

# **Snijder Filtertechniek bv**



## **KOPPELINGEN CONNECTORS CONNECT**

Heeft u vragen neem dan contact met ons op.  
We helpen u graag verder.

+31 (0)38 477 3800

[info@snijderfiltertechniek.nl](mailto:info@snijderfiltertechniek.nl)

Whatsapp: 06 1997 5550

Tube Connectors

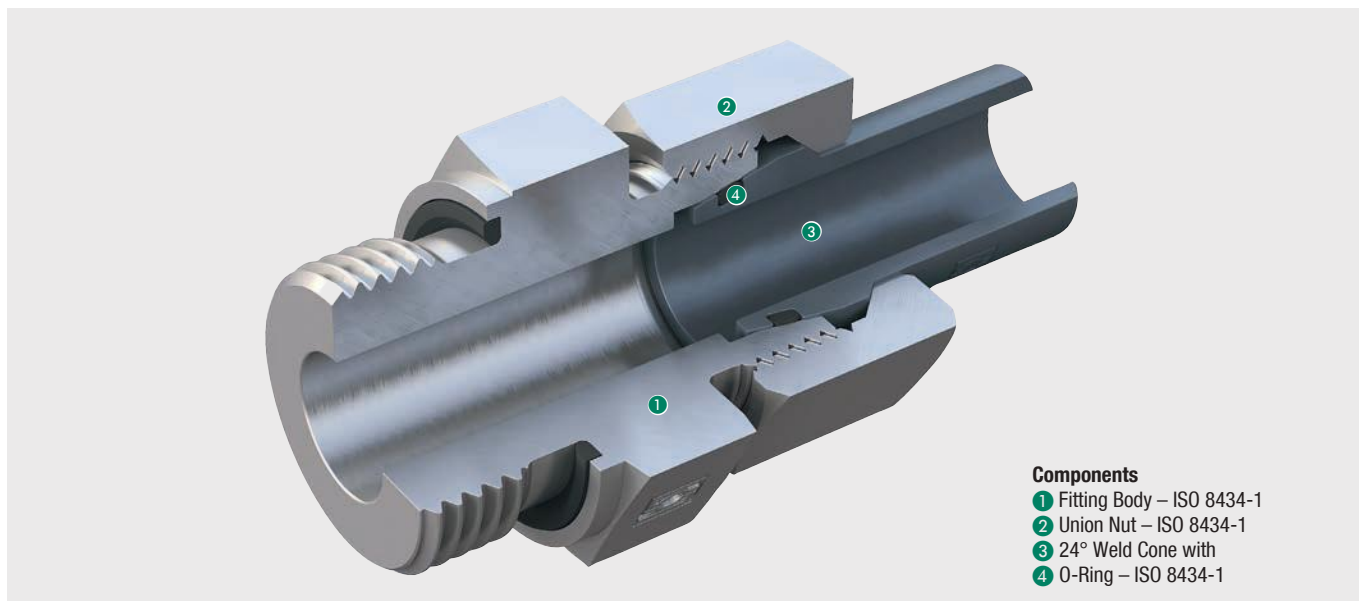


Assembly Tools and Devices



## 24° Weld Cones with O-Ring

A



STAUFF Connect 24° Weld Cones with O-Ring represent a supplement to the usual range of tube fittings. However, they are increasingly perceived as a special solution due to the complex tube preparation, assembly, finishing and testing, as are all other types of welded connectors.

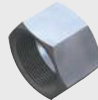
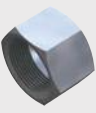
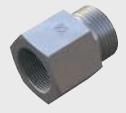
STAUFF Connect 24° Weld Cones with O-Ring are directly welded to the tube end.

With regards to their dimensioning and general design, they fully comply with the latest versions of the ISO 8434-1 standard.



## Overview of 24°- Tube Fittings (ISO 8434-1 / DIN 2353)

A

|                                        |                                                                                                                                                      |                                                                                                                                                 |                                                                                                                                                      |                                                                                                                                                 |                                                                                                                                                |                                                                                                                                                     |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Connecting Parts                       | Double Edge Cutting Ring<br><br>Page 28<br>FI-DS                    | Soft-Sealing Cutting Ring<br><br>Page 29<br>FI-WDDS            | Support Sleeve<br><br>Page 31<br>FI-VH                              | STAUFF Form EVO Sealing Ring<br><br>Page 32<br>FI-FD          | Union Nut<br><br>Page 33<br>FI-M                            | 24°/37° Flared Cone Adaptor with O-Rings<br><br>Page 34<br>FI-BA |
|                                        | Support Sleeve for 37° Flared Tube Fittings<br><br>Page 35<br>FI-BH | Union Nut for 37° Flared Tube Fittings<br><br>Page 36<br>FI-BM | 37° Flared Tube Fitting Set<br><br>Page 37<br>FI-AB                 |                                                                                                                                                 |                                                                                                                                                |                                                                                                                                                     |
| Male Stud Fittings                     | Straight Male Stud Fitting<br><br>Page 40<br>FI-GE-                 | Male Stud Elbow<br><br>Page 74<br>FI-WE-                       | Male Stud Branch Tee<br><br>Page 82<br>FI-TE-                       | Male Stud Barrel Tee<br><br>Page 88<br>FI-LE-                 |                                                                                                                                                |                                                                                                                                                     |
|                                        |                                                                                                                                                      |                                                                                                                                                 |                                                                                                                                                      |                                                                                                                                                 |                                                                                                                                                |                                                                                                                                                     |
| Tube Fittings / Unions                 | Straight Union<br><br>Page 96<br>FI-G                              | Straight Reducer<br><br>Page 97<br>FI-G                       | Equal Elbow<br><br>Page 99<br>FI-W                                 | Equal Tee<br><br>Page 100<br>FI-T                            | Tee Reducer<br><br>Page 101<br>FI-T                        | Equal Cross<br><br>Page 104<br>FI-K                             |
|                                        |                                                                                                                                                      |                                                                                                                                                 |                                                                                                                                                      |                                                                                                                                                 |                                                                                                                                                |                                                                                                                                                     |
| Bulkhead Fittings                      | Straight Bulkhead Fitting<br><br>Page 108<br>FI-GS                | Elbow Bulkhead Fittings<br><br>Page 109<br>FI-WS             | Straight Bulkhead Weld Fitting<br><br>Page 110<br>FI-ES           |                                                                                                                                                 |                                                                                                                                                |                                                                                                                                                     |
|                                        |                                                                                                                                                      |                                                                                                                                                 |                                                                                                                                                      |                                                                                                                                                 |                                                                                                                                                |                                                                                                                                                     |
| Weld Fittings                          | Straight Weld Fitting<br><br>Page 114<br>FI-AS                    | Elbow Weld Fitting<br><br>Page 115<br>FI-WAS                 | 24° Weld Cone with O-Ring<br><br>Page 116<br>FI-SN                | 24° Weld Cone Reducer with O-Ring<br><br>Page 118<br>FI-SNR | Straight Weld Fitting for Tubes<br><br>Page 120<br>FI-ASV |                                                                                                                                                     |
|                                        |                                                                                                                                                      |                                                                                                                                                 |                                                                                                                                                      |                                                                                                                                                 |                                                                                                                                                |                                                                                                                                                     |
| Female Studs and Gauge Fittings        | Straight Female Stud Fitting<br><br>Page 124<br>FI-GA-            | Gauge Fitting<br><br>Page 129<br>FI-MA-                      | Gauge Fitting with 24° Taper / O-Ring<br><br>Page 130<br>FI-EMAD- | Gauge Standpipe Fitting<br><br>Page 131<br>FI-EMA-          |                                                                                                                                                |                                                                                                                                                     |
|                                        |                                                                                                                                                      |                                                                                                                                                 |                                                                                                                                                      |                                                                                                                                                 |                                                                                                                                                |                                                                                                                                                     |
| Fittings with 24° Taper / O-Ring (DKO) | Straight Male Stud Fitting<br><br>Page 134<br>FI-EGED             | Straight Fitting / Reducer<br><br>Page 138<br>FI-SNV         | Straight Reducer for Tube Ends<br><br>Page 144<br>FI-REDS         | Distance Adaptor<br><br>Page 148<br>FI-RESD                 | Adjustable Elbow (90°)<br><br>Page 150<br>FI-EWD          | Adjustable Elbow (45°)<br><br>Page 151<br>FI-EVD               |
|                                        |                                                                                                                                                      |                                                                                                                                                 |                                                                                                                                                      |                                                                                                                                                 |                                                                                                                                                |                                                                                                                                                     |





## Overview of 24°- Tube Fittings (ISO 8434-1 / DIN 2353)

A

|                                        |                                                                                                                       |                                                                                                                         |                                                                                                                         |                                                                                                                          |                                                                                                             |                                                                                                             |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Fittings with 24° Taper / O-Ring (DK0) | Adjustable Branch Tee                                                                                                 | Adjustable Barrel Tee                                                                                                   |                                                                                                                         |                                                                                                                          |                                                                                                             |                                                                                                             |
|                                        | <br>Page 152<br>FI-ETD               | <br>Page 153<br>FI-ELD                 |                                                                                                                         |                                                                                                                          |                                                                                                             |                                                                                                             |
| Standpipe Fittings                     | Straight Male Stud Standpipe Fitting                                                                                  | Straight Standpipe Reducer                                                                                              | Adjustable Standpipe Elbow                                                                                              | Adjustable Standpipe Branch Tee                                                                                          | Adjustable Standpipe Barrel Tee                                                                             |                                                                                                             |
|                                        | <br>Page 156<br>FI-EGE               | <br>Page 162<br>FI-REDS                | <br>Page 166<br>FI-EW                  | <br>Page 167<br>FI-ET                  | <br>Page 168<br>FI-EL    |                                                                                                             |
| Fittings with Lock Nut                 | Adjustable Male Stud Elbow (90°)                                                                                      | Adjustable Male Stud Elbow (45°)                                                                                        | Adjustable Male Stud Branch Tee                                                                                         | Adjustable Male Stud Barrel Tee                                                                                          |                                                                                                             |                                                                                                             |
|                                        | <br>Page 172<br>FI-WEE               | <br>Page 173<br>FI-VEE                 | <br>Page 173<br>FI-TEE                 | <br>Page 173<br>FI-LEE                 |                                                                                                             |                                                                                                             |
| Banjo Fittings                         | Banjo Elbow (Medium-Pressure Version)                                                                                 | Banjo Elbow (High-Pressure Version)                                                                                     | Banjo Tee (High-Pressure Version)                                                                                       |                                                                                                                          |                                                                                                             |                                                                                                             |
|                                        | <br>Page 183<br>FI-RSWND            | <br>Page 186<br>FI-RSW                | <br>Page 190<br>FI-RST                |                                                                                                                          |                                                                                                             |                                                                                                             |
| Swivel Fittings                        | Swivel Elbow                                                                                                          |                                                                                                                         |                                                                                                                         |                                                                                                                          |                                                                                                             |                                                                                                             |
|                                        | <br>Page 196<br>FI-DGWE            |                                                                                                                         |                                                                                                                         |                                                                                                                          |                                                                                                             |                                                                                                             |
| Hydraulic Valves                       | Check Valve                                                                                                           | Male Stud Check Valve (Flow from Stud End)                                                                              | Male Stud Check Valve (Flow to Stud End)                                                                                | Female Stud Check Valve                                                                                                  | Check Valve Installation Kit                                                                                | Alternating Valve                                                                                           |
|                                        | <br>Page 200-201<br>FI-RV / FI-RVA | <br>Page 202-205<br>FI-RVV / FI-RVVA | <br>Page 206-209<br>FI-RVZ / FI-RVZA | <br>Page 210-211<br>FI-RVI / FI-RVIA | <br>Page 212<br>FI-VES | <br>Page 213<br>FI-WV  |
| Spare Parts / Accessories              | Thread Reducer                                                                                                        | Blanking Screw for Ports (Heavy Duty)                                                                                   | Blanking Screw for Ports                                                                                                | Blanking Plug with 24° Taper / O-Ring (DK0)                                                                              | Blanking Plug with Sealing Edge                                                                             | Blanking Plug for Tube Ends                                                                                 |
|                                        | <br>Page 224<br>FI-RED             | <br>Page 228<br>FI-VSV               | <br>Page 230<br>FI-VS                | <br>Page 234<br>FI-VD                | <br>Page 235<br>FI-BUZ | <br>Page 236<br>FI-VSK |
| Hexagon Lock Nut                       | Profile Sealing Ring                                                                                                  | O-Ring                                                                                                                  | External Metallic Sealing Ring                                                                                          | Retaining Ring with Captive Seal                                                                                         | Internal Metallic Sealing Ring                                                                              | Retaining Ring (Small)                                                                                      |
|                                        | <br>Page 237<br>FI-SKM             | <br>Page 238<br>WDG                  | <br>Page 239<br>O-RING               | <br>Page 244<br>FI-DKR                | <br>Page 245<br>FI-DIR  | <br>Page 246<br>FI-DKI |
|                                        |                                                                                                                       |                                                                                                                         |                                                                                                                         |                                                                                                                          |                                                                                                             | <br>Page 247<br>FI-KR  |





|                                                                                     |                                                                  |    |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------|----|
|    | <b>Double Edge Cutting Ring</b><br>FI-DS                         | 28 |
|    | <b>Soft-Sealing Cutting Ring</b><br>FI-WDDS                      | 29 |
|    | <b>Soft-Sealing Cutting Ring (Stainless Steel)</b><br>FI-WDDS-W5 | 30 |
|    | <b>Support Sleeve</b><br>FI-VH                                   | 31 |
|    | <b>STAUFF Form EVO Sealing Ring</b><br>FI-FD                     | 32 |
|    | <b>Union Nut</b><br>FI-M                                         | 33 |
|    | <b>24°/37° Flared Cone Adaptor with O-Rings</b><br>FI-BA         | 34 |
|    | <b>Support Sleeve for 37° Flared Tube Fittings</b><br>FI-BH      | 35 |
|   | <b>Union Nut for 37° Flared Tube Fittings</b><br>FI-BM           | 36 |
|  | <b>37° Flared Tube Fitting Set</b><br>FI-AB                      | 37 |



## Cutting Ring

Type FI-S (Single-Edge) ▪ Series LL

Type FI-DS (Double-Edge) ▪ Series L / S



## Ordering Codes

**\*FI-DS\*-15\*L\*-W3**

\* Cutting Ring      Single-Edge Version      **FI-S**  
                                  Double-Edge Version      **FI-DS**

\* Outside Tube Diameter D1 (in mm)      **-15**

\* Series      Extra-Light Series      **LL**  
                                  Light Series      **L**  
                                  Heavy Series      **S**

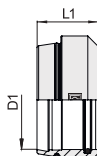
\* Material Code      Steel, zinc/nickel-plated      **-W3**

Please contact STAUFF for alternative materials and surface finishings.

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in)<br>L1 | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes<br>Double-Edge<br>Cutting Ring | Single-Edge<br>Cutting Ring |
|--------|--------------------------|-----------------|-----------------------------|-----------------------------------|-----------------------------------------------|-----------------------------|
| LL     | 4                        | 100             | 6                           | 0,04                              |                                               | FI-S-04LL-W3                |
|        | .16                      | 1450            | .24                         | .09                               |                                               |                             |
|        | 6                        | 100             | 7                           | 0,08                              |                                               | FI-S-06LL-W3                |
|        | .24                      | 1450            | .28                         | .18                               |                                               |                             |
|        | 8                        | 100             | 7                           | 0,1                               |                                               | FI-S-08LL-W3                |
|        | .31                      | 1450            | .28                         | .22                               |                                               |                             |
|        | 10                       | 100             | 7                           | 0,12                              |                                               | FI-S-10LL-W3                |
|        | .39                      | 1450            | .28                         | .26                               |                                               |                             |
|        | 12                       | 100             | 7,5                         | 0,15                              |                                               | FI-S-12LL-W3                |
|        | .47                      | 1450            | .30                         | .33                               |                                               |                             |
| L      | 6                        | 500             | 9,5                         | 0,21                              | FI-DS-06L/S-W3                                |                             |
|        | .24                      | 7250            | .37                         | .46                               |                                               |                             |
|        | 8                        | 500             | 9,5                         | 0,26                              | FI-DS-08L/S-W3                                |                             |
|        | .31                      | 7250            | .37                         | .57                               |                                               |                             |
|        | 10                       | 500             | 10                          | 0,34                              | FI-DS-10L/S-W3                                |                             |
|        | .39                      | 7250            | .39                         | .75                               |                                               |                             |
|        | 12                       | 400             | 10                          | 0,44                              | FI-DS-12L/S-W3                                |                             |
|        | .47                      | 5800            | .39                         | .97                               |                                               |                             |
|        | 15                       | 400             | 10                          | 0,54                              | FI-DS-15L-W3                                  |                             |
|        | .59                      | 5800            | .39                         | 1.19                              |                                               |                             |
|        | 18                       | 400             | 10                          | 0,71                              | FI-DS-18L-W3                                  |                             |
|        | .71                      | 5800            | .39                         | 1.56                              |                                               |                             |
|        | 22                       | 250             | 11,5                        | 1,01                              | FI-DS-22L-W3                                  |                             |
|        | .87                      | 3625            | .45                         | 2.22                              |                                               |                             |
|        | 28                       | 250             | 11,5                        | 1,23                              | FI-DS-28L-W3                                  |                             |
|        | 1.10                     | 3625            | .45                         | 2.71                              |                                               |                             |
|        | 35                       | 250             | 13,5                        | 2,35                              | FI-DS-35L-W3                                  |                             |
|        | 1.38                     | 3625            | .53                         | 5.17                              |                                               |                             |
|        | 42                       | 250             | 13,5                        | 2,69                              | FI-DS-42L-W3                                  |                             |
|        | 1.65                     | 3625            | .53                         | 5.92                              |                                               |                             |
| S      | 6                        | 800             | 9,5                         | 0,21                              | FI-DS-06L/S-W3                                |                             |
|        | .24                      | 11600           | .37                         | .46                               |                                               |                             |
|        | 8                        | 800             | 9,5                         | 0,26                              | FI-DS-08L/S-W3                                |                             |
|        | .31                      | 11600           | .37                         | .57                               |                                               |                             |
|        | 10                       | 800             | 10                          | 0,34                              | FI-DS-10L/S-W3                                |                             |
|        | .39                      | 11600           | .39                         | .75                               |                                               |                             |
|        | 12                       | 630             | 10                          | 0,44                              | FI-DS-12L/S-W3                                |                             |
|        | .47                      | 9135            | .39                         | .97                               |                                               |                             |
|        | 14                       | 630             | 10,5                        | 0,63                              | FI-DS-14S-W3                                  |                             |
|        | .55                      | 9135            | .41                         | 1.39                              |                                               |                             |
|        | 16                       | 630             | 10,5                        | 0,69                              | FI-DS-16S-W3                                  |                             |
|        | .63                      | 9135            | .41                         | 1.52                              |                                               |                             |
|        | 20                       | 420             | 12,5                        | 1,26                              | FI-DS-20S-W3                                  |                             |
|        | .79                      | 6091            | .49                         | 2.77                              |                                               |                             |
|        | 25                       | 420             | 12,5                        | 1,52                              | FI-DS-25S-W3                                  |                             |
|        | .98                      | 6091            | .49                         | 3.34                              |                                               |                             |
|        | 30                       | 420             | 13,5                        | 2,06                              | FI-DS-30S-W3                                  |                             |
|        | 1.18                     | 6091            | .53                         | 4.53                              |                                               |                             |
|        | 38                       | 420             | 13,5                        | 2,54                              | FI-DS-38S-W3                                  |                             |
|        | 1.50                     | 6091            | .53                         | 5.59                              |                                               |                             |



## Soft-Sealing Cutting Ring Type FI-WDDS • Series L / S



B

| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in) | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes            |
|--------|--------------------|-----------------|-----------------------|-----------------------------------|---------------------------|
|        | D1                 |                 | L1                    |                                   | Soft-Sealing Cutting Ring |
| L      | 6                  | 500             | 8,8                   | 0,19                              | FI-WDDS-06L/S-V-W3        |
|        | .24                | 7250            | .35                   | .42                               |                           |
|        | 8                  | 500             | 8,8                   | 0,24                              | FI-WDDS-08L/S-V-W3        |
|        | .31                | 7250            | .35                   | .53                               |                           |
|        | 10                 | 500             | 9,8                   | 0,35                              | FI-WDDS-10L/S-V-W3        |
|        | .39                | 7250            | .39                   | .77                               |                           |
|        | 12                 | 400             | 9,8                   | 0,41                              | FI-WDDS-12L/S-V-W3        |
|        | .47                | 5800            | .39                   | .90                               |                           |
|        | 15                 | 400             | 10,2                  | 0,66                              | FI-WDDS-15L-V-W3          |
|        | .59                | 5800            | .40                   | 1.44                              |                           |
|        | 18                 | 400             | 10,2                  | 0,82                              | FI-WDDS-18L-V-W3          |
|        | .71                | 5800            | .40                   | 1.79                              |                           |
|        | 22                 | 250             | 11,5                  | 1,06                              | FI-WDDS-22L-V-W3          |
|        | .87                | 3625            | .45                   | 2.34                              |                           |
|        | 28                 | 250             | 11,5                  | 1,28                              | FI-WDDS-28L-V-W3          |
|        | 1.10               | 3625            | .45                   | 2.82                              |                           |
|        | 35                 | 250             | 13,5                  | 2,36                              | FI-WDDS-35L-V-W3          |
|        | 1.38               | 3625            | .53                   | 5.18                              |                           |
|        | 42                 | 250             | 13,5                  | 2,75                              | FI-WDDS-42L-V-W3          |
|        | 1.65               | 3625            | .53                   | 6.05                              |                           |
| S      | 6                  | 800             | 8,8                   | 0,19                              | FI-WDDS-06L/S-V-W3        |
|        | .24                | 11600           | .35                   | .42                               |                           |
|        | 8                  | 800             | 8,8                   | 0,24                              | FI-WDDS-08L/S-V-W3        |
|        | .31                | 11600           | .35                   | .53                               |                           |
|        | 10                 | 800             | 9,8                   | 0,35                              | FI-WDDS-10L/S-V-W3        |
|        | .39                | 11600           | .39                   | .77                               |                           |
|        | 12                 | 630             | 9,8                   | 0,41                              | FI-WDDS-12L/S-V-W3        |
|        | .47                | 9135            | .39                   | .90                               |                           |
|        | 14                 | 630             | 10,2                  | 0,73                              | FI-WDDS-14S-V-W3          |
|        | .55                | 9135            | .40                   | 1.61                              |                           |
|        | 16                 | 630             | 10,3                  | 0,83                              | FI-WDDS-16S-V-W3          |
|        | .63                | 9135            | .41                   | 1.82                              |                           |
|        | 20                 | 420             | 12,5                  | 1,28                              | FI-WDDS-20S-V-W3          |
|        | .79                | 6091            | .49                   | 2.81                              |                           |
|        | 25                 | 420             | 12,5                  | 1,58                              | FI-WDDS-25S-V-W3          |
|        | .98                | 6091            | .49                   | 3.48                              |                           |
|        | 30                 | 420             | 13,5                  | 2,41                              | FI-WDDS-30S-V-W3          |
|        | 1.18               | 6091            | .53                   | 5.31                              |                           |
|        | 38                 | 420             | 13,5                  | 3,00                              | FI-WDDS-38S-V-W3          |
|        | 1.50               | 6091            | .53                   | 6.60                              |                           |

### Ordering Codes

**\*FI-WDDS\*-15\*L\*-V\*-W3**

|                                    |                                  |
|------------------------------------|----------------------------------|
| * Soft-Sealing Cutting Ring        | FI-WDDS                          |
| * Outside Tube Diameter D1 (in mm) | -15                              |
| * Series                           | Light Series L<br>Heavy Series S |
| * Seal Material                    | FKM (Viton®) -V                  |
| * Material Code                    | Steel, zinc/nickel-plated -W3    |

Please contact STAUFF for alternative materials and surface finishings.

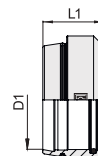
Standard seal material is FKM (Viton®).



## Soft-Sealing Cutting Ring (Stainless Steel)

### Type FI-WDDS-W5 ▪ Series L / S

B



#### Ordering Codes

##### \*FI-WDDS\*-15\*L\*-V\*-W5

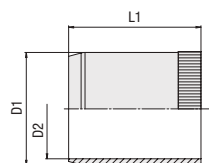
|                                               |                                                       |
|-----------------------------------------------|-------------------------------------------------------|
| * Soft-Sealing Cutting Ring (Stainless Steel) | <b>FI-WDDS</b>                                        |
| * Outside Tube Diameter D1 (in mm)            | <b>-15</b>                                            |
| * Series                                      | Light Series <b>L</b><br>Heavy Series <b>S</b>        |
| * Seal Material                               | FKM (Viton®) <b>-V</b>                                |
| * Material Code                               | Stainless Steel V4A - 1.4571 (AISI 316 Ti) <b>-W5</b> |

Please contact STAUFF for alternative materials and surface finishings.

| Series                                      | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in)<br>L1 | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes     |
|---------------------------------------------|--------------------------|-----------------|-----------------------------|-----------------------------------|--------------------|
| Soft-Sealing Cutting Ring (Stainless Steel) |                          |                 |                             |                                   |                    |
| L                                           | 6                        | 500             | 8,8                         | 0,2                               | FI-WDDS-06L/S-V-W5 |
|                                             | .24                      | 7250            | .35                         | .44                               |                    |
|                                             | 8                        | 500             | 8,8                         | 0,25                              | FI-WDDS-08L/S-V-W5 |
|                                             | .31                      | 7250            | .35                         | .55                               |                    |
|                                             | 10                       | 500             | 9,8                         | 0,37                              | FI-WDDS-10L/S-V-W5 |
|                                             | .39                      | 7250            | .39                         | .81                               |                    |
|                                             | 12                       | 400             | 9,8                         | 0,44                              | FI-WDDS-12L/S-V-W5 |
|                                             | .47                      | 5800            | .39                         | .97                               |                    |
|                                             | 15                       | 400             | 10,2                        | 0,68                              | FI-WDDS-15L-V-W5   |
|                                             | .59                      | 5800            | .40                         | 1.49                              |                    |
|                                             | 18                       | 400             | 10,0                        | 0,80                              | FI-WDDS-18L-V-W5   |
|                                             | .71                      | 5800            | .39                         | 1.76                              |                    |
|                                             | 22                       | 250             | 11,5                        | 1,09                              | FI-WDDS-22L-V-W5   |
|                                             | .87                      | 3625            | .45                         | 2.40                              |                    |
|                                             | 28                       | 250             | 11,5                        | 1,39                              | FI-WDDS-28L-V-W5   |
|                                             | 1.10                     | 3625            | .45                         | 3.06                              |                    |
|                                             | 35                       | 250             | 13,5                        | 2,47                              | FI-WDDS-35L-V-W5   |
|                                             | 1.38                     | 3625            | .53                         | 5.44                              |                    |
|                                             | 42                       | 250             | 13,5                        | 2,89                              | FI-WDDS-42L-V-W5   |
|                                             | 1.65                     | 3625            | .53                         | 6.37                              |                    |
| S                                           | 6                        | 800             | 8,8                         | 0,2                               | FI-WDDS-06L/S-V-W5 |
|                                             | .24                      | 11600           | .35                         | .44                               |                    |
|                                             | 8                        | 800             | 8,8                         | 0,25                              | FI-WDDS-08L/S-V-W5 |
|                                             | .31                      | 11600           | .35                         | .55                               |                    |
|                                             | 10                       | 800             | 9,8                         | 0,37                              | FI-WDDS-10L/S-V-W5 |
|                                             | .39                      | 11600           | .39                         | .81                               |                    |
|                                             | 12                       | 630             | 9,8                         | 0,44                              | FI-WDDS-12L/S-V-W5 |
|                                             | .47                      | 9135            | .39                         | .97                               |                    |
|                                             | 14                       | 630             | 10,2                        | 0,75                              | FI-WDDS-14S-V-W5   |
|                                             | .55                      | 9135            | .40                         | 1.65                              |                    |
|                                             | 16                       | 630             | 10,3                        | 0,86                              | FI-WDDS-16S-V-W5   |
|                                             | .63                      | 9135            | .41                         | 1.89                              |                    |
|                                             | 20                       | 420             | 12,5                        | 1,31                              | FI-WDDS-20S-V-W5   |
|                                             | .79                      | 6091            | .49                         | 2.88                              |                    |
|                                             | 25                       | 420             | 12,5                        | 1,64                              | FI-WDDS-25S-V-W5   |
|                                             | .98                      | 6091            | .49                         | 3.61                              |                    |
|                                             | 30                       | 420             | 13,3                        | 2,65                              | FI-WDDS-30S-V-W5   |
|                                             | 1.18                     | 6091            | .52                         | 5.84                              |                    |
|                                             | 38                       | 420             | 13,5                        | 3,20                              | FI-WDDS-38S-V-W5   |
|                                             | 1.50                     | 6091            | .53                         | 7.05                              |                    |

Standard seal material is FKM (Viton®).



Support Sleeve  
Type FI-VH


B

| Dimensions<br>(mm/in) |      |      |      | Ordering Codes    |
|-----------------------|------|------|------|-------------------|
| for Tube              | D1   | D2   | L1   |                   |
| 6 x 1                 | 4    | 2,6  | 15,5 | FI-VH-6x1-W69     |
| .24 x .04             | .16  | .10  | .61  |                   |
| 6 x 0,75              | 4,5  | 3,1  | 12,5 | FI-VH-6x0.75-W69  |
| .24 x .03             | .18  | .12  | .49  |                   |
| 6 x 0,5               | 5    | 3,6  | 12,5 | FI-VH-6x0.5-W69   |
| .24 x .02             | .20  | .14  | .49  |                   |
| 8 x 1                 | 6    | 4,6  | 15,5 | FI-VH-8x1-W69     |
| .31 x .04             | .24  | .18  | .61  |                   |
| 8 x 0,75              | 6,5  | 5,1  | 12,5 | FI-VH-8x0.75-W69  |
| .31 x .03             | .26  | .20  | .49  |                   |
| 10 x 1,5              | 7    | 5,6  | 17   | FI-VH-10x1.5-W69  |
| .39 x .06             | .28  | .22  | .67  |                   |
| 10 x 1                | 8    | 6,6  | 16,5 | FI-VH-10x1-W69    |
| .39 x .04             | .31  | .26  | .65  |                   |
| 10 x 0,75             | 8,5  | 7,1  | 16,5 | FI-VH-10x0.75-W69 |
| .39 x .03             | .33  | .28  | .65  |                   |
| 12 x 1,5              | 9    | 7,6  | 16,5 | FI-VH-12x1.5-W69  |
| .47 x .06             | .35  | .30  | .65  |                   |
| 12 x 1                | 10   | 8,6  | 16,5 | FI-VH-12x1-W69    |
| .47 x .04             | .39  | .34  | .65  |                   |
| 12 x 0,75             | 10,5 | 9,3  | 16,5 | FI-VH-12x0.75-W69 |
| .47 x .03             | .41  | .37  | .65  |                   |
| 14 x 1                | 12   | 10,2 | 18   | FI-VH-14x1-W69    |
| .55 x .04             | .47  | .40  | .71  |                   |
| 15 x 1,5              | 12   | 10,2 | 17   | FI-VH-15x1.5-W69  |
| .59 x .06             | .47  | .40  | .67  |                   |
| 15 x 1                | 13   | 11,2 | 17   | FI-VH-15x1-W69    |
| .59 x .04             | .51  | .44  | .67  |                   |
| 18 x 1,5              | 15   | 13,2 | 17,5 | FI-VH-18x1.5-W69  |
| .71 x .06             | .59  | .52  | .69  |                   |
| 18 x 1                | 16   | 14,2 | 17,5 | FI-VH-18x1-W69    |
| .71 x .04             | .63  | .56  | .69  |                   |
| 20 x 1                | 18   | 16,2 | 22   | FI-VH-20x1-W69    |
| .79 x .04             | .71  | .64  | .87  |                   |
| 22 x 1,5              | 19   | 17,2 | 18   | FI-VH-22x1.5-W69  |
| .87 x .06             | .75  | .68  | .71  |                   |
| 22 x 1                | 20   | 18,2 | 18   | FI-VH-22x1-W69    |
| .87 x .04             | .79  | .72  | .71  |                   |
| 25 x 1,5              | 22   | 20,2 | 23,5 | FI-VH-25x1.5-W69  |
| .98 x .06             | .87  | .80  | .93  |                   |
| 25 x 1                | 23   | 21,2 | 23,5 | FI-VH-25x1-W69    |
| .98 x .04             | .91  | .83  | .93  |                   |
| 28 x 2                | 24   | 22,2 | 23,5 | FI-VH-28x2-W69    |
| 1.10 x .08            | .94  | .87  | .93  |                   |
| 28 x 1,5              | 25   | 23,2 | 23,5 | FI-VH-28x1.5-W69  |
| 1.10 x .06            | .98  | .91  | .93  |                   |
| 28 x 1                | 26   | 24,2 | 23,5 | FI-VH-28x1-W69    |
| 1.10 x .04            | 1.02 | .95  | .93  |                   |
| 35 x 2                | 31   | 28,8 | 23,5 | FI-VH-35x2-W69    |
| 1.38 x .08            | 1.22 | 1.13 | .93  |                   |
| 35 x 1,5              | 32   | 29,8 | 23,5 | FI-VH-35x1.5-W69  |
| 1.38 x .06            | 1.26 | 1.17 | .93  |                   |
| 35 x 1                | 33   | 30,8 | 23,5 | FI-VH-35x1-W69    |
| 1.38 x .04            | 1.30 | 1.21 | .93  |                   |
| 42 x 2                | 38   | 35,8 | 23,5 | FI-VH-42x2-W69    |
| 1.65 x .08            | 1.50 | 1.41 | .93  |                   |
| 42 x 1,5              | 39   | 36,8 | 23,5 | FI-VH-42x1.5-W69  |
| 1.65 x .06            | 1.54 | 1.45 | .93  |                   |

## Ordering Codes

## \*FI-VH\*-10\*x1.5\*-W69

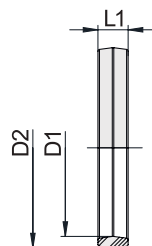
|                                 |       |
|---------------------------------|-------|
| * Support Sleeve                | FI-VH |
| * Outside Tube Diameter (in mm) | -10   |
| * Wall Thickness (in mm)        | x1.5  |
| * Material Code      Brass      | -W69  |

Please contact STAUFF for alternative materials and surface finishings.





## STAUFF Form EVO Sealing Ring Type FI-FD • Series L / S



### Ordering Codes

#### \*FI-FD\*-15\*L\*-V90

\* STAUFF Form EVO Sealing Ring

FI-FD

\* Outside Tube Diameter D1 (in mm)

-15

\* Series

Light Series

L

Heavy Series

S

\* Seal Material

FKM (Viton®) 90 Shore

-V90

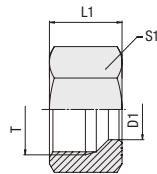
Please contact STAUFF for alternative materials and surface finishings.

| Series | Tube OD       | PN        | Dimensions    |     | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes  |
|--------|---------------|-----------|---------------|-----|-----------------------------------|-----------------|
|        | (mm/in)<br>D1 | (bar/psi) | (mm/in)<br>D2 | L1  |                                   |                 |
| L      | 6             | 500       | 7,8           | 2,6 | 0,01                              | FI-FD-06L/S-V90 |
|        | .24           | 7250      | .31           | .10 | .02                               |                 |
|        | 8             | 500       | 9,8           | 2,6 | 0,01                              | FI-FD-08L/S-V90 |
|        | .31           | 7250      | .39           | .10 | .03                               |                 |
|        | 10            | 500       | 12            | 2,8 | 0,02                              | FI-FD-10L/S-V90 |
|        | .39           | 7250      | .47           | .11 | .04                               |                 |
|        | 12            | 400       | 14            | 2,8 | 0,02                              | FI-FD-12L/S-V90 |
|        | .47           | 5800      | .55           | .11 | .05                               |                 |
|        | 15            | 400       | 17            | 2,8 | 0,03                              | FI-FD-15L-V90   |
|        | .59           | 5800      | .67           | .11 | .06                               |                 |
|        | 18            | 400       | 20            | 2,8 | 0,03                              | FI-FD-18L-V90   |
|        | .71           | 5800      | .79           | .11 | .07                               |                 |
|        | 22            | 250       | 24            | 2,8 | 0,04                              | FI-FD-22L-V90   |
|        | .87           | 3625      | .94           | .11 | .08                               |                 |
|        | 28            | 250       | 30            | 2,8 | 0,05                              | FI-FD-28L-V90   |
|        | 1.10          | 3625      | 1.18          | .11 | .10                               |                 |
|        | 35            | 250       | 37,8          | 3,4 | 0,10                              | FI-FD-35L-V90   |
|        | 1.38          | 3625      | 1.49          | .13 | .22                               |                 |
|        | 42            | 250       | 44,8          | 3,4 | 0,12                              | FI-FD-42L-V90   |
|        | 1.65          | 3625      | 1.76          | .13 | .27                               |                 |
| S      | 6             | 800       | 7,8           | 2,6 | 0,01                              | FI-FD-06L/S-V90 |
|        | .24           | 11600     | .31           | .10 | .02                               |                 |
|        | 8             | 800       | 9,8           | 2,6 | 0,01                              | FI-FD-08L/S-V90 |
|        | .31           | 11600     | .39           | .10 | .03                               |                 |
|        | 10            | 800       | 12            | 2,8 | 0,02                              | FI-FD-10L/S-V90 |
|        | .39           | 11600     | .47           | .11 | .04                               |                 |
|        | 12            | 630       | 14            | 2,8 | 0,02                              | FI-FD-12L/S-V90 |
|        | .47           | 9135      | .55           | .11 | .05                               |                 |
|        | 16            | 630       | 18            | 2,8 | 0,03                              | FI-FD-16S-V90   |
|        | .63           | 9135      | .71           | .11 | .06                               |                 |
|        | 20            | 400       | 22,6          | 3,4 | 0,05                              | FI-FD-20S-V90   |
|        | .79           | 5800      | .89           | .13 | .12                               |                 |
|        | 25            | 400       | 27,6          | 3,4 | 0,07                              | FI-FD-25S-V90   |
|        | .98           | 5800      | 1.09          | .13 | .15                               |                 |
|        | 30            | 400       | 32,8          | 3,4 | 0,09                              | FI-FD-30S-V90   |
|        | 1.18          | 5800      | 1.29          | .13 | .19                               |                 |
|        | 38            | 400       | 40,8          | 3,4 | 0,11                              | FI-FD-38S-V90   |
|        | 1.50          | 5800      | 1.61          | .13 | .24                               |                 |

Standard seal material is FKM (Viton®).



## Union Nut Type FI-M • Series LL / L / S



B

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/PSI) | Dimensions<br>(mm/in)<br>Thread T | L1   | S1   | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes |
|--------|--------------------------|-----------------|-----------------------------------|------|------|-----------------------------------|----------------|
| LL     | 4                        | 100             | M 8 x 1                           | 11   | 10   | 0,40                              | FI-M-04LL-W3   |
|        | .16                      | 1450            |                                   | .43  | .39  | .88                               |                |
|        | 6                        | 100             | M 10 x 1                          | 11,5 | 12   | 0,50                              | FI-M-06LL-W3   |
|        | .24                      | 1450            |                                   | .45  | .47  | 1.10                              |                |
|        | 8                        | 100             | M 12 x 1                          | 12   | 14   | 0,70                              | FI-M-08LL-W3   |
|        | .31                      | 1450            |                                   | .47  | .55  | 1.54                              |                |
|        | 10                       | 100             | M 14 x 1                          | 12,5 | 17   | 1,10                              | FI-M-10LL-W3   |
|        | .39                      | 1450            |                                   | .49  | .67  | 2.42                              |                |
|        | 12                       | 100             | M 16 x 1                          | 13   | 19   | 1,30                              | FI-M-12LL-W3   |
|        | .47                      | 1450            |                                   | .51  | .75  | 2.86                              |                |
| L      | 6                        | 500             | M 12 x 1,5                        | 14,5 | 14   | 0,90                              | FI-M-06L-W3    |
|        | .24                      | 7250            |                                   | .57  | .55  | 1.98                              |                |
|        | 8                        | 500             | M 14 x 1,5                        | 14,5 | 17   | 1,40                              | FI-M-08L-W3    |
|        | .31                      | 7250            |                                   | .57  | .67  | 3.08                              |                |
|        | 10                       | 500             | M 16 x 1,5                        | 15,5 | 19   | 1,70                              | FI-M-10L-W3    |
|        | .39                      | 7250            |                                   | .61  | .75  | 3.74                              |                |
|        | 12                       | 400             | M 18 x 1,5                        | 15,5 | 22   | 2,40                              | FI-M-12L-W3    |
|        | .47                      | 5800            |                                   | .61  | .87  | 5.28                              |                |
|        | 15                       | 400             | M 22 x 1,5                        | 17   | 27   | 4,10                              | FI-M-15L-W3    |
|        | .59                      | 5800            |                                   | .67  | 1.06 | 9.02                              |                |
|        | 18                       | 400             | M 26 x 1,5                        | 18   | 32   | 6,00                              | FI-M-18L-W3    |
|        | .71                      | 5800            |                                   | .71  | 1.26 | 13.20                             |                |
|        | 22                       | 250             | M 30 x 2                          | 20   | 36   | 8,00                              | FI-M-22L-W3    |
|        | .87                      | 3625            |                                   | .79  | 1.42 | 17.60                             |                |
|        | 28                       | 250             | M 36 x 2                          | 22   | 41   | 14,20                             | FI-M-28L-W3    |
|        | 1.10                     | 3625            |                                   | .87  | 1.61 | 31.24                             |                |
|        | 35                       | 250             | M 45 x 2                          | 25   | 50   | 19,80                             | FI-M-35L-W3    |
|        | 1.38                     | 3625            |                                   | .98  | 1.97 | 43.56                             |                |
| S      | 42                       | 250             | M 52 x 2                          | 25   | 60   | 22,00                             | FI-M-42L-W3    |
|        | 1.65                     | 3625            |                                   | .98  | 2.36 | 48.40                             |                |
|        | 6                        | 800             | M 14 x 1,5                        | 16,5 | 17   | 1,70                              | FI-M-06S-W3    |
|        | .24                      | 11600           |                                   | .65  | .67  | 3.74                              |                |
|        | 8                        | 800             | M 16 x 1,5                        | 16,5 | 19   | 2,00                              | FI-M-08S-W3    |
|        | .31                      | 11600           |                                   | .65  | .75  | 4.40                              |                |
|        | 10                       | 800             | M 18 x 1,5                        | 17,5 | 22   | 3,00                              | FI-M-10S-W3    |
|        | .39                      | 11600           |                                   | .69  | .87  | 6.60                              |                |
|        | 12                       | 630             | M 20 x 1,5                        | 17,5 | 24   | 3,40                              | FI-M-12S-W3    |
|        | .47                      | 9135            |                                   | .69  | .94  | 7.48                              |                |
|        | 14                       | 630             | M 22 x 1,5                        | 20,5 | 27   | 5,20                              | FI-M-14S-W3    |
|        | .55                      | 9135            |                                   | .81  | 1.06 | 11.44                             |                |
|        | 16                       | 630             | M 24 x 1,5                        | 20,5 | 30   | 6,50                              | FI-M-16S-W3    |
|        | .63                      | 9135            |                                   | .81  | 1.18 | 14.30                             |                |
|        | 20                       | 420             | M 30 x 2                          | 24   | 36   | 10,10                             | FI-M-20S-W3    |
|        | .79                      | 6091            |                                   | .94  | 1.42 | 22.22                             |                |
|        | 25                       | 420             | M 36 x 2                          | 27   | 46   | 19,80                             | FI-M-25S-W3    |
|        | .98                      | 6091            |                                   | 1.06 | 1.81 | 43.56                             |                |
|        | 30                       | 420             | M 42 x 2                          | 29   | 50   | 21,60                             | FI-M-30S-W3    |
|        | 1.18                     | 6091            |                                   | 1.14 | 1.97 | 47.52                             |                |
|        | 38                       | 420             | M52 x 2                           | 32,5 | 60   | 31,40                             | FI-M-38S-W3    |
|        | 1.50                     | 6091            |                                   | 1.28 | 2.36 | 69.08                             |                |

### Ordering Codes

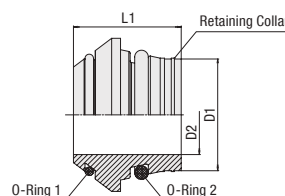
**\*FI-M\*-15\*L\*-W3**

|                                    |                                                           |
|------------------------------------|-----------------------------------------------------------|
| * Union Nut                        | FI-M                                                      |
| * Outside Tube Diameter D1 (in mm) | -15                                                       |
| * Series                           | Extra-Light Series LL<br>Light Series L<br>Heavy Series S |
| * Material Code                    | Steel, zinc/nickel-plated -W3                             |

Please contact STAUFF for alternative materials and surface finishings.



## 24°/37° Flared Cone Adaptor with O-Rings Type FI-BA ▪ Series L / S



### Ordering Codes

#### \*FI-BA\*-10\*L\*-V\*-W3

\* 24°/37° Flared Cone Adaptor with O-Rings

**FI-BA**

\* Outside Tube Diameter D1 (in mm)

**-10**

\* Series  
Light Series  
Heavy Series

**L**

**S**

\* Seal Material  
FKM (Viton®)  
EPDM

**-V**

**-E**

\* Material Code  
Steel, zinc/nickel-plated

**-W3**

Please contact STAUFF for alternative materials and surface finishings.

### Spare Parts / Accessories



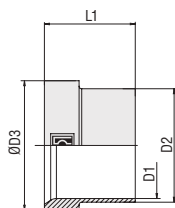
O-Ring  
Type **O-RING**

Page 240

| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |            | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes |
|--------|--------------------|-----------------|-----------------------|------|------------|-----------------------------------|----------------|
|        | D1                 |                 | D2                    | L1   | O-Ring 1   | O-Ring 2                          |                |
| L      | 6                  | 500             | 3                     | 11,5 | 4,4 x 0,8  | 4,5 x 1,5                         | 0,28           |
|        | .24                | 7250            | .12                   | .45  | .17 x .03  | .18 x .06                         | .62            |
|        | 8                  | 500             | 5                     | 12   | 6,0 x 0,8  | 6,5 x 1,5                         | 0,40           |
|        | .31                | 7250            | .20                   | .47  | .24 x .03  | .26 x .06                         | .89            |
|        | 10                 | 500             | 6                     | 12,5 | 7,5 x 0,8  | 8,5 x 1,5                         | 0,65           |
|        | .39                | 7250            | .24                   | .49  | .30 x .03  | .33 x .06                         | 1.43           |
|        | 12                 | 400             | 8                     | 12,5 | 9,5 x 0,8  | 10,0 x 1,5                        | 0,80           |
|        | .47                | 5800            | .31                   | .49  | .37 x .03  | .39 x .06                         | 1.76           |
|        | 15                 | 400             | 11                    | 12,5 | 12,5 x 0,8 | 12,5 x 2,0                        | 1,05           |
|        | .59                | 5800            | .43                   | .49  | .49 x .03  | .49 x .08                         | 2.31           |
|        | 18                 | 400             | 14                    | 13   | 15,0 x 1,0 | 16,0 x 2,0                        | 1,26           |
|        | .71                | 5800            | .55                   | .51  | .59 x .04  | .63 x .08                         | 2.77           |
|        | 22                 | 250             | 17                    | 14,2 | 18,0 x 1,0 | 20,0 x 2,0                        | 2,01           |
|        | .87                | 3625            | .67                   | .56  | .71 x .04  | .79 x .08                         | 4.43           |
|        | 28                 | 250             | 23                    | 14,7 | 23,0 x 1,0 | 26,0 x 2,0                        | 2,82           |
|        | 1.10               | 3625            | .91                   | .58  | .91 x .04  | 1.02 x .08                        | 6.20           |
|        | 35                 | 250             | 28                    | 18,5 | 30,0 x 1,0 | 32,0 x 2,5                        | 5,86           |
|        | 1.38               | 3625            | 1.10                  | .73  | 1.18 x .04 | 1.26 x .10                        | 12.88          |
|        | 42                 | 250             | 35                    | 20,5 | 37,0 x 1,0 | 38,0 x 2,5                        | 4,40           |
|        | 1.65               | 3625            | 1.38                  | .81  | 1.46 x .04 | 1.50 x .10                        | 9.69           |
| S      | 6                  | 630             | 3                     | 11,5 | 4,4 x 0,8  | 4,5 x 1,5                         | 0,28           |
|        | .24                | 9135            | .12                   | .45  | .17 x .03  | .18 x .06                         | .62            |
|        | 8                  | 630             | 5                     | 12   | 6,0 x 0,8  | 6,5 x 1,5                         | 0,40           |
|        | .31                | 9135            | .20                   | .47  | .24 x .03  | .26 x .06                         | .89            |
|        | 10                 | 630             | 6                     | 12,5 | 7,5 x 0,8  | 8,5 x 1,5                         | 0,65           |
|        | .39                | 9135            | .24                   | .49  | .30 x .03  | .33 x .06                         | 1.43           |
|        | 12                 | 630             | 8                     | 12,5 | 9,5 x 0,8  | 10,0 x 1,5                        | 0,80           |
|        | .47                | 9135            | .31                   | .49  | .37 x .03  | .39 x .06                         | 1.76           |
|        | 14                 | 630             | 9                     | 14   | 11,0 x 1,0 | 12,0 x 2,0                        | 1,20           |
|        | .55                | 9135            | .35                   | .55  | .43 x .04  | .47 x .08                         | 2.63           |
|        | 16                 | 630             | 11                    | 15   | 12,5 x 1,0 | 14,0 x 2,0                        | 1,50           |
|        | .63                | 9135            | .43                   | .59  | .49 x .04  | .55 x .08                         | 3.30           |
|        | 20                 | 400             | 14                    | 18,5 | 16,0 x 1,0 | 17,3 x 2,4                        | 2,73           |
|        | .79                | 5800            | .55                   | .73  | .63 x .04  | .68 x .09                         | 6.00           |
|        | 25                 | 400             | 19                    | 20   | 20,0 x 1,0 | 22,3 x 2,4                        | 3,78           |
|        | .98                | 5800            | .75                   | .79  | .79 x .04  | .88 x .09                         | 8.32           |
|        | 30                 | 400             | 23                    | 22   | 25,0 x 1,0 | 27,3 x 2,4                        | 3,82           |
|        | 1.18               | 5800            | .91                   | .87  | .98 x .04  | 1.07 x .09                        | 8.41           |
|        | 38                 | 400             | 30                    | 26   | 32,0 x 1,8 | 35,0 x 2,4                        | 9,15           |
|        | 1.50               | 5800            | 1.18                  | 1.02 | 1.26 x .07 | 1.38 x .09                        | 20.13          |

Standard seal material is FKM (Viton®).





## Support Sleeve for 37° Flared Tube Fittings Type FI-BH ■ Series L / S



B

| Series | Tube OD |      | PN        |  | Dimensions |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes |
|--------|---------|------|-----------|--|------------|------|-----------------------------------|----------------|
|        | (mm/in) |      | (bar/psi) |  | (mm/in)    |      |                                   |                |
|        | D1      |      |           |  | D2         | D3   | L1                                |                |
| L      | 6       | 500  |           |  | 7,6        | 10,2 | 10                                | 0,21           |
|        | .24     | 7250 |           |  | .30        | .40  | .39                               | .46            |
|        | 8       | 500  |           |  | 9,3        | 12,2 | 11                                | 0,25           |
|        | .31     | 7250 |           |  | .37        | .48  | .43                               | .56            |
|        | 10      | 500  |           |  | 11,5       | 14,2 | 12                                | 0,37           |
|        | .39     | 7250 |           |  | .45        | .56  | .47                               | .82            |
|        | 12      | 400  |           |  | 13,6       | 16,2 | 12,5                              | 0,46           |
|        | .47     | 5800 |           |  | .54        | .64  | .49                               | 1,01           |
|        | 15      | 400  |           |  | 17,5       | 20,2 | 13,5                              | 0,89           |
|        | .59     | 5800 |           |  | .69        | .80  | .53                               | 1,96           |
|        | 18      | 400  |           |  | 21         | 24,2 | 14                                | 1,40           |
|        | .71     | 5800 |           |  | .83        | .95  | .55                               | 3,08           |
|        | 22      | 250  |           |  | 24,2       | 27,8 | 17,5                              | 1,59           |
|        | .87     | 3625 |           |  | .95        | 1.09 | .69                               | 3,49           |
|        | 28      | 250  |           |  | 30,2       | 33,8 | 16,5                              | 1,99           |
|        | 1.10    | 3625 |           |  | 1.19       | 1.33 | .65                               | 4,38           |
|        | 35      | 250  |           |  | 38         | 42,7 | 18,5                              | 3,70           |
|        | 1.38    | 3625 |           |  | 1.50       | 1.68 | .73                               | 8,14           |
|        | 42      | 250  |           |  | 45         | 49,7 | 20,5                              | 4,94           |
|        | 1.65    | 3625 |           |  | 1.77       | 1.96 | .81                               | 10,86          |
| S      | 6       | 630  |           |  | 7,6        | 10,2 | 10                                | 0,21           |
|        | .24     | 9135 |           |  | .30        | .40  | .39                               | .46            |
|        | 8       | 630  |           |  | 9,3        | 12,2 | 11                                | 0,25           |
|        | .31     | 9135 |           |  | .37        | .48  | .43                               | .56            |
|        | 10      | 630  |           |  | 11,5       | 14,2 | 12                                | 0,37           |
|        | .39     | 9135 |           |  | .45        | .56  | .47                               | .82            |
|        | 12      | 630  |           |  | 13,6       | 16,2 | 12,5                              | 0,46           |
|        | .47     | 9135 |           |  | .54        | .64  | .49                               | 1,01           |
|        | 14      | 630  |           |  | 17,5       | 20,2 | 14                                | 1,20           |
|        | .55     | 9135 |           |  | .69        | .80  | .55                               | 2,63           |
|        | 16      | 630  |           |  | 18,5       | 22   | 16,5                              | 1,25           |
|        | .63     | 9135 |           |  | .73        | .87  | .65                               | 2,74           |
|        | 20      | 400  |           |  | 24,2       | 27,8 | 17                                | 2,39           |
|        | .79     | 5800 |           |  | .95        | 1.09 | .67                               | 5,26           |
|        | 25      | 400  |           |  | 28,5       | 32,8 | 19,5                              | 2,98           |
|        | .98     | 5800 |           |  | 1.12       | 1.29 | .77                               | 6,55           |
|        | 30      | 400  |           |  | 34         | 39   | 21                                | 4,50           |
|        | 1.18    | 5800 |           |  | 1.34       | 1.54 | .83                               | 9,91           |
|        | 38      | 400  |           |  | 42         | 48,5 | 26                                | 7,34           |
|        | 1.50    | 5800 |           |  | 1.65       | 1.91 | 1.02                              | 16,15          |

### Ordering Codes

#### \*FI-BH\*-15\*L\*-W3

\* Support Sleeve for 37° Flared Tube Fittings **FI-BH**

\* Outside Tube Diameter D1 (in mm) **-15**

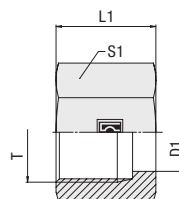
\* Series Light Series **L**  
Heavy Series **S**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.



## Union Nut for 37° Flared Tube Fittings Type FI-BM ▪ Series L / S



### Ordering Codes

#### \*FI-BM\*-15\*L\*-W3

\* Union Nut for 37° Flared Tube Fittings

**FI-BM**

\* Outside Tube Diameter D1 (in mm)

**-15**

\* Series                      Light Series  
                                         Heavy Series

**L**

**S**

\* Material Code            Steel, zinc/nickel-plated

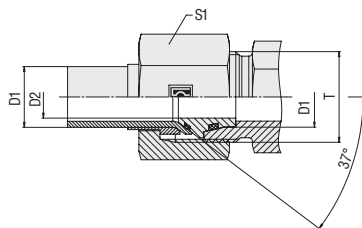
**-W3**

Please contact STAUFF for alternative materials and surface finishings.

| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes |
|--------|--------------------|-----------------|-----------------------|------|------|------|-----------------------------------|----------------|
|        |                    |                 | Thread T              | D1   | L1   | S1   |                                   |                |
| L      | 6                  | 500             | M 12 x 1,5            | 7,8  | 17   | 14   | 1,07                              | FI-BM-06L-W3   |
|        | .24                | 7250            |                       | .31  | .67  | .55  | 2.35                              |                |
|        | 8                  | 500             | M 14 x 1,5            | 9,5  | 18   | 17   | 1,82                              | FI-BM-08L-W3   |
|        | .31                | 7250            |                       | .37  | .71  | .67  | 4.01                              |                |
|        | 10                 | 500             | M 16 x 1,5            | 11,7 | 19,5 | 19   | 2,35                              | FI-BM-10L-W3   |
|        | .39                | 7250            |                       | .46  | .77  | .75  | 5.18                              |                |
|        | 12                 | 400             | M 18 x 1,5            | 13,8 | 20,5 | 22   | 3,36                              | FI-BM-12L-W3   |
|        | .47                | 5800            |                       | .54  | .81  | .87  | 7.38                              |                |
|        | 15                 | 400             | M 22 x 1,5            | 17,7 | 23   | 27   | 5,31                              | FI-BM-15L-W3   |
|        | .59                | 5800            |                       | .70  | .91  | 1.06 | 11.68                             |                |
|        | 18                 | 400             | M 26 x 1,5            | 21,2 | 23   | 32   | 7,22                              | FI-BM-18L-W3   |
|        | .71                | 5800            |                       | .83  | .91  | 1.26 | 15.88                             |                |
|        | 22                 | 250             | M 30 x 2              | 24,4 | 27,5 | 36   | 10,60                             | FI-BM-22L-W3   |
|        | .87                | 3625            |                       | .96  | 1.08 | 1.42 | 23.32                             |                |
|        | 28                 | 250             | M 36 x 2              | 30,4 | 27,5 | 41   | 11,47                             | FI-BM-28L-W3   |
|        | 1.10               | 3625            |                       | 1.20 | 1.08 | 1.61 | 25.24                             |                |
|        | 35                 | 250             | M 45 x 2              | 38,3 | 30   | 50   | 16,27                             | FI-BM-35L-W3   |
|        | 1.38               | 3625            |                       | 1.51 | 1.18 | 1.97 | 35.80                             |                |
|        | 42                 | 250             | M 52 x 2              | 45,3 | 34   | 60   | 30,39                             | FI-BM-42L-W3   |
|        | 1.65               | 3625            |                       | 1.78 | 1.34 | 2.36 | 66.86                             |                |
| S      | 6                  | 630             | M 14 x 1,5            | 7,8  | 18   | 17   | 2,03                              | FI-BM-06S-W3   |
|        | .24                | 9135            |                       | .31  | .71  | .67  | 4.46                              |                |
|        | 8                  | 630             | M 16 x 1,5            | 9,5  | 19   | 19   | 2,52                              | FI-BM-08S-W3   |
|        | .31                | 9135            |                       | .37  | .75  | .75  | 5.54                              |                |
|        | 10                 | 630             | M 18 x 1,5            | 11,7 | 20,5 | 22   | 3,58                              | FI-BM-10S-W3   |
|        | .39                | 9135            |                       | .46  | .81  | .87  | 7.88                              |                |
|        | 12                 | 630             | M 20 x 1,5            | 13,8 | 21   | 24   | 4,11                              | FI-BM-12S-W3   |
|        | .47                | 9135            |                       | .54  | .83  | .94  | 9.05                              |                |
|        | 14                 | 630             | M 22 x 1,5            | 17,7 | 23   | 27   | 5,38                              | FI-BM-14S-W3   |
|        | .55                | 9135            |                       | .70  | .91  | 1.06 | 11.84                             |                |
|        | 16                 | 630             | M 24 x 1,5            | 18,7 | 26,5 | 30   | 7,87                              | FI-BM-16S-W3   |
|        | .63                | 9135            |                       | .74  | 1.04 | 1.18 | 17.31                             |                |
|        | 20                 | 400             | M 30 x 2              | 24,4 | 27,5 | 36   | 10,61                             | FI-BM-20S-W3   |
|        | .79                | 5800            |                       | .96  | 1.08 | 1.42 | 23.35                             |                |
|        | 25                 | 400             | M 36 x 2              | 28,7 | 30,5 | 46   | 22,19                             | FI-BM-25S-W3   |
|        | .98                | 5800            |                       | 1.13 | 1.20 | 1.81 | 48.81                             |                |
|        | 30                 | 400             | M 42 x 2              | 34,2 | 32   | 50   | 23,20                             | FI-BM-30S-W3   |
|        | 1.18               | 5800            |                       | 1.35 | 1.26 | 1.97 | 51.04                             |                |
|        | 38                 | 400             | M 52 x 2              | 42,3 | 38   | 60   | 35,40                             | FI-BM-38S-W3   |
|        | 1.50               | 5800            |                       | 1.67 | 1.50 | 2.36 | 77.89                             |                |



## 37° Flared Tube Fitting Set Type FI-AB ■ Series L / S



B

| Series | Tube OD                           | PN                                  | Dimensions                        |      |      | Weight<br>( <sup>kg</sup> / <sub>lbs</sub> ) ca.<br>per 100 | Ordering Codes |
|--------|-----------------------------------|-------------------------------------|-----------------------------------|------|------|-------------------------------------------------------------|----------------|
|        | ( <sup>mm</sup> / <sub>in</sub> ) | ( <sup>bar</sup> / <sub>psi</sub> ) | ( <sup>mm</sup> / <sub>in</sub> ) |      |      |                                                             |                |
|        | D1                                |                                     | Thread T                          | D2   | S1   |                                                             |                |
| L      | 6                                 | 500                                 | M 12 x 1,5                        | 3    | 14   | 1,74                                                        | FI-AB-06L-V-W3 |
|        | .24                               | 7250                                |                                   | .12  | .55  | 3.83                                                        |                |
|        | 8                                 | 500                                 | M 14 x 1,5                        | 5    | 17   | 2,50                                                        | FI-AB-08L-V-W3 |
|        | .31                               | 7250                                |                                   | .20  | .67  | 5.50                                                        |                |
|        | 10                                | 500                                 | M 16 x 1,5                        | 6    | 19   | 3,38                                                        | FI-AB-10L-V-W3 |
|        | .39                               | 7250                                |                                   | .24  | .75  | 7.43                                                        |                |
|        | 12                                | 400                                 | M 18 x 1,5                        | 8    | 22   | 4,83                                                        | FI-AB-12L-V-W3 |
|        | .47                               | 5800                                |                                   | .31  | .87  | 10.62                                                       |                |
|        | 15                                | 400                                 | M 22 x 1,5                        | 11   | 27   | 4,66                                                        | FI-AB-15L-V-W3 |
|        | .59                               | 5800                                |                                   | .43  | 1.06 | 10.24                                                       |                |
|        | 18                                | 400                                 | M 26 x 1,5                        | 14   | 32   | 10,11                                                       | FI-AB-18L-V-W3 |
|        | .71                               | 5800                                |                                   | .55  | 1.26 | 22.25                                                       |                |
|        | 22                                | 250                                 | M 30 x 2                          | 17   | 36   | 14,25                                                       | FI-AB-22L-V-W3 |
|        | .87                               | 3625                                |                                   | .67  | 1.42 | 31.35                                                       |                |
|        | 28                                | 250                                 | M 36 x 2                          | 23   | 41   | 16,47                                                       | FI-AB-28L-V-W3 |
|        | 1.10                              | 3625                                |                                   | .91  | 1.61 | 36.23                                                       |                |
|        | 35                                | 250                                 | M 45 x 2                          | 28   | 50   | 25,86                                                       | FI-AB-35L-V-W3 |
|        | 1.38                              | 3625                                |                                   | 1.10 | 1.97 | 56.90                                                       |                |
|        | 42                                | 250                                 | M 52 x 2                          | 35   | 60   | 42,85                                                       | FI-AB-42L-V-W3 |
|        | 1.65                              | 3625                                |                                   | 1.38 | 2.36 | 94.27                                                       |                |
| S      | 6                                 | 630                                 | M 14 x 1,5                        | 3    | 17   | 2,51                                                        | FI-AB-06S-V-W3 |
|        | .24                               | 9135                                |                                   | .12  | .67  | 5.53                                                        |                |
|        | 8                                 | 630                                 | M 16 x 1,5                        | 5    | 19   | 3,39                                                        | FI-AB-08S-V-W3 |
|        | .31                               | 9135                                |                                   | .20  | .75  | 7.46                                                        |                |
|        | 10                                | 630                                 | M 18 x 1,5                        | 6    | 22   | 4,77                                                        | FI-AB-10S-V-W3 |
|        | .39                               | 9135                                |                                   | .24  | .87  | 10.49                                                       |                |
|        | 12                                | 630                                 | M 20 x 1,5                        | 8    | 24   | 5,63                                                        | FI-AB-12S-V-W3 |
|        | .47                               | 9135                                |                                   | .31  | .94  | 12.39                                                       |                |
|        | 14                                | 630                                 | M 22 x 1,5                        | 9    | 27   | 7,77                                                        | FI-AB-14S-V-W3 |
|        | .55                               | 9135                                |                                   | .35  | 1.06 | 17.10                                                       |                |
|        | 16                                | 630                                 | M 24 x 1,5                        | 11   | 30   | 10,88                                                       | FI-AB-16S-V-W3 |
|        | .63                               | 9135                                |                                   | .43  | 1.18 | 23.94                                                       |                |
|        | 20                                | 400                                 | M 30 x 2                          | 14   | 36   | 15,90                                                       | FI-AB-20S-V-W3 |
|        | .79                               | 5800                                |                                   | .55  | 1.42 | 34.98                                                       |                |
|        | 25                                | 400                                 | M 36 x 2                          | 19   | 46   | 29,34                                                       | FI-AB-25S-V-W3 |
|        | .98                               | 5800                                |                                   | .75  | 1.81 | 64.54                                                       |                |
|        | 30                                | 400                                 | M 42 x 2                          | 23   | 50   | 33,64                                                       | FI-AB-30S-V-W3 |
|        | 1.18                              | 5800                                |                                   | .91  | 1.97 | 74.00                                                       |                |
|        | 38                                | 400                                 | M 52 x 2                          | 30   | 60   | 52,40                                                       | FI-AB-38S-V-W3 |
|        | 1.50                              | 5800                                |                                   | 1.18 | 2.36 | 115.28                                                      |                |

### Ordering Codes

**\*FI-AB\*-15\*L\*-V\*-W3**

\* 37° Flared Tube Fitting Set **FI-AB**

\* Outside Tube Diameter D1 (in mm) **-15**

\* Series Light Series **L**  
Heavy Series **S**

\* Seal Material FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

### Spare Parts / Accessories

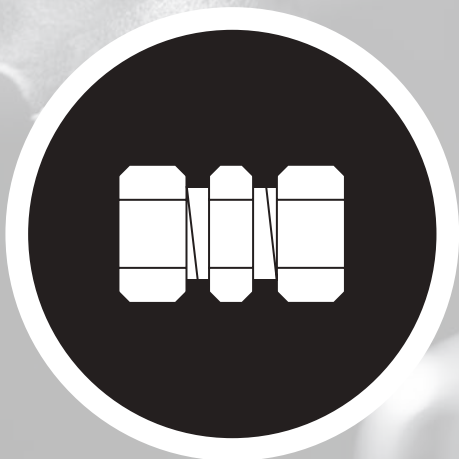


O-Ring  
Type **O-RING**

Page 240

Standard seal material is FKM (Viton®).





## Straight Male Stud Fitting

40-73

FI-GE



**Whitworth Parallel Pipe Thread (BSPP) /  
Metallic Sealing Edge**  
FI-GE-...-R

40



**Metric Parallel Thread /  
Metallic Sealing Edge**  
FI-GE-...-M

44



**Whitworth Parallel Pipe Thread (BSPP) /  
Profile Sealing Ring**  
FI-GE-...-R-WD

48



**Metric Parallel Thread /  
Profile Sealing Ring**  
FI-GE-...-M-WD

52



**BSPP Thread / 60° Conical Bore /  
Sealing Surface for Gaskets**  
FI-GE-...-R-DF

55



**Metric Parallel Thread /  
O-Ring**  
FI-GE-...-M-OR

57



**Whitworth Taper Pipe Thread (BSPT)**  
FI-GE-...-Rk

60



**Metric Taper Thread**  
FI-GE-...-Mk

64



**NPT Thread**  
FI-GE-...-N

65



**UN/UNF Thread /  
O-Ring**  
FI-GE-...-U

70

## Male Stud Elbow

FI-WE

74-81



**Whitworth Parallel Pipe Thread (BSPP) /  
Metallic Sealing Edge**  
FI-WE-...-R

74



**Metric Parallel Thread /  
Metallic Sealing Edge**  
FI-WE-...-M

75



**Whitworth Taper Pipe Thread (BSPT)**  
FI-WE-...-Rk

76



**Metric Taper Thread**  
FI-WE-...-Mk

78



**NPT Thread**  
FI-WE-...-N

80

## Male Stud Branch Tee

FI-TE

82-87



**Whitworth Parallel Pipe Thread (BSPP) /  
Metallic Sealing Edge**  
FI-TE-...-R

82



**Metric Parallel Thread /  
Metallic Sealing Edge**  
FI-TE-...-M

83



**Whitworth Taper Pipe Thread (BSPT)**  
FI-TE-...-Rk

84



**Metric Taper Thread**  
FI-TE-...-Mk

85



**NPT Thread**  
FI-TE-...-N

86

## Male Stud Barrel Tee

FI-LE

88-93



**Whitworth Parallel Pipe Thread (BSPP) /  
Metallic Sealing Edge**  
FI-LE-...-R

88



**Metric Parallel Thread /  
Metallic Sealing Edge**  
FI-LE-...-M

89



**Whitworth Taper Pipe Thread (BSPT)**  
FI-LE-...-Rk

90



**Metric Taper Thread**  
FI-LE-...-Mk

91



**NPT Thread**  
FI-LE-...-N

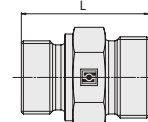
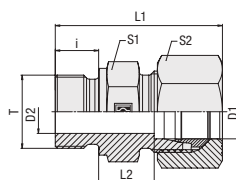
92





## Straight Male Stud Fitting

### Type FI-GE-...-R • Series LL / L



#### Whitworth Parallel Pipe Thread (BSPP)

#### Metallic Sealing Edge

### Ordering Codes

#### \*FI-GE\*-10\*L\*R\*-W3\*-MS

|                                                                         |                                                                                                                                                                                  |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | <b>FI-GE</b>                                                                                                                                                                     |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                                                                                                                       |
| * Series                                                                | Extra-Light Series (page 40) <b>LL</b><br>Light Series (pages 40/41) <b>L</b><br>Heavy Series (pages 42/43) <b>S</b>                                                             |
| * Thread Type                                                           | Whitworth Parallel Pipe Thread (BSPP) <b>R</b>                                                                                                                                   |
| If required, please indicate special sizes, e.g. R1/8!                  |                                                                                                                                                                                  |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                                                                                                                             |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                                                                                  |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b><br>Fitting body supplied with cutting ring and union nut <b>-MS</b><br>Fitting body supplied with soft-sealing cutting ring and union nut <b>-MSV</b> |

### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in)<br>Thread T | D2  | i   | L    | L1 <sup>1</sup> | L2   | S1   | S2  | Torque<br>(N·m/ft·lb)<br>Thread T | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------------------|-----|-----|------|-----------------|------|------|-----|-----------------------------------|-----------------------------------|-----------------------------|
| LL     | 4                        | 100             | G 1/8                             | 3   | 8   | 21,5 | 25,5            | 9,5  | 14   | 10  | 25                                | 1,17                              | FI-GE-04LLR-W3              |
|        | .16                      | 1450            | G 1/8                             | .12 | .31 | .85  | 1.00            | .37  | .55  | .39 | 18.4                              | 2.58                              | FI-GE-06LLR-W3              |
|        | 6                        | 100             | G 1/8                             | 4   | 8   | 21,5 | 25,5            | 8    | 14   | 12  | 25                                | 1,16                              | FI-GE-08LLR-W3              |
|        | .24                      | 1450            | G 1/8                             | .16 | .31 | .85  | 1.00            | .31  | .55  | .47 | 18.4                              | 2.56                              | FI-GE-10LLR-W3              |
|        | 8                        | 100             | G 1/8                             | 4   | 8   | 22,5 | 26,5            | 9    | 14   | 14  | 25                                | 1,33                              | FI-GE-10LLR-W3              |
|        | .31                      | 1450            | G 1/8                             | .16 | .31 | .89  | 1.04            | .35  | .55  | .55 | 18.4                              | 2.93                              | FI-GE-10LLR-W3              |
| L      | 10                       | 100             | G 1/4                             | 6   | 12  | 28   | 35              | 10,5 | 19   | 17  | 55                                | 2,66                              | FI-GE-06LR-W3               |
|        | .39                      | 1450            | G 1/4                             | .24 | .47 | 1.10 | 1.38            | .41  | .75  | .67 | 40.5                              | 5.86                              | FI-GE-06LR1/4-W3            |
|        | 6                        | 400             | G 1/8                             | 4   | 8   | 23,5 | 31,5            | 8,5  | 14   | 14  | 25                                | 1,37                              | FI-GE-06LR1/4-W3            |
|        | .24                      | 5800            | G 1/8                             | .16 | .31 | .93  | 1.24            | .33  | .55  | .55 | 18.4                              | 3.01                              | FI-GE-06LR3/8-W3            |
|        | 6                        | 400             | G 1/4                             | 4   | 12  | 29   | 37              | 10   | 19   | 14  | 55                                | 2,84                              | FI-GE-06LR3/8-W3            |
|        | .24                      | 5800            | G 1/4                             | .16 | .47 | 1.14 | 1.46            | .39  | .75  | .55 | 40.5                              | 6.24                              | FI-GE-06LR1/2-W3            |
|        | 6                        | 400             | G 3/8                             | 4   | 12  | 30,5 | 38,5            | 11,5 | 22   | 14  | 95                                | 4,13                              | FI-GE-08LR1/8-W3            |
|        | .24                      | 5800            | G 3/8                             | .16 | .47 | 1.20 | 1.52            | .45  | .87  | .55 | 70.1                              | 9.08                              | FI-GE-08LR1/8-W3            |
|        | 6                        | 400             | G 1/2                             | 4   | 14  | 33   | 41              | 12   | 27   | 14  | 185                               | 6,48                              | FI-GE-08LR1/2-W3            |
|        | .24                      | 5800            | G 1/2                             | .16 | .55 | 1.30 | 1.61            | .47  | 1.06 | .55 | 136.5                             | 14.26                             | FI-GE-08LR3/8-W3            |
|        | 8                        | 400             | G 1/8                             | 4   | 8   | 24,5 | 32,5            | 9,5  | 14   | 17  | 25                                | 1,61                              | FI-GE-08LR3/8-W3            |
|        | .31                      | 5800            | G 1/8                             | .16 | .31 | .96  | 1.28            | .37  | .55  | .67 | 18.4                              | 3.54                              | FI-GE-08LR1/2-W3            |
|        | 8                        | 400             | G 1/4                             | 6   | 12  | 29   | 37              | 10   | 19   | 17  | 55                                | 2,72                              | FI-GE-08LR1/2-W3            |
|        | .31                      | 5800            | G 1/4                             | .24 | .47 | 1.14 | 1.46            | .39  | .75  | .67 | 40.5                              | 5.97                              | FI-GE-08LR3/8-W3            |
|        | 8                        | 400             | G 3/8                             | 6   | 12  | 30,5 | 38,5            | 11   | 22   | 17  | 95                                | 4,46                              | FI-GE-10LR1/8-W3            |
|        | .31                      | 5800            | G 3/8                             | .24 | .47 | 1.20 | 1.52            | .43  | .87  | .67 | 70.1                              | 9.81                              | FI-GE-10LR1/8-W3            |
|        | 8                        | 400             | G 1/2                             | 6   | 14  | 33   | 41              | 12   | 27   | 17  | 185                               | 7,51                              | FI-GE-10LR1/2-W3            |
|        | .31                      | 5800            | G 1/2                             | .24 | .55 | 1.30 | 1.61            | .47  | 1.06 | .67 | 136.5                             | 16.53                             | FI-GE-10LR3/8-W3            |
|        | 10                       | 400             | G 1/8                             | 4   | 8   | 25,5 | 33,5            | 10,5 | 17   | 19  | 25                                | 2,00                              | FI-GE-10LR3/8-W3            |
|        | .39                      | 5800            | G 1/8                             | .16 | .31 | 1.00 | 1.32            | .41  | .67  | .75 | 18.4                              | 4.40                              | FI-GE-10LR1/2-W3            |
|        | 10                       | 400             | G 1/4                             | 6   | 12  | 30   | 38              | 11   | 19   | 19  | 55                                | 2,95                              | FI-GE-10LR1/2-W3            |
|        | .39                      | 5800            | G 1/4                             | .24 | .47 | 1.18 | 1.50            | .43  | .75  | .75 | 40.5                              | 6.48                              | FI-GE-10LR3/4-W3            |
|        | 10                       | 400             | G 3/8                             | 8   | 12  | 31,5 | 39,5            | 12,5 | 22   | 19  | 95                                | 4,29                              | FI-GE-10LR3/4-W3            |
|        | .39                      | 5800            | G 3/8                             | .31 | .47 | 1.24 | 1.56            | .49  | .87  | .75 | 70.1                              | 9.44                              | FI-GE-12LR1/8-W3            |
|        | 10                       | 400             | G 1/2                             | 8   | 14  | 34   | 42              | 13   | 27   | 19  | 185                               | 7,08                              | FI-GE-12LR1/8-W3            |
|        | .39                      | 5800            | G 1/2                             | .31 | .55 | 1.34 | 1.65            | .51  | 1.06 | .75 | 136.5                             | 15.58                             | FI-GE-12LR1/2-W3            |
|        | 10                       | 400             | G 3/4                             | 8   | 16  | 37,5 | 45,5            | 14,5 | 32   | 19  | 250                               | 9,29                              | FI-GE-12LR3/4-W3            |
|        | .39                      | 5800            | G 3/4                             | .31 | .63 | 1.48 | 1.79            | .57  | 1.26 | .75 | 184.4                             | 20.43                             | FI-GE-12LR3/4-W3            |
|        | 12                       | 400             | G 1/8                             | 4   | 8   | 26,5 | 34,5            | 11,5 | 19   | 22  | 25                                | 2,49                              | FI-GE-12LR1/8-W3            |
|        | .47                      | 5800            | G 1/8                             | .16 | .31 | 1.04 | 1.36            | .45  | .75  | .87 | 18.4                              | 5.48                              | FI-GE-12LR1/8-W3            |
|        | 12                       | 400             | G 1/4                             | 6   | 12  | 31   | 39              | 12   | 19   | 22  | 55                                | 3,10                              | FI-GE-12LR1/4-W3            |
|        | .47                      | 5800            | G 1/4                             | .24 | .47 | 1.22 | 1.54            | .47  | .75  | .87 | 40.5                              | 6.81                              | FI-GE-12LR1/4-W3            |
|        | 12                       | 400             | G 3/8                             | 9   | 12  | 31,5 | 39,5            | 12,5 | 22   | 22  | 95                                | 4,24                              | FI-GE-12LR3/8-W3            |
|        | .47                      | 5800            | G 3/8                             | .35 | .47 | 1.24 | 1.56            | .49  | .87  | .87 | 70.1                              | 9.32                              | FI-GE-12LR3/8-W3            |
|        | 12                       | 400             | G 1/2                             | 10  | 14  | 34   | 42              | 13   | 27   | 22  | 185                               | 6,67                              | FI-GE-12LR1/2-W3            |
|        | .47                      | 5800            | G 1/2                             | .39 | .55 | 1.34 | 1.65            | .51  | 1.06 | .87 | 136.5                             | 14.68                             | FI-GE-12LR1/2-W3            |
|        | 12                       | 400             | G 3/4                             | 10  | 16  | 37   | 45              | 14   | 32   | 22  | 250                               | 10,83                             | FI-GE-12LR3/4-W3            |
|        | .47                      | 5800            | G 3/4                             | .39 | .63 | 1.46 | 1.77            | .55  | 1.26 | .87 | 184.4                             | 23.83                             | FI-GE-12LR3/4-W3            |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

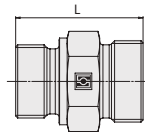
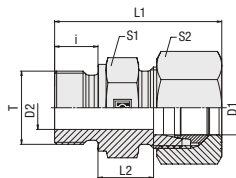
Male stud acc. to DIN 3852-2 (Form B) / ISO 1179-4 (Type B)  
Port acc. to DIN 3852-2 (Form X) / ISO 1179-1

Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.  
Please contact STAUFF prior to the assembly for further information.



## Straight Male Stud Fitting Type FI-GE-...-R • Series L



C

### Metallic Sealing Edge

### Whitworth Parallel Pipe Thread (BSPP)

| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in) | Torque<br>(Nm/ft-lb)                   | Weight<br>(kg/lbs) ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|----------------------------------------|------------------------|-----------------------------|
|        | D1                 |                 | Thread T              | Thread T                               | per 100                |                             |
| L      | 15                 | 400             | G 1/4                 | 6 12 33 41 14 24 27 55                 | 4,93                   | FI-GE-15LR1/4-W3            |
|        | .59                | 5800            |                       | .24 .47 1.30 1.61 .55 .94 1.06 40.5    | 10.85                  |                             |
|        | 15                 | 400             | G 3/8                 | 9 12 32.5 4.5 13 24 27 95              | 5,03                   | FI-GE-15LR3/8-W3            |
|        | .59                | 5800            |                       | .35 .47 1.28 1.59 .51 .94 1.06 70.1    | 11.06                  |                             |
|        | 15                 | 400             | G 1/2                 | 11 14 35 43 14 27 27 185               | 6,53                   | FI-GE-15LR-W3               |
|        | .59                | 5800            |                       | .43 .55 1.38 1.69 .55 1.06 1.06 136.5  | 14.37                  |                             |
|        | 15                 | 400             | G 3/4                 | 12 16 38 46 15 32 27 250               | 10,06                  | FI-GE-15LR3/4-W3            |
|        | .59                | 5800            |                       | .47 .63 1.50 1.81 .59 1.26 1.06 184.4  | 22.14                  |                             |
|        | 18                 | 200             | G 3/8                 | 9 12 33.5 42.5 14 27 32 95             | 6,41                   | FI-GE-18LR3/8-W3            |
|        | .71                | 2900            |                       | .35 .47 1.32 1.67 .55 1.06 1.26 70.1   | 14.11                  |                             |
|        | 18                 | 200             | G 1/2                 | 14 14 36 45 14.5 27 32 185             | 7,13                   | FI-GE-18LR-W3               |
|        | .71                | 2900            |                       | .55 .55 1.42 1.77 .57 1.06 1.26 136.5  | 15.69                  |                             |
|        | 18                 | 200             | G 3/4                 | 15 16 38 47 14.5 32 32 250             | 11,28                  | FI-GE-18LR3/4-W3            |
|        | .71                | 2900            |                       | .59 .63 1.50 1.85 .57 1.26 1.26 184.4  | 24.82                  |                             |
|        | 18                 | 200             | G 1                   | 15 18 40 49 14.5 41 32 400             | 15,87                  | FI-GE-18LR1-W3              |
|        | .71                | 2900            |                       | .59 .71 1.57 1.93 .57 1.61 1.26 295    | 34.91                  |                             |
|        | 22                 | 200             | G 1/2                 | 14 14 38 47 16.5 32 36 185             | 8,57                   | FI-GE-22LR1/2-W3            |
|        | .87                | 2900            |                       | .55 .55 1.50 1.85 .65 1.26 1.42 136.5  | 18.85                  |                             |
|        | 22                 | 200             | G 3/4                 | 18 16 40 49 16.5 32 36 250             | 10,48                  | FI-GE-22LR-W3               |
|        | .87                | 2900            |                       | .71 .63 1.57 1.93 .65 1.26 1.42 184.4  | 23.06                  |                             |
|        | 22                 | 200             | G 1                   | 19 18 43 52 17.5 41 36 400             | 19,17                  | FI-GE-22LR1-W3              |
|        | .87                | 2900            |                       | .75 .71 1.69 2.05 .69 1.61 1.42 295    | 42.17                  |                             |
|        | 28                 | 200             | G 1/2                 | 14 14 39 48 17.5 41 41 185             | 6,11                   | FI-GE-28LR1/2-W3            |
|        | 1.10               | 2900            |                       | .55 .55 1.54 1.89 .69 1.61 1.61 136.5  | 13.43                  |                             |
|        | 28                 | 200             | G 3/4                 | 18 16 41 50 17.5 41 41 250             | 14,42                  | FI-GE-28LR3/4-W3            |
|        | 1.10               | 2900            |                       | .71 .63 1.61 1.97 .69 1.61 1.61 184.4  | 31.72                  |                             |
|        | 28                 | 200             | G 1                   | 23 18 43 52 17.5 41 41 400             | 17,08                  | FI-GE-28LR-W3               |
|        | 1.10               | 2900            |                       | .91 .71 1.69 2.05 .69 1.61 1.61 295    | 37.58                  |                             |
|        | 28                 | 200             | G 1 1/4               | 24 20 46 55 18.5 50 41 670             | 13,40                  | FI-GE-28LR1-1/4-W3          |
|        | 1.10               | 2900            |                       | .94 .79 1.81 2.17 .73 1.97 1.61 494.2  | 29.48                  |                             |
|        | 28                 | 200             | G 1 1/2               | 36 22 50 65 20.5 55 41 800             | 33,31                  | FI-GE-28LR1-1/2-W3          |
|        | 1.10               | 2900            |                       | 1.42 .87 1.97 2.56 .81 2.17 1.61 590   | 73.44                  |                             |
|        | 35                 | 200             | G 1                   | 23 18 46 57 17.5 46 50 400             | 22,45                  | FI-GE-35LR1-W3              |
|        | 1.38               | 2900            |                       | .91 .71 1.81 2.24 .69 1.81 1.97 295    | 49.38                  |                             |
|        | 35                 | 200             | G 1 1/4               | 30 20 48 59 17.5 50 50 670             | 27,69                  | FI-GE-35LR-W3               |
|        | 1.38               | 2900            |                       | 1.18 .79 1.89 2.32 .69 1.97 1.97 494.2 | 60.92                  |                             |
|        | 35                 | 200             | G 1 1/2               | 30 22 52 63 19.5 55 50 800             | 42,63                  | FI-GE-35LR1-1/2-W3          |
|        | 1.38               | 2900            |                       | 1.18 .87 2.05 2.48 .77 2.17 1.97 590   | 93.78                  |                             |
|        | 42                 | 200             | G 1                   | 23 18 48 60 19 55 60 400               | 32,20                  | FI-GE-42LR1-W3              |
|        | 1.65               | 2900            |                       | .91 .71 1.89 2.36 .75 2.17 2.36 295    | 70.84                  |                             |
|        | 42                 | 200             | G 1 1/4               | 30 20 50 62 19 55 60 670               | 34,71                  | FI-GE-42LR1-1/4-W3          |
|        | 1.65               | 2900            |                       | 1.18 .79 1.97 2.44 .75 2.17 2.36 494.2 | 76.35                  |                             |
|        | 42                 | 200             | G 1 1/2               | 36 22 52 64 19 55 60 800               | 34,78                  | FI-GE-42LR-W3               |
|        | 1.65               | 2900            |                       | 1.42 .87 2.05 2.52 .75 2.17 2.36 590   | 76.52                  |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-2 (Form B) / ISO 1179-4 (Type B)  
Port acc. to DIN 3852-2 (Form X) / ISO 1179-1

Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

#### \*FI-GE\*-10\*L\*R\*-W3\*-MS

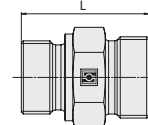
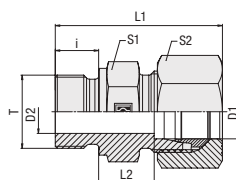
|                                                                         |                                                                                                 |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | FI-GE                                                                                           |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                                                             |
| * Series                                                                | Extra-Light Series (page 40) LL<br>Light Series (pages 40/41) L<br>Heavy Series (pages 42/43) S |
| * Thread Type                                                           | Whitworth Parallel Pipe Thread (BSPP) R                                                         |
| If required, please indicate special sizes, e.g. R1/8!                  |                                                                                                 |
| * Material Code                                                         | Steel, zinc/nickel-plated -W3                                                                   |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                 |
| * Assembling / Kitting                                                  | Fitting body only —                                                                             |
|                                                                         | Fitting body supplied with cutting ring and union nut -MS                                       |
|                                                                         | Fitting body supplied with soft-sealing cutting ring and union nut -MSV                         |

### Connecting Parts

|  |                                            |         |
|--|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |



## Straight Male Stud Fitting Type FI-GE-...-R • Series S



### Whitworth Parallel Pipe Thread (BSPP)

### Metallic Sealing Edge

#### Ordering Codes

#### \*FI-GE\*-10\*S\*R\*-W3\*-MS

|                                                                         |                                                                                                                                                                                  |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | <b>FI-GE</b>                                                                                                                                                                     |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                                                                                                                       |
| * Series                                                                | Extra-Light Series (page 40) <b>LL</b><br>Light Series (pages 40/41) <b>L</b><br>Heavy Series (pages 42/43) <b>S</b>                                                             |
| * Thread Type                                                           | Whitworth Parallel Pipe Thread (BSPP) <b>R</b>                                                                                                                                   |
| If required, please indicate special sizes, e.g. R1/8!                  |                                                                                                                                                                                  |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                                                                                                                             |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                                                                                  |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b><br>Fitting body supplied with cutting ring and union nut <b>-MS</b><br>Fitting body supplied with soft-sealing cutting ring and union nut <b>-MSV</b> |

#### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in)<br>Thread T | D2  | i   | L    | L1 <sup>1</sup> | L2   | S1   | S2   | Torque<br>(Nm/ft-lb)<br>Thread T | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------------------|-----|-----|------|-----------------|------|------|------|----------------------------------|-----------------------------------|-----------------------------|
| S      | 6                        | 500             | G 1/8                             | 4   | 8   | 28   | 36              | 13   | 17   | 17   | 30                               | 2,55                              | FI-GE-06SR1/8-W3            |
|        | .24                      | 7252            |                                   | .16 | .31 | 1.10 | 1.42            | .51  | .67  | .67  | 22.1                             | 5.62                              |                             |
|        | 6                        | 630             | G 1/4                             | 4   | 12  | 32   | 40              | 13   | 19   | 17   | 80                               | 3,49                              | FI-GE-06SR-W3               |
|        | .24                      | 9135            |                                   | .16 | .47 | 1.26 | 1.57            | .51  | .75  | .67  | 59                               | 7.77                              |                             |
|        | 6                        | 630             | G 3/8                             | 4   | 12  | 34,5 | 42,5            | 15,5 | 22   | 17   | 130                              | 2,29                              | FI-GE-06SR3/8-W3            |
|        | .24                      | 9135            |                                   | .16 | .47 | 1.36 | 1.67            | .61  | .87  | .67  | 95.9                             | 5.03                              |                             |
|        | 6                        | 630             | G 1/2                             | 4   | 14  | 39   | 47              | 18   | 27   | 17   | 220                              | 9,40                              | FI-GE-06SR1/2-W3            |
|        | .24                      | 9135            |                                   | .16 | .55 | 1.54 | 1.85            | .71  | 1.06 | .67  | 162.3                            | 20.68                             |                             |
|        | 8                        | 630             | G 1/4                             | 5   | 12  | 34   | 42              | 15   | 19   | 19   | 80                               | 4,06                              | FI-GE-08SR-W3               |
|        | .31                      | 9135            |                                   | .20 | .47 | 1.34 | 1.65            | .59  | .75  | .75  | 59                               | 8.93                              |                             |
|        | 8                        | 630             | G 3/8                             | 5   | 12  | 34,5 | 42,5            | 15,5 | 22   | 19   | 130                              | 5,77                              | FI-GE-08SR3/8-W3            |
|        | .31                      | 9135            |                                   | .20 | .47 | 1.36 | 1.67            | .61  | .87  | .75  | 95.9                             | 12.69                             |                             |
|        | 8                        | 630             | G 1/2                             | 5   | 14  | 39   | 47              | 18   | 27   | 19   | 220                              | 9,91                              | FI-GE-08SR1/2-W3            |
|        | .31                      | 9135            |                                   | .20 | .55 | 1.54 | 1.85            | .71  | 1.06 | .75  | 162.3                            | 21.80                             |                             |
|        | 10                       | 630             | G 1/4                             | 5   | 12  | 34   | 43              | 14,5 | 19   | 22   | 80                               | 4,35                              | FI-GE-10SR1/4-W3            |
|        | .39                      | 9135            |                                   | .20 | .47 | 1.34 | 1.69            | .57  | .75  | .87  | 59                               | 9.57                              |                             |
|        | 10                       | 630             | G 3/8                             | 7   | 12  | 34,5 | 43,5            | 15   | 22   | 22   | 130                              | 5,68                              | FI-GE-10SR-W3               |
|        | .39                      | 9135            |                                   | .28 | .47 | 1.36 | 1.71            | .59  | .87  | .87  | 95.9                             | 12.50                             |                             |
|        | 10                       | 630             | G 1/2                             | 7   | 14  | 39   | 48              | 17,5 | 27   | 22   | 220                              | 9,73                              | FI-GE-10SR1/2-W3            |
|        | .39                      | 9135            |                                   | .28 | .55 | 1.54 | 1.89            | .69  | 1.06 | .87  | 162.3                            | 21.41                             |                             |
|        | 12                       | 630             | G 1/4                             | 5   | 12  | 36   | 45              | 16,5 | 22   | 24   | 80                               | 5,93                              | FI-GE-12SR1/4-W3            |
|        | .47                      | 9135            |                                   | .20 | .47 | 1.42 | 1.77            | .65  | .87  | .94  | 59                               | 13.05                             |                             |
|        | 12                       | 630             | G 3/8                             | 8   | 12  | 36,5 | 45,5            | 17   | 22   | 24   | 130                              | 5,02                              | FI-GE-12SR-W3               |
|        | .47                      | 9135            |                                   | .31 | .47 | 1.44 | 1.79            | .67  | .87  | .94  | 95.9                             | 11.04                             |                             |
|        | 12                       | 630             | G 1/2                             | 8   | 14  | 39   | 48              | 17,5 | 27   | 24   | 220                              | 9,72                              | FI-GE-12SR1/2-W3            |
|        | .47                      | 9135            |                                   | .31 | .55 | 1.54 | 1.89            | .69  | 1.06 | .94  | 162.3                            | 21.38                             |                             |
|        | 12                       | 630             | G 3/4                             | 8   | 16  | 43   | 52              | 19,5 | 32   | 24   | 350                              | 16,48                             | FI-GE-12SR3/4-W3            |
|        | .47                      | 9135            |                                   | .31 | .63 | 1.69 | 2.05            | .77  | 1.26 | .94  | 258.1                            | 36.26                             |                             |
|        | 14                       | 400             | G 1/4                             | 5   | 12  | 36   | 46              | 16   | 22   | 27   | 80                               | 6,72                              | FI-GE-14SR1/4-W3            |
|        | .55                      | 5800            |                                   | .20 | .47 | 1.42 | 1.81            | .63  | .87  | 1.06 | 59                               | 14.78                             |                             |
|        | 14                       | 400             | G 3/8                             | 8   | 12  | 38,5 | 48,5            | 18,5 | 22   | 27   | 130                              | 6,95                              | FI-GE-14SR3/8-W3            |
|        | .55                      | 5800            |                                   | .31 | .47 | 1.52 | 1.91            | .73  | .87  | 1.06 | 95.9                             | 15.29                             |                             |
|        | 14                       | 400             | G 1/2                             | 10  | 14  | 41   | 51              | 19   | 27   | 27   | 220                              | 9,79                              | FI-GE-14SR-W3               |
|        | .55                      | 5800            |                                   | .39 | .55 | 1.61 | 2.01            | .75  | 1.06 | 1.06 | 162.3                            | 21.54                             |                             |
|        | 14                       | 400             | G 3/4                             | 10  | 16  | 45   | 55              | 21   | 32   | 27   | 350                              | 16,30                             | FI-GE-14SR3/4-W3            |
|        | .55                      | 5800            |                                   | .39 | .63 | 1.77 | 2.17            | .83  | 1.26 | 1.06 | 258.1                            | 35.86                             |                             |
|        | 16                       | 400             | G 3/8                             | 8   | 12  | 38,5 | 48,5            | 18   | 27   | 30   | 130                              | 6,42                              | FI-GE-16SR3/8-W3            |
|        | .63                      | 5800            |                                   | .31 | .47 | 1.52 | 1.91            | .71  | 1.06 | 1.18 | 95.9                             | 14.12                             |                             |
|        | 16                       | 400             | G 1/2                             | 12  | 14  | 41   | 51              | 18,5 | 27   | 30   | 220                              | 9,15                              | FI-GE-16SR-W3               |
|        | .63                      | 5800            |                                   | .47 | .55 | 1.61 | 2.01            | .73  | 1.06 | 1.18 | 162.3                            | 21.13                             |                             |
|        | 16                       | 400             | G 3/4                             | 12  | 16  | 45   | 55              | 20,5 | 32   | 30   | 350                              | 15,75                             | FI-GE-16SR3/4-W3            |
|        | .63                      | 5800            |                                   | .47 | .63 | 1.77 | 2.17            | .81  | 1.26 | 1.18 | 258.1                            | 34.65                             |                             |
|        | 16                       | 400             | G 1                               | 20  | 18  | 49   | 60              | 22,5 | 41   | 30   | 700                              | 24,6                              | FI-GE-16SR1-W3              |
|        | .63                      | 5800            |                                   | .79 | .71 | 1.93 | 2.36            | .89  | 1.61 | 1.18 | 516.3                            | 54.23                             |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

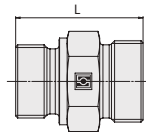
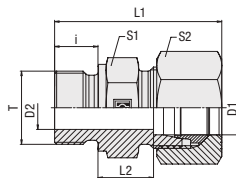
Male stud acc. to DIN 3852-2 (Form B) / ISO 1179-4 (Type B)  
Port acc. to DIN 3852-2 (Form X) / ISO 1179-1

Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.  
Please contact STAUFF prior to the assembly for further information.



## Straight Male Stud Fitting Type FI-GE-...-R • Series S



C

### Metallic Sealing Edge

### Whitworth Parallel Pipe Thread (BSPP)

| Series | Tube OD                           | PN                                  | Dimensions                        |      |     |      |                 |      |      |      |                                       | Torque                                 | Weight             | Ordering Codes <sup>3</sup> |
|--------|-----------------------------------|-------------------------------------|-----------------------------------|------|-----|------|-----------------|------|------|------|---------------------------------------|----------------------------------------|--------------------|-----------------------------|
|        | ( <sup>mm</sup> / <sub>in</sub> ) | ( <sup>bar</sup> / <sub>PSI</sub> ) | ( <sup>mm</sup> / <sub>in</sub> ) |      |     |      |                 |      |      |      | ( <sup>N-m</sup> / <sub>ft-lb</sub> ) | ( <sup>kg</sup> / <sub>lbs</sub> ) ca. |                    |                             |
|        | D1                                |                                     | Thread T                          | D2   | i   | L    | L1 <sup>1</sup> | L2   | S1   | S2   | Thread T                              | per 100                                |                    |                             |
| S      | 20                                | 250                                 | G 1/2                             | 12   | 14  | 45   | 56              | 20.5 | 32   | 36   | 220                                   | 13,69                                  | FI-GE-20SR1/2-W3   |                             |
|        | .79                               | 3625                                |                                   | .47  | .55 | 1.77 | 2.20            | .81  | 1.26 | 1.42 | 162.3                                 | 30.11                                  |                    |                             |
|        | 20                                | 250                                 | G 3/4                             | 16   | 16  | 47   | 58              | 20.5 | 32   | 36   | 350                                   | 15,24                                  | FI-GE-20SR-W3      |                             |
|        | .79                               | 3625                                |                                   | .63  | .63 | 1.85 | 2.28            | .81  | 1.26 | 1.42 | 258.1                                 | 33.54                                  |                    |                             |
|        | 20                                | 250                                 | G 1                               | 16   | 18  | 51   | 62              | 22,5 | 41   | 36   | 700                                   | 25,90                                  | FI-GE-20SR1-W3     |                             |
|        | .79                               | 3625                                |                                   | .63  | .71 | 2.01 | 2.44            | .89  | 1.61 | 1.42 | 516.3                                 | 56.98                                  |                    |                             |
|        | 25                                | 250                                 | G 3/4                             | 16   | 16  | 51   | 63              | 23   | 41   | 46   | 350                                   | 24,73                                  | FI-GE-25SR3/4-W3   |                             |
|        | .98                               | 3625                                |                                   | .63  | .63 | 2.01 | 2.48            | .91  | 1.61 | 1.81 | 258.1                                 | 54.40                                  |                    |                             |
|        | 25                                | 250                                 | G 1                               | 20   | 18  | 53   | 65              | 23   | 41   | 46   | 700                                   | 26,89                                  | FI-GE-25SR-W3      |                             |
|        | .98                               | 3625                                |                                   | .79  | .71 | 2.09 | 2.56            | .91  | 1.61 | 1.81 | 516.3                                 | 59.16                                  |                    |                             |
|        | 25                                | 250                                 | G 1 1/4                           | 20   | 20  | 55   | 67              | 23   | 50   | 46   | 850                                   | 23,28                                  | FI-GE-25SR1-1/4-W3 |                             |
|        | .98                               | 3625                                |                                   | .79  | .79 | 2.17 | 2.64            | .91  | 1.97 | 1.81 | 627                                   | 51.22                                  |                    |                             |
|        | 30                                | 200                                 | G 3/4                             | 16   | 16  | 53   | 68              | 23,5 | 46   | 50   | 350                                   | 31,08                                  | FI-GE-30SR3/4-W3   |                             |
|        | 1.18                              | 2900                                |                                   | .63  | .63 | 2.09 | 2.68            | .93  | 1.81 | 1.97 | 258.1                                 | 68.52                                  |                    |                             |
|        | 30                                | 200                                 | G 1                               | 20   | 18  | 55   | 68              | 23,5 | 46   | 50   | 700                                   | 33,52                                  | FI-GE-30SR1-W3     |                             |
|        | 1.18                              | 2900                                |                                   | .79  | .71 | 2.17 | 2.68            | .93  | 1.81 | 1.97 | 516.3                                 | 73.75                                  |                    |                             |
|        | 30                                | 200                                 | G 1 1/4                           | 25   | 20  | 57   | 70              | 23,5 | 50   | 50   | 850                                   | 42,11                                  | FI-GE-30SR-W3      |                             |
|        | 1.18                              | 2900                                |                                   | .98  | .79 | 2.24 | 2.76            | .93  | 1.97 | 1.97 | 627                                   | 92.65                                  |                    |                             |
|        | 30                                | 200                                 | G 1 1/2                           | 25   | 22  | 59   | 72              | 23,5 | 55   | 50   | 1000                                  | 57,10                                  | FI-GE-30SR1-1/2-W3 |                             |
|        | 1.18                              | 2900                                |                                   | .98  | .87 | 2.32 | 2.83            | .93  | 2.17 | 1.97 | 737.5                                 | 125.63                                 |                    |                             |
|        | 38                                | 200                                 | G 1                               | 20   | 18  | 62   | 77              | 28   | 55   | 60   | 700                                   | 52,40                                  | FI-GE-38SR1-W3     |                             |
|        | 1.50                              | 2900                                |                                   | .79  | .71 | 2.44 | 3.03            | 1.10 | 2.17 | 2.36 | 516.3                                 | 115.28                                 |                    |                             |
|        | 38                                | 200                                 | G 1 1/4                           | 25   | 20  | 62   | 75              | 26   | 55   | 60   | 850                                   | 57,22                                  | FI-GE-38SR1-1/4-W3 |                             |
|        | 1.50                              | 2900                                |                                   | .98  | .79 | 2.44 | 2.95            | 1.02 | 2.17 | 2.36 | 627                                   | 125.88                                 |                    |                             |
|        | 38                                | 200                                 | G 1 1/2                           | 32   | 22  | 64   | 77              | 26   | 55   | 60   | 1000                                  | 56,30                                  | FI-GE-38SR-W3      |                             |
|        | 1.50                              | 2900                                |                                   | 1.26 | .87 | 2.52 | 3.03            | 1.02 | 2.17 | 2.36 | 737.5                                 | 123.86                                 |                    |                             |
|        | 38                                | 200                                 | G 2                               | 32   | 24  | 66,5 | 83              | 26,5 | 75   | 60   | 1200                                  | 98,3                                   | FI-GE-38SR2-W3     |                             |
|        | 1.50                              | 2900                                |                                   | 1.26 | .94 | 2.62 | 3.27            | 1.04 | 2.95 | 2.36 | 885                                   | 216.7                                  |                    |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-2 (Form B) / ISO 1179-4 (Type B)

Port acc. to DIN 3852-2 (Form X) / ISO 1179-1

Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

#### \*FI-GE\*-10\*S\*R\*-W3\*-MS

|                                    |                                                                                                 |
|------------------------------------|-------------------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting       | FI-GE                                                                                           |
| * Outside Tube Diameter D1 (in mm) | -10                                                                                             |
| * Series                           | Extra-Light Series (page 40) LL<br>Light Series (pages 40/41) L<br>Heavy Series (pages 42/43) S |
| * Thread Type                      | Whitworth Parallel Pipe Thread (BSPP) R                                                         |

If required, please indicate special sizes, e.g. R1/8!

|                 |                           |     |
|-----------------|---------------------------|-----|
| * Material Code | Steel, zinc/nickel-plated | -W3 |
|-----------------|---------------------------|-----|

Please contact STAUFF for alternative materials and surface finishings.

|                        |                                                                    |      |
|------------------------|--------------------------------------------------------------------|------|
| * Assembling / Kitting | Fitting body only                                                  | —    |
|                        | Fitting body supplied with cutting ring and union nut              | -MS  |
|                        | Fitting body supplied with soft-sealing cutting ring and union nut | -MSV |

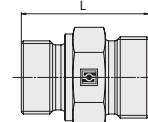
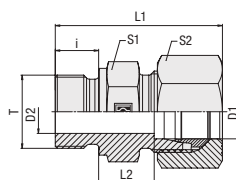
### Connecting Parts

|  |                                            |         |
|--|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |



## Straight Male Stud Fitting

### Type FI-GE-...-M • Series LL / L



#### Metric Parallel Thread

#### Metallic Sealing Edge

### Ordering Codes

#### \*FI-GE\*-10\*L\*M\*-W3\*-MS

|                                                                         |                                                                                                                  |
|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | <b>FI-GE</b>                                                                                                     |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                                                       |
| * Series                                                                | Extra-Light Series (page 44) <b>LL</b><br>Light Series (pages 44/45) <b>L</b><br>Heavy Series (page 46) <b>S</b> |
| * Thread Type                                                           | Metric Parallel Thread <b>M</b>                                                                                  |
| If required, please indicate special sizes, e.g. M12x1.5!               |                                                                                                                  |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                                                             |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                  |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b>                                                                                       |
|                                                                         | Fitting body supplied with cutting ring and union nut <b>-MS</b>                                                 |
|                                                                         | Fitting body supplied with soft-sealing cutting ring and union nut <b>-MSV</b>                                   |

### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-1 (Form B) / ISO 9974-3 (Type B)  
Port acc. to DIN 3852-1 (Form X) / ISO 9974-1

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in)<br>Thread T | D2  | i   | L    | L1 <sup>1</sup> | L2   | S1   | S2  | Torque<br>(N·m/ft·lb)<br>Thread T | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------------------|-----|-----|------|-----------------|------|------|-----|-----------------------------------|-----------------------------------|-----------------------------|
| LL     | 4                        | 100             | M 8 x 1                           | 3   | 8   | 21,5 | 27              | 9,5  | 12   | 10  | 14                                | 0,84                              | FI-GE-04LLM-W3              |
|        | .16                      | 1450            |                                   | .12 | .31 | .85  | 1.06            | .37  | .47  | .39 | 10.3                              | 1.85                              |                             |
|        | 6                        | 100             | M 6 x 1                           | 2   | 8   | 21,5 | 27              | 8    | 12   | 12  | 5                                 | 0,74                              | FI-GE-06LLM6x1-W3           |
|        | .24                      | 1450            |                                   | .08 | .31 | .85  | 1.06            | .31  | .47  | .47 | 3.7                               | 1.63                              |                             |
|        | 6                        | 100             | M 8 x 1                           | 3   | 8   | 21,5 | 27              | 8    | 12   | 12  | 14                                | 0,88                              | FI-GE-06LLM8x1-W3           |
|        | .24                      | 1450            |                                   | .12 | .31 | .85  | 1.06            | .31  | .47  | .47 | 10.3                              | 1.94                              |                             |
|        | 6                        | 100             | M 10 x 1                          | 4,5 | 8   | 21,5 | 27              | 8    | 14   | 12  | 25                                | 1,17                              | FI-GE-06LLM-W3              |
|        | .24                      | 1450            |                                   | .18 | .31 | .85  | 1.06            | .31  | .55  | .47 | 18.4                              | 2.58                              |                             |
|        | 8                        | 100             | M 10 x 1                          | 5   | 8   | 22,5 | 28              | 9    | 14   | 14  | 25                                | 1,25                              | FI-GE-08LLM-W3              |
|        | .31                      | 1450            |                                   | .2  | .31 | .89  | 1.10            | .35  | .55  | .55 | 18.4                              | 2.76                              |                             |
|        | 6                        | 100             | M 8 x 1                           | 3   | 8   | 23,5 | 31              | 8,5  | 14   | 14  | 14                                | 1,29                              | FI-GE-06LLM8x1-W3           |
|        | .24                      | 1450            |                                   | .12 | .31 | .93  | 1.22            | .33  | .55  | .55 | 10.3                              | 2.84                              |                             |
| L      | 6                        | 400             | M 10 x 1                          | 4   | 8   | 23,5 | 31,5            | 8,5  | 14   | 14  | 25                                | 1,38                              | FI-GE-06LM-W3               |
|        | .24                      | 5800            |                                   | .16 | .31 | .93  | 1.24            | .33  | .55  | .55 | 18.4                              | 3.03                              |                             |
|        | 6                        | 400             | M 12 x 1,5                        | 4   | 12  | 29   | 37              | 10   | 17   | 14  | 45                                | 2,26                              | FI-GE-06LM12x1.5-W3         |
|        | .24                      | 5800            |                                   | .16 | .47 | 1.14 | 1.46            | .39  | .67  | .55 | 33.2                              | 4.98                              |                             |
|        | 6                        | 400             | M 14 x 1,5                        | 4   | 12  | 30   | 38              | 11   | 19   | 14  | 70                                | 2,89                              | FI-GE-06LM14x1.5-W3         |
|        | .24                      | 5800            |                                   | .16 | .47 | 1.18 | 1.50            | .43  | .75  | .55 | 51.6                              | 6.35                              |                             |
|        | 8                        | 400             | M 10 x 1                          | 4   | 8   | 23,5 | 31,5            | 8,5  | 14   | 17  | 25                                | 1,53                              | FI-GE-08LM10x1-W3           |
|        | .31                      | 5800            |                                   | .16 | .31 | .93  | 1.24            | .33  | .55  | .67 | 18.4                              | 3.37                              |                             |
|        | 8                        | 400             | M 12 x 1,5                        | 6   | 12  | 29   | 37              | 10   | 17   | 17  | 45                                | 2,21                              | FI-GE-08LM-W3               |
|        | .31                      | 5800            |                                   | .24 | .47 | 1.14 | 1.46            | .39  | .67  | .67 | 33.2                              | 4.86                              |                             |
|        | 8                        | 400             | M 14 x 1,5                        | 6   | 12  | 30   | 38              | 11   | 19   | 17  | 70                                | 3,11                              | FI-GE-08LM14x1.5-W3         |
|        | .31                      | 5800            |                                   | .24 | .47 | 1.18 | 1.50            | .43  | .75  | .67 | 51.6                              | 6.83                              |                             |
|        | 8                        | 400             | M 16 x 1,5                        | 6   | 12  | 30   | 38              | 11   | 22   | 17  | 90                                | 4,05                              | FI-GE-08LM16x1.5-W3         |
|        | .31                      | 5800            |                                   | .24 | .47 | 1.18 | 1.50            | .43  | .87  | .67 | 66.4                              | 8.91                              |                             |
|        | 8                        | 400             | M 18 x 1,5                        | 6   | 12  | 30,5 | 38,5            | 11,5 | 24   | 17  | 120                               | 4,34                              | FI-GE-08LM18x1.5-W3         |
|        | .31                      | 5800            |                                   | .24 | .47 | 1.20 | 1.52            | .45  | .94  | .67 | 88.5                              | 9.54                              |                             |
|        | 8                        | 400             | M 22 x 1,5                        | 14  | 14  | 34   | 40              | 13   | 27   | 17  | 170                               | 6,46                              | FI-GE-08LM22x1.5-W3         |
|        | .31                      | 5800            |                                   | .55 | .55 | 1.34 | 1.57            | .51  | 1.06 | .67 | 125.4                             | 14.24                             |                             |
|        | 10                       | 400             | M 10 x 1                          | 4   | 8   | 25,5 | 33,5            | 1,5  | 17   | 19  | 25                                | 2,20                              | FI-GE-10LM10x1-W3           |
|        | .39                      | 5800            |                                   | .16 | .31 | 1.00 | 1.32            | .41  | .67  | .75 | 18.4                              | 4.84                              |                             |
|        | 10                       | 400             | M 12 x 1,5                        | 6   | 12  | 30   | 38              | 11   | 17   | 19  | 45                                | 2,38                              | FI-GE-10LM12x1.5-W3         |
|        | .39                      | 5800            |                                   | .24 | .47 | 1.18 | 1.50            | .43  | .67  | .75 | 33.2                              | 5.23                              |                             |
|        | 10                       | 400             | M 14 x 1,5                        | 7   | 12  | 30   | 38              | 11   | 19   | 19  | 70                                | 2,94                              | FI-GE-10LM-W3               |
|        | .39                      | 5800            |                                   | .28 | .47 | 1.18 | 1.50            | .43  | .75  | .75 | 51.6                              | 6.46                              |                             |
|        | 10                       | 400             | M 16 x 1,5                        | 8   | 12  | 31,5 | 39,5            | 12,5 | 22   | 19  | 90                                | 4,05                              | FI-GE-10LM16x1.5-W3         |
|        | .39                      | 5800            |                                   | .31 | .47 | 1.24 | 1.56            | .49  | .87  | .75 | 66.4                              | 8.91                              |                             |
|        | 10                       | 400             | M 18 x 1,5                        | 8   | 12  | 31,5 | 39,5            | 12,5 | 24   | 19  | 120                               | 4,94                              | FI-GE-10LM18x1.5-W3         |
|        | .39                      | 5800            |                                   | .31 | .47 | 1.24 | 1.56            | .49  | .94  | .75 | 88.5                              | 10.86                             |                             |
|        | 10                       | 400             | M 22 x 1,5                        | 8   | 14  | 34   | 42              | 13   | 27   | 19  | 170                               | 7,36                              | FI-GE-10LM22x1.5-W3         |
|        | .39                      | 5800            |                                   | .31 | .55 | 1.34 | 1.65            | .51  | 1.06 | .75 | 125.4                             | 16.19                             |                             |
|        | 12                       | 400             | M 12 x 1,5                        | 6   | 12  | 30   | 38              | 11   | 19   | 22  | 45                                | 2,84                              | FI-GE-12LM12x1.5-W3         |
|        | .47                      | 5800            |                                   | .24 | .47 | 1.18 | 1.50            | .43  | .75  | .87 | 33.2                              | 6.25                              |                             |
|        | 12                       | 400             | M 14 x 1,5                        | 7   | 12  | 30   | 38              | 11   | 19   | 22  | 70                                | 3,06                              | FI-GE-12LM14x1.5-W3         |
|        | .47                      | 5800            |                                   | .28 | .47 | 1.18 | 1.50            | .43  | .75  | .87 | 51.6                              | 6.72                              |                             |
|        | 12                       | 400             | M 16 x 1,5                        | 9   | 12  | 31,5 | 39,5            | 12,5 | 22   | 22  | 90                                | 3,92                              | FI-GE-12LM-W3               |
|        | .47                      | 5800            |                                   | .35 | .47 | 1.24 | 1.56            | .49  | .87  | .87 | 66.4                              | 8.63                              |                             |
|        | 12                       | 400             | M 18 x 1,5                        | 10  | 12  | 31,5 | 39,5            | 12,5 | 24   | 22  | 120                               | 4,90                              | FI-GE-12LM18x1.5-W3         |
|        | .47                      | 5800            |                                   | .39 | .47 | 1.24 | 1.56            | .49  | .94  | .87 | 88.5                              | 10.78                             |                             |
|        | 12                       | 400             | M 22 x 1,5                        | 10  | 14  | 35   | 43              | 14   | 27   | 22  | 170                               | 6,96                              | FI-GE-12LM22x1.5-W3         |
|        | .47                      | 5800            |                                   | .39 | .55 | 1.38 | 1.69            | .55  | 1.06 | .87 | 125.4                             | 15.31                             |                             |

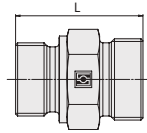
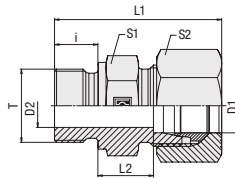
Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.







## Straight Male Stud Fitting Type FI-GE-...-M • Series L



C

### Metric Parallel Thread

### Metallic Sealing Edge

| Series | Tube OD                           | PN                                  | Dimensions                        |            |      |      |      |                 |      |       |       | Torque                                | Weight                                 | Ordering Codes <sup>3</sup> |
|--------|-----------------------------------|-------------------------------------|-----------------------------------|------------|------|------|------|-----------------|------|-------|-------|---------------------------------------|----------------------------------------|-----------------------------|
|        | ( <sup>mm</sup> / <sub>in</sub> ) | ( <sup>bar</sup> / <sub>PSI</sub> ) | ( <sup>mm</sup> / <sub>in</sub> ) | D1         | D2   | i    | L    | L1 <sup>1</sup> | L2   | S1    | S2    | ( <sup>N·m</sup> / <sub>ft·lb</sub> ) | ( <sup>kg</sup> / <sub>lbs</sub> ) ca. |                             |
| L      |                                   |                                     | Thread T                          |            |      |      |      |                 |      |       |       | Thread T                              | per 100                                |                             |
|        | 15                                | 400                                 | M 16 x 1,5                        | 9          | 12   | 32   | 40   | 13              | 24   | 27    | 90    |                                       | 5,15                                   | FI-GE-15LM16x1.5-W3         |
|        | .59                               | 5800                                |                                   | .35        | .47  | 1.26 | 1.57 | .51             | .94  | 1.06  | 66.4  | 11.33                                 |                                        |                             |
|        | 15                                | 400                                 |                                   | M 18 x 1,5 | 11   | 12   | 32,5 | 4,5             | 13,5 | 24    | 27    | 120                                   | 5,28                                   |                             |
|        | .59                               | 5800                                | .43                               |            | .47  | 1.28 | 1.59 | .53             | .94  | 1.06  | 88.5  | 11.61                                 |                                        |                             |
|        | 15                                | 400                                 | M 22 x 1,5                        |            | 12   | 14   | 35   | 43              | 14   | 27    | 170   | 7,15                                  | FI-GE-15LM22x1.5-W3                    |                             |
|        | .59                               | 5800                                |                                   | .47        | .55  | 1.38 | 1.69 | .55             | 1.06 | 1.06  | 125.4 | 15.73                                 |                                        |                             |
|        | 18                                | 400                                 |                                   | M 18 x 1,5 | 11   | 12   | 33,5 | 42,5            | 14   | 27    | 32    | 120                                   |                                        | 6,26                        |
|        | .71                               | 5800                                | .43                               |            | .47  | 1.32 | 1.67 | .55             | 1.06 | 1.26  | 88.5  | 13.77                                 |                                        |                             |
|        | 18                                | 400                                 | M 22 x 1,5                        |            | 14   | 14   | 36   | 45              | 14,5 | 27    | 32    | 170                                   | 7,60                                   | FI-GE-18LM-W3               |
|        | .71                               | 5800                                |                                   | .55        | .55  | 1.42 | 1.77 | .57             | 1.06 | 1.26  | 125.4 | 16.72                                 |                                        |                             |
|        | 18                                | 250                                 |                                   | M 26 x 1,5 | 15   | 16   | 38   | 47              | 14,5 | 32    | 32    | 230                                   | 10,88                                  |                             |
|        | .71                               | 3626                                | .59                               |            | .63  | 1.50 | 1.85 | .57             | 1.26 | 1.26  | 169.6 | 23.94                                 |                                        |                             |
|        | 22                                | 250                                 | M 22 x 1,5                        |            | 14   | 14   | 38   | 47              | 16,5 | 32    | 36    | 170                                   | 9,10                                   | FI-GE-22LM22x1.5-W3         |
|        | .87                               | 3626                                |                                   | .55        | .55  | 1.50 | 1.85 | .65             | 1.26 | 1.42  | 125.4 | 20.02                                 |                                        |                             |
|        | 22                                | 250                                 |                                   | M 26 x 1,5 | 18   | 16   | 40   | 49              | 16,5 | 32    | 36    | 230                                   | 10,34                                  |                             |
|        | .87                               | 3626                                | .71                               |            | .63  | 1.57 | 1.93 | .65             | 1.26 | 1.42  | 169.6 | 22.74                                 |                                        |                             |
|        | 22                                | 250                                 | M 33 x 2                          |            | 23   | 18   | 43   | 53              | 17,5 | 41    | 36    | 400                                   | 16,15                                  | FI-GE-22LM33x2-W3           |
|        | .87                               | 3626                                |                                   | .91        | .71  | 1.69 | 2.09 | .69             | 1.61 | 1.42  | 295   | 35.60                                 |                                        |                             |
|        | 28                                | 250                                 |                                   | M 26 x 1.5 | 18   | 16   | 41   | 51              | 17,5 | 41    | 41    | 230                                   | 14,46                                  |                             |
|        | 1.10                              | 3626                                | .71                               |            | .63  | 1.61 | 2.01 | .69             | 1.61 | 1.61  | 169.6 | 31.88                                 |                                        |                             |
|        | 28                                | 250                                 | M 33 x 2                          |            | 23   | 18   | 43   | 52              | 17,5 | 41    | 41    | 400                                   | 17,13                                  | FI-GE-28LM-W3               |
|        | 1.10                              | 3626                                |                                   | .91        | .71  | 1.69 | 2.05 | .69             | 1.61 | 1.61  | 295   | 37.69                                 |                                        |                             |
|        | 35                                | 200                                 |                                   | M 42 x 2   | 30   | 20   | 48   | 59              | 17,5 | 50    | 50    | 700                                   | 27,85                                  |                             |
| 1.38   | 2900                              | 1.18                                | .79                               |            | 1.89 | 2.32 | .69  | 1.97            | 1.97 | 516.3 | 61.27 |                                       |                                        |                             |
| 42     | 200                               | M 48 x 2                            | 36                                |            | 22   | 52   | 64   | 19              | 55   | 60    | 900   | 35,91                                 | FI-GE-42LM-W3                          |                             |
| 1,65   | 2900                              |                                     | 1.42                              | .87        | 2.05 | 2.52 | .75  | 2.17            | 2.36 | 663.8 | 79.00 |                                       |                                        |                             |

### Ordering Codes

#### \*FI-GE\*-10\*L\*M\*-W3\*-MS

|                                                                         |                                                                                             |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | FI-GE                                                                                       |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                                                         |
| * Series                                                                | Extra-Light Series (page 44) LL<br>Light Series (pages 44/45) L<br>Heavy Series (page 46) S |
| * Thread Type                                                           | Metric Parallel Thread M                                                                    |
| If required, please indicate special sizes, e.g. M12x1.5!               |                                                                                             |
| * Material Code                                                         | Steel, zinc/nickel-plated -W3                                                               |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                             |
| * Assembling / Kitting                                                  | Fitting body only —                                                                         |
|                                                                         | Fitting body supplied with cutting ring and union nut -MS                                   |
|                                                                         | Fitting body supplied with soft-sealing cutting ring and union nut -MSV                     |

### Connecting Parts

|  |                                            |         |
|--|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-1 (Form B) / ISO 9974-3 (Type B)  
Port acc. to DIN 3852-1 (Form X) / ISO 9974-1

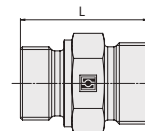
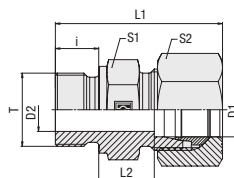
Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.



## Straight Male Stud Fitting Type FI-GE-...-M • Series S



### Metallic Sealing Edge

### Metric Parallel Thread

#### Ordering Codes

#### \*FI-GE\*-10\*S\*M\*-W3\*-MS

|                                                                         |                                                                                                                  |
|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | <b>FI-GE</b>                                                                                                     |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                                                       |
| * Series                                                                | Extra-Light Series (page 44) <b>LL</b><br>Light Series (pages 44/45) <b>L</b><br>Heavy Series (page 46) <b>S</b> |
| * Thread Type                                                           | Metric Parallel Thread <b>M</b>                                                                                  |
| If required, please indicate special sizes, e.g. M12x1.5!               |                                                                                                                  |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                                                             |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                  |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b>                                                                                       |
|                                                                         | Fitting body supplied with cutting ring and union nut <b>-MS</b>                                                 |
|                                                                         | Fitting body supplied with soft-sealing cutting ring and union nut <b>-MSV</b>                                   |

#### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in) | Thread | T   | D2   | i    | L    | L1 <sup>1</sup> | L2   | S1    | S2     | Torque<br>(Nm/ft-lb) | Weight<br>(kg/lbs) ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|--------|-----|------|------|------|-----------------|------|-------|--------|----------------------|------------------------|-----------------------------|
|        | D1                 |                 |                       |        |     |      |      |      |                 |      |       |        | Thread T             | per 100                |                             |
| S      | 6                  | 630             | M 12 x 1,5            | 4      | 12  | 32   | 40   | 13   | 17              | 17   | 60    | 2,99   |                      |                        | FI-GE-06SM-W3               |
|        | .24                | 9135            |                       | .16    | .47 | 1.26 | 1.57 | .51  | .67             | .67  | 44.2  | 6.58   |                      |                        |                             |
|        | 8                  | 630             | M 14 x 1,5            | 5      | 12  | 34   | 42   | 15   | 19              | 19   | 80    | 4,26   |                      |                        | FI-GE-08SM-W3               |
|        | .31                | 9135            |                       | .20    | .47 | 1.34 | 1.65 | .59  | .75             | .75  | 59    | 9.37   |                      |                        |                             |
|        | 10                 | 630             | M 14 x 1,5            | 5      | 12  | 34,5 | 42   | 15   | 19              | 22   | 80    | 4,63   |                      |                        | FI-GE-10SM14x1.5-W3         |
|        | .39                | 9135            |                       | .2     | .47 | 1.36 | 1.65 | .59  | .75             | .87  | 59    | 10.21  |                      |                        |                             |
|        | 10                 | 630             | M 16 x 1,5            | 7      | 12  | 34,5 | 43,5 | 15   | 22              | 22   | 130   | 5,46   |                      |                        | FI-GE-10SM-W3               |
|        | .39                | 9135            |                       | .28    | .47 | 1.36 | 1.71 | .59  | .87             | .87  | 95.9  | 12.01  |                      |                        |                             |
|        | 10                 | 630             | M 18 x 1,5            | 7      | 12  | 36,5 | 45,5 | 17   | 24              | 22   | 190   | 7,66   |                      |                        | FI-GE-10SM18x1.5-W3         |
|        | .39                | 9135            |                       | .28    | .47 | 1.44 | 1.79 | .67  | .94             | .87  | 140.1 | 16.85  |                      |                        |                             |
|        | 10                 | 630             | M 22 x 1,5            | 12     | 14  | 39   | 47   | 17,5 | 27              | 22   | 300   | 9,18   |                      |                        | FI-GE-10SM22x1.5-W3         |
|        | .39                | 9135            |                       | .47    | .55 | 1.54 | 1.85 | .69  | 1.06            | .87  | 221.2 | 20.24  |                      |                        |                             |
|        | 12                 | 630             | M 14 x 1,5            | 5      | 12  | 36   | 45   | 17   | 22              | 24   | 80    | 6,00   |                      |                        | FI-GE-12SM14x1.5-W3         |
|        | .47                | 9135            |                       | .20    | .47 | 1.42 | 1.77 | .67  | .87             | .94  | 59    | 13.20  |                      |                        |                             |
|        | 12                 | 630             | M 16 x 1,5            | 7      | 12  | 24,5 | 48   | 17   | 22              | 24   | 130   | 6,12   |                      |                        | FI-GE-12SM16x1.5-W3         |
|        | .47                | 9135            |                       | .28    | .47 | .96  | 1.89 | .67  | .87             | .94  | 95.9  | 13.47  |                      |                        |                             |
|        | 12                 | 630             | M 18 x 1,5            | 8      | 12  | 36,5 | 45,5 | 17   | 24              | 24   | 190   | 7,19   |                      |                        | FI-GE-12SM-W3               |
|        | .47                | 9135            |                       | .31    | .47 | 1.44 | 1.79 | .67  | .94             | .94  | 140.1 | 15.83  |                      |                        |                             |
|        | 12                 | 630             | M 22 x 1,5            | 8      | 14  | 39   | 48   | 17,5 | 27              | 24   | 300   | 9,28   |                      |                        | FI-GE-12SM22x1.5-W3         |
|        | .47                | 9135            |                       | .31    | .55 | 1.54 | 1.89 | .69  | 1.06            | .94  | 221.2 | 20.42  |                      |                        |                             |
|        | 14                 | 400             | M 18 x 1,5            | 8      | 12  | 39   | 48   | 19   | 27              | 27   | 190   | 9,10   |                      |                        | FI-GE-14SM18x1.5-W3         |
|        | .55                | 5800            |                       | .31    | .47 | 1.54 | 1.89 | .75  | 1.06            | 1.06 | 140.1 | 20.06  |                      |                        |                             |
|        | 14                 | 400             | M 20 x 1,5            | 10     | 14  | 41   | 51   | 19   | 27              | 27   | 220   | 9,49   |                      |                        | FI-GE-14SM-W3               |
|        | .55                | 5800            |                       | .39    | .55 | 1.61 | 2.01 | .75  | 1.06            | 1.06 | 162.3 | 20.88  |                      |                        |                             |
|        | 16                 | 400             | M 18 x 1,5            | 8      | 12  | 38,5 | 48,5 | 18   | 27              | 30   | 190   | 7,82   |                      |                        | FI-GE-16SM18x1.5-W3         |
|        | .63                | 5800            |                       | .31    | .47 | 1.52 | 1.91 | .71  | 1.06            | 1.18 | 140.1 | 17.20  |                      |                        |                             |
|        | 16                 | 400             | M 22 x 1,5            | 12     | 14  | 41   | 51   | 18,5 | 27              | 30   | 300   | 9,75   |                      |                        | FI-GE-16SM-W3               |
|        | .63                | 5800            |                       | .47    | .55 | 1.61 | 2.01 | .73  | 1.06            | 1.18 | 221.2 | 21.44  |                      |                        |                             |
|        | 16                 | 400             | M 27 x 2              | 16     | 16  | 45   | 55   | 20,5 | 32              | 30   | 420   | 14,29  |                      |                        | FI-GE-16SM27x2-W3           |
|        | .63                | 5800            |                       | .63    | .63 | 1.77 | 2.17 | .81  | 1.26            | 1.18 | 309.8 | 31.50  |                      |                        |                             |
|        | 20                 | 400             | M 18 x 1,5            | 8      | 12  | 42,5 | 54   | 20   | 32              | 36   | 190   | 13,64  |                      |                        | FI-GE-20SM18x1.5-W3         |
|        | .79                | 5800            |                       | .31    | .47 | 1.67 | 2.13 | .79  | 1.26            | 1.42 | 140.1 | 30.07  |                      |                        |                             |
|        | 20                 | 400             | M 22 x 1,5            | 12     | 14  | 47   | 58   | 22,5 | 32              | 36   | 300   | 13,95  |                      |                        | FI-GE-20SM22x1.5-W3         |
|        | .79                | 5800            |                       | .47    | .55 | 1.85 | 2.28 | .89  | 1.26            | 1.42 | 221.2 | 30.69  |                      |                        |                             |
|        | 20                 | 400             | M 27 x 2              | 16     | 16  | 47   | 58   | 20,5 | 32              | 36   | 420   | 15,12  |                      |                        | FI-GE-20SM-W3               |
|        | .79                | 5800            |                       | .63    | .63 | 1.85 | 2.28 | .81  | 1.26            | 1.42 | 309.8 | 33.22  |                      |                        |                             |
|        | 25                 | 400             | M 33 x 2              | 20     | 18  | 53   | 65   | 23   | 41              | 46   | 600   | 26,71  |                      |                        | FI-GE-25SM-W3               |
|        | .98                | 5800            |                       | .79    | .71 | 2.09 | 2.56 | .91  | 1.61            | 1.81 | 442.5 | 58.77  |                      |                        |                             |
|        | 30                 | 200             | M 42 x 2              | 25     | 20  | 57   | 70   | 23,5 | 50              | 50   | 700   | 42,96  |                      |                        | FI-GE-30SM-W3               |
|        | 1.18               | 2900            |                       | .98    | .79 | 2.24 | 2.76 | .93  | 1.97            | 1.97 | 516.3 | 94.51  |                      |                        |                             |
|        | 38                 | 200             | M 48 x 2              | 32     | 22  | 64   | 79   | 26   | 55              | 60   | 950   | 56,40  |                      |                        | FI-GE-38SM-W3               |
|        | 1.50               | 2900            |                       | 1.26   | .87 | 2.52 | 3.11 | 1.02 | 2.17            | 2.36 | 700.7 | 124.08 |                      |                        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

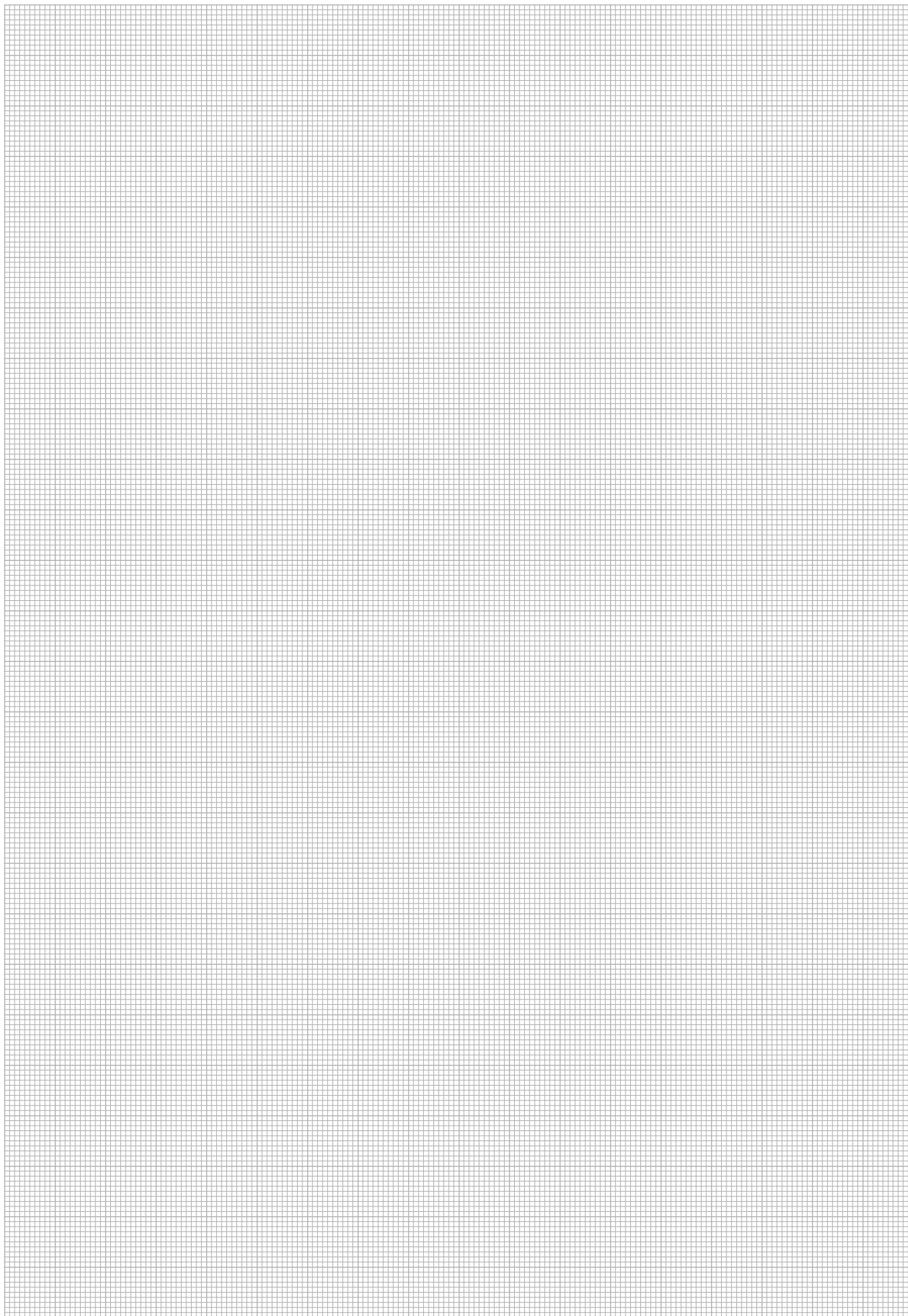
Male stud acc. to DIN 3852-1 (Form B) / ISO 9974-3 (Type B)  
Port acc. to DIN 3852-1 (Form X) / ISO 9974-1

Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

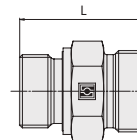
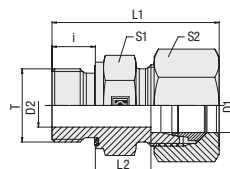






## Straight Male Stud Fitting

### Type FI-GE-...-R-WD • Series LL / L



#### Whitworth Parallel Pipe Thread (BSPP)

#### Profile Sealing Ring

#### Ordering Codes

#### \*FI-GE\*-10\*L\*R\*-WD\*-B\*-W3\*-MS

|                                                                         |                                                                                                                                                             |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | FI-GE                                                                                                                                                       |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                                                                                                                         |
| * Series                                                                | Extra-Light Series (page 48) LL<br>Light Series (pages 48/49) L<br>Heavy Series (pages 50/51) S                                                             |
| * Thread Type                                                           | Whitworth Parallel Pipe Thread (BSPP) R                                                                                                                     |
| If required, please indicate special sizes, e.g. R1/8!                  |                                                                                                                                                             |
| * Seal Type                                                             | Profile Sealing Ring -WD                                                                                                                                    |
| * Seal Material                                                         | NBR (Buna-N®) -B<br>FKM (Viton®) -V<br>EPDM -E                                                                                                              |
| * Material Code                                                         | Steel, zinc/nickel-plated -W3                                                                                                                               |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                                                             |
| * Assembling / Kitting                                                  | Fitting body only —<br>Fitting body supplied with cutting ring and union nut -MS<br>Fitting body supplied with soft-sealing cutting ring and union nut -MSV |

#### Connecting Parts

|  |                                            |         |
|--|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |

#### Spare Parts / Accessories

|  |                                  |          |
|--|----------------------------------|----------|
|  | Profile Sealing Ring<br>Type WDG | Page 238 |
|--|----------------------------------|----------|

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in)<br>Thread T | D2  | i   | L    | L1 <sup>1</sup> | L2   | S1   | S2   | Torque<br>(Nm/lbf·ft)<br>Thread T | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------------------|-----|-----|------|-----------------|------|------|------|-----------------------------------|-----------------------------------|-----------------------------|
| LL     | 6                        | 100             | G 1/8                             | 4   | 8   | 21,5 | 28              | 8    | 14   | 12   | 18                                | 1,14                              | FI-GE-06LLR-WD-B-W3         |
|        | .24                      | 1450            |                                   | .16 | .31 | .85  | 1.10            | .31  | .55  | .47  | 13.3                              | 2.51                              |                             |
| L      | 6                        | 500             | G 1/8                             | 4   | 8   | 23,5 | 31,5            | 8,5  | 14   | 14   | 18                                | 1,33                              | FI-GE-06LR-WD-B-W3          |
|        | .24                      | 7250            |                                   | .16 | .31 | .93  | 1.24            | .33  | .55  | .55  | 13.3                              | 2.93                              |                             |
|        | 6                        | 500             | G 1/4                             | 4   | 12  | 29   | 37              | 10   | 19   | 14   | 35                                | 2,74                              | FI-GE-06LR1/4-WD-B-W3       |
|        | .24                      | 7250            |                                   | .16 | .47 | 1.14 | 1.46            | .39  | .75  | .55  | 25.9                              | 6.04                              |                             |
|        | 6                        | 400             | G 3/8                             | 4   | 12  | 30,5 | 38,5            | 11,5 | 22   | 14   | 70                                | 4,03                              | FI-GE-06LR3/8-WD-B-W3       |
|        | .24                      | 5800            |                                   | .16 | .47 | 1.20 | 1.52            | .45  | .87  | .55  | 51.8                              | 8.87                              |                             |
|        | 6                        | 400             | G 1/2                             | 4   | 14  | 33   | 41              | 12   | 27   | 14   | 90                                | 6,37                              | FI-GE-06LR1/2-WD-B-W3       |
|        | .24                      | 5800            |                                   | .16 | .55 | 1.30 | 1.61            | .47  | 1.06 | .55  | 66.6                              | 14.01                             |                             |
|        | 8                        | 500             | G 1/8                             | 4   | 8   | 24,5 | 32,5            | 9,5  | 14   | 17   | 18                                | 1,61                              | FI-GE-08LR1/8-WD-B-W3       |
|        | .31                      | 7250            |                                   | .16 | .31 | .96  | 1.28            | .37  | .55  | .67  | 13.3                              | 3.53                              |                             |
|        | 8                        | 500             | G 1/4                             | 6   | 12  | 29   | 37              | 10   | 19   | 17   | 35                                | 2,65                              | FI-GE-08LR-WD-B-W3          |
|        | .31                      | 7250            |                                   | .24 | .47 | 1.14 | 1.46            | .39  | .75  | .67  | 25.9                              | 5.83                              |                             |
|        | 8                        | 400             | G 3/8                             | 6   | 12  | 30,5 | 38,5            | 11,5 | 22   | 17   | 70                                | 4,35                              | FI-GE-08LR3/8-WD-B-W3       |
|        | .31                      | 5800            |                                   | .24 | .47 | 1.20 | 1.52            | .45  | .87  | .67  | 51.8                              | 9.57                              |                             |
|        | 8                        | 400             | G 1/2                             | 6   | 14  | 33   | 41              | 12   | 27   | 17   | 90                                | 6,58                              | FI-GE-08LR1/2-WD-B-W3       |
|        | .31                      | 5800            |                                   | .24 | .55 | 1.30 | 1.61            | .47  | 1.06 | .67  | 66.6                              | 14.48                             |                             |
|        | 10                       | 500             | G 1/8                             | 4   | 8   | 25,5 | 33,5            | 10,5 | 17   | 19   | 18                                | 2,05                              | FI-GE-10LR1/8-WD-B-W3       |
|        | .39                      | 7250            |                                   | .16 | .31 | 1.00 | 1.32            | .41  | .67  | .75  | 13.3                              | 4.52                              |                             |
|        | 10                       | 500             | G 1/4                             | 6   | 12  | 30   | 38              | 11   | 19   | 19   | 35                                | 2,88                              | FI-GE-10LR-WD-B-W3          |
|        | .39                      | 7250            |                                   | .24 | .47 | 1.18 | 1.50            | .43  | .75  | .75  | 25.9                              | 6.34                              |                             |
|        | 10                       | 500             | G 3/8                             | 8   | 12  | 31,5 | 39,5            | 12,5 | 22   | 19   | 70                                | 4,15                              | FI-GE-10LR3/8-WD-B-W3       |
|        | .39                      | 7250            |                                   | .31 | .47 | 1.24 | 1.56            | .49  | .87  | .75  | 51.8                              | 9.12                              |                             |
|        | 10                       | 400             | G 1/2                             | 8   | 14  | 34   | 42              | 13   | 27   | 19   | 90                                | 7,10                              | FI-GE-10LR1/2-WD-B-W3       |
|        | .39                      | 5800            |                                   | .31 | .55 | 1.34 | 1.65            | .51  | 1.06 | .75  | 66.6                              | 15.61                             |                             |
|        | 12                       | 400             | G 1/8                             | 4   | 8   | 26,5 | 34,5            | 11,5 | 19   | 22   | 18                                | 2,55                              | FI-GE-12LR1/8-WD-B-W3       |
|        | .47                      | 5800            |                                   | .16 | .31 | 1.04 | 1.36            | .45  | .75  | .87  | 13.3                              | 5.61                              |                             |
|        | 12                       | 400             | G 1/4                             | 6   | 12  | 31   | 39              | 12   | 19   | 22   | 35                                | 3,05                              | FI-GE-12LR1/4-WD-B-W3       |
|        | .47                      | 5800            |                                   | .24 | .47 | 1.22 | 1.54            | .47  | .75  | .87  | 25.9                              | 6.70                              |                             |
|        | 12                       | 400             | G 3/8                             | 9   | 12  | 31,5 | 39,5            | 12,5 | 22   | 22   | 70                                | 4,14                              | FI-GE-12LR-WD-B-W3          |
|        | .47                      | 5800            |                                   | .35 | .47 | 1.24 | 1.56            | .49  | .87  | .87  | 51.8                              | 9.10                              |                             |
|        | 12                       | 400             | G 1/2                             | 10  | 14  | 34   | 42              | 13   | 27   | 22   | 90                                | 6,65                              | FI-GE-12LR1/2-WD-B-W3       |
|        | .47                      | 5800            |                                   | .39 | .55 | 1.34 | 1.65            | .51  | 1.06 | .87  | 66.6                              | 14.63                             |                             |
|        | 12                       | 250             | G 3/4                             | 10  | 16  | 37   | 45              | 14   | 32   | 22   | 180                               | 9,25                              | FI-GE-12LR3/4-WD-B-W3       |
|        | .47                      | 3625            |                                   | .39 | .63 | 1.46 | 1.77            | .55  | 1.26 | .87  | 133.2                             | 20.34                             |                             |
|        | 15                       | 400             | G 1/4                             | 7   | 12  | 31,5 | 39,5            | 12,5 | 22   | 27   | 35                                | 4,07                              | FI-GE-15LR1/4-WD-B-W3       |
|        | .59                      | 5800            |                                   | .28 | .47 | 1.24 | 1.56            | .49  | .87  | 1.06 | 25.9                              | 8.95                              |                             |
|        | 15                       | 400             | G 3/8                             | 9   | 12  | 32,5 | 40,5            | 13,5 | 24   | 27   | 70                                | 5,32                              | FI-GE-15LR3/8-WD-B-W3       |
|        | .59                      | 5800            |                                   | .35 | .47 | 1.28 | 1.59            | .53  | .94  | 1.06 | 51.8                              | 11.70                             |                             |
|        | 15                       | 400             | G 1/2                             | 12  | 14  | 35   | 43              | 14   | 27   | 27   | 90                                | 6,62                              | FI-GE-15LR-WD-B-W3          |
|        | .59                      | 5800            |                                   | .47 | .55 | 1.38 | 1.69            | .55  | 1.06 | 1.06 | 66.6                              | 14.56                             |                             |
|        | 15                       | 250             | G 3/4                             | 12  | 16  | 38   | 46              | 15   | 32   | 27   | 180                               | 11,80                             | FI-GE-15LR3/4-WD-B-W3       |
|        | .59                      | 3625            |                                   | .47 | .63 | 1.50 | 1.81            | .59  | 1.26 | 1.06 | 133.2                             | 25.96                             |                             |
|        | 15                       | 250             | G 1                               | 12  | 18  | 42,5 | 49              | 17,5 | 41   | 27   | 310                               | 22,61                             | FI-GE-15LR1-WD-B-W3         |
|        | .59                      | 3625            |                                   | .47 | .71 | 1.67 | 1.93            | .69  | 1.61 | 1.06 | 229.4                             | 49.85                             |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to ISO 1179-2 (Type E)

Port acc. to ISO 1179-1

Torque recommendations for Steel mating material.

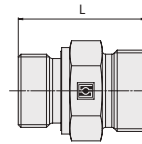
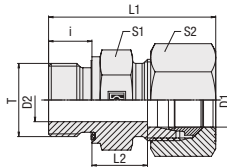
Standard seal material is NBR (Buna-N®).

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.



## Straight Male Stud Fitting Type FI-GE-...-R-WD • Series L



C

### Profile Sealing Ring

### Whitworth Parallel Pipe Thread (BSPP)

| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in)                        | Torque<br>(Nm/N·lb) | Weight<br>(kg/lbs) Ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|----------------------------------------------|---------------------|------------------------|-----------------------------|
|        | D1                 |                 | Thread T D2 i L L1 L2 S1 S2 Thread T per 100 |                     |                        |                             |
| L      | 18                 | 400             | G 3/8 9 12 33,5 42,5 14 27 32 70 6,56        |                     |                        | FI-GE-18LR3/8-WD-B-W3       |
|        | .71                | 5800            | .35 .47 1.32 1.67 .55 1.06 1.26 51.8 14.44   |                     |                        |                             |
|        | 18                 | 400             | G 1/2 14 14 36 45 14,5 27 32 90 7,01         |                     |                        | FI-GE-18LR-WD-B-W3          |
|        | .71                | 5800            | .55 .55 1.42 1.77 .57 1.06 1.26 66.6 15.41   |                     |                        |                             |
|        | 18                 | 400             | G 3/4 15 16 38 47 14,5 32 32 180 10,89       |                     |                        | FI-GE-18LR3/4-WD-B-W3       |
|        | .71                | 5800            | .59 .63 1.50 1.85 .57 1.26 1.26 133.2 23.96  |                     |                        |                             |
|        | 18                 | 250             | G 1 22 18 43 48 17,5 41 32 310 18,44         |                     |                        | FI-GE-18LR1-WD-B-W3         |
|        | .71                | 3625            | .87 .71 1.69 1.89 .69 1.61 1.26 229.4 40.65  |                     |                        |                             |
|        | 22                 | 250             | G 1/2 14 14 38 47 16,5 32 36 90 8,75         |                     |                        | FI-GE-22LR1/2-WD-B-W3       |
|        | .87                | 3625            | .55 .55 1.50 1.85 .65 1.26 1.42 66.6 19.25   |                     |                        |                             |
|        | 22                 | 250             | G 3/4 18 16 40 49 16,5 32 36 180 10,28       |                     |                        | FI-GE-22LR-WD-B-W3          |
|        | .87                | 3625            | .71 .63 1.57 1.93 .65 1.26 1.42 133.2 22.61  |                     |                        |                             |
|        | 22                 | 250             | G 1 19 18 43 52 17,5 41 36 310 18,57         |                     |                        | FI-GE-22LR1-WD-B-W3         |
|        | .87                | 3625            | .75 .71 1.69 2.05 .69 1.61 1.42 229.4 40.85  |                     |                        |                             |
|        | 22                 | 250             | G 1 1/4 30 20 46 55 18,5 50 36 450 26,41     |                     |                        | FI-GE-22LR1-1/4-WD-B-W3     |
|        | .87                | 3625            | 1.18 .79 1.81 2.17 .73 1.97 1.42 333 58.22   |                     |                        |                             |
|        | 28                 | 250             | G 3/4 18 16 41 50 17,5 41 41 180 14,97       |                     |                        | FI-GE-28LR3/4-WD-B-W3       |
|        | 1.10               | 3625            | .71 .63 1.61 1.97 .69 1.61 1.61 133.2 32.93  |                     |                        |                             |
|        | 28                 | 250             | G 1 23 18 43 52 17,5 41 41 310 15,83         |                     |                        | FI-GE-28LR-WD-B-W3          |
|        | 1.10               | 3625            | .91 .71 1.69 2.05 .69 1.61 1.61 229.4 34.82  |                     |                        |                             |
|        | 28                 | 250             | G 1 1/4 24 20 45 54 17,5 50 41 450 13,40     |                     |                        | FI-GE-28LR1-1/4-WD-B-W3     |
|        | 1.10               | 3625            | .94 .79 1.77 2.13 .69 1.97 1.61 333.0 29.48  |                     |                        |                             |
|        | 35                 | 250             | G 3/4 18 16 44 55 17 46 50 180 20,71         |                     |                        | FI-GE-35LR3/4-WD-B-W3       |
|        | 1.38               | 3625            | .71 .63 1.73 2.17 .67 1.81 1.97 133.2 45.56  |                     |                        |                             |
|        | 35                 | 250             | G 1 23 18 46 57 17,5 46 50 310 22,15         |                     |                        | FI-GE-35LR1-WD-B-W3         |
|        | 1.38               | 3625            | .91 .71 1.81 2.24 .69 1.81 1.97 229.4 48.74  |                     |                        |                             |
|        | 35                 | 250             | G 1 1/4 30 20 48 59 17,5 50 50 450 27,23     |                     |                        | FI-GE-35LR-WD-B-W3          |
|        | 1.38               | 3625            | 1.18 .79 1.89 2.32 .69 1.97 1.97 333.0 59.90 |                     |                        |                             |
|        | 35                 | 250             | G 1 1/2 30 22 52 63 19,5 55 50 540 42,18     |                     |                        | FI-GE-35LR1-1/2-WD-B-W3     |
|        | 1.38               | 3625            | 1.18 .87 2.05 2.48 .77 2.17 1.97 399.6 92.80 |                     |                        |                             |
|        | 42                 | 250             | G 1 23 18 48 60 19 55 60 310 31,72           |                     |                        | FI-GE-42LR1-WD-B-W3         |
|        | 1.65               | 3625            | .91 .71 1.89 2.36 .75 2.17 2.36 229.4 69.78  |                     |                        |                             |
|        | 42                 | 250             | G 1 1/4 30 20 50 62 19 55 60 450 34,03       |                     |                        | FI-GE-42LR1-1/4-WD-B-W3     |
|        | 1.65               | 3625            | 1.18 .79 1.97 2.44 .75 2.17 2.36 333.0 74.87 |                     |                        |                             |
|        | 42                 | 250             | G 1 1/2 36 22 52 64 19 55 60 540 34,37       |                     |                        | FI-GE-42LR-WD-B-W3          |
|        | 1.65               | 3625            | 1.42 .87 2.05 2.52 .75 2.17 2.36 399.6 75.62 |                     |                        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to ISO 1179-2 (Type E)

Port acc. to ISO 1179-1

Torque recommendations for Steel mating material.

Standard seal material is NBR (Buna-N®).

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

**\*FI-GE\*-10\*L\*R\*-WD\*-B\*-W3\*-MS**

|                                                                         |                                                                                                 |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | FI-GE                                                                                           |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                                                             |
| * Series                                                                | Extra-Light Series (page 48) LL<br>Light Series (pages 48/49) L<br>Heavy Series (pages 50/51) S |
| * Thread Type                                                           | Whitworth Parallel Pipe Thread (BSPP) R                                                         |
| If required, please indicate special sizes, e.g. R1/8!                  |                                                                                                 |
| * Seal Type                                                             | Profile Sealing Ring -WD                                                                        |
| * Seal Material                                                         | NBR (Buna-N®) -B<br>FKM (Viton®) -V<br>EPDM -E                                                  |
| * Material Code                                                         | Steel, zinc/nickel-plated -W3                                                                   |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                 |
| * Assembling / Kitting                                                  | Fitting body only —                                                                             |
|                                                                         | Fitting body supplied with cutting ring and union nut -MS                                       |
|                                                                         | Fitting body supplied with soft-sealing cutting ring and union nut -MSV                         |

### Connecting Parts

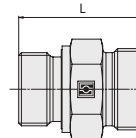
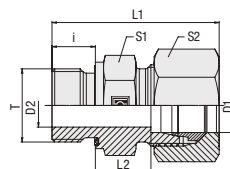
|  |                                            |         |
|--|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |

### Spare Parts / Accessories

|  |                                  |          |
|--|----------------------------------|----------|
|  | Profile Sealing Ring<br>Type WDG | Page 238 |
|--|----------------------------------|----------|



## Straight Male Stud Fitting Type FI-GE-...-R-WD • Series S



### Whitworth Parallel Pipe Thread (BSPP)

### Profile Sealing Ring

#### Ordering Codes

**\*FI-GE\*-10\*S\*-R\*-WD\*-B\*-W3\*-MS**

|                                                                         |                                                                                                                                                                                  |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | <b>FI-GE</b>                                                                                                                                                                     |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                                                                                                                       |
| * Series                                                                | Extra-Light Series (page 48) <b>LL</b><br>Light Series (pages 48/49) <b>L</b><br>Heavy Series (pages 50/51) <b>S</b>                                                             |
| * Thread Type                                                           | Whitworth Parallel Pipe Thread (BSPP) <b>R</b>                                                                                                                                   |
| If required, please indicate special sizes, e.g. R1/8!                  |                                                                                                                                                                                  |
| * Seal Type                                                             | Profile Sealing Ring <b>-WD</b>                                                                                                                                                  |
| * Seal Material                                                         | NBR (Buna-N®) <b>-B</b><br>FKM (Viton®) <b>-V</b><br>EPDM <b>-E</b>                                                                                                              |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                                                                                                                             |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                                                                                  |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b><br>Fitting body supplied with cutting ring and union nut <b>-MS</b><br>Fitting body supplied with soft-sealing cutting ring and union nut <b>-MSV</b> |

#### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

#### Spare Parts / Accessories

|  |                                         |          |
|--|-----------------------------------------|----------|
|  | Profile Sealing Ring<br>Type <b>WDG</b> | Page 238 |
|--|-----------------------------------------|----------|

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in)<br>Thread T | D2  | i   | L    | L1 <sup>1</sup> | L2   | S1   | S2   | Torque<br>(N·m/lbf·ft)<br>Thread T | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------------------|-----|-----|------|-----------------|------|------|------|------------------------------------|-----------------------------------|-----------------------------|
| S      | 6                        | 800             | G 1/8                             | 4   | 8   | 27,5 | 35,5            | 12,5 | 14   | 17   | 25                                 | 2,49                              | FI-GE-06SR1/8-WD-B-W3       |
|        | .24                      | 11600           |                                   | .16 | .31 | 1.08 | 1.40            | .49  | .55  | .67  | 18.5                               | 5.48                              |                             |
|        | 6                        | 800             | G 1/4                             | 4   | 12  | 32   | 40              | 13   | 19   | 17   | 55                                 | 3,46                              | FI-GE-06SR-WD-B-W3          |
|        | .24                      | 11600           |                                   | .16 | .47 | 1.26 | 1.57            | .51  | .75  | .67  | 40.7                               | 7.61                              |                             |
|        | 6                        | 800             | G 3/8                             | 4   | 12  | 34,5 | 42,5            | 15,5 | 22   | 17   | 80                                 | 5,63                              | FI-GE-06SR3/8-WD-B-W3       |
|        | .24                      | 11600           |                                   | .16 | .47 | 1.36 | 1.67            | .61  | .87  | .67  | 59.2                               | 12.38                             |                             |
|        | 6                        | 800             | G 1/2                             | 4   | 14  | 39   | 47              | 18   | 27   | 17   | 115                                | 8,22                              | FI-GE-06SR1/2-WD-B-W3       |
|        | .24                      | 11600           |                                   | .16 | .55 | 1.54 | 1.85            | .71  | 1.06 | .67  | 85.1                               | 18.09                             |                             |
|        | 8                        | 800             | G 1/8                             | 4   | 8   | 29,5 | 37,5            | 14,5 | 19   | 19   | 25                                 | 3,41                              | FI-GE-08SR1/8-WD-B-W3       |
|        | .31                      | 11600           |                                   | .16 | .31 | 1.16 | 1.48            | .57  | .75  | .75  | 18.5                               | 7.49                              |                             |
|        | 8                        | 800             | G 1/4                             | 5   | 12  | 34   | 42              | 15   | 19   | 19   | 55                                 | 4,00                              | FI-GE-08SR-WD-B-W3          |
|        | .31                      | 11600           |                                   | .20 | .47 | 1.34 | 1.65            | .59  | .75  | .75  | 40.7                               | 8.80                              |                             |
|        | 8                        | 800             | G 3/8                             | 5   | 12  | 34,5 | 42,5            | 15,5 | 22   | 19   | 80                                 | 5,72                              | FI-GE-08SR3/8-WD-B-W3       |
|        | .31                      | 11600           |                                   | .20 | .47 | 1.36 | 1.67            | .61  | .87  | .75  | 59.2                               | 12.58                             |                             |
|        | 8                        | 800             | G 1/2                             | 5   | 14  | 39   | 47              | 18   | 27   | 19   | 115                                | 9,92                              | FI-GE-08SR1/2-WD-B-W3       |
|        | .31                      | 11600           |                                   | .20 | .55 | 1.54 | 1.85            | .71  | 1.06 | .75  | 85.1                               | 21.82                             |                             |
|        | 10                       | 800             | G 1/4                             | 5   | 12  | 34   | 43              | 14,5 | 19   | 22   | 55                                 | 4,22                              | FI-GE-10SR1/4-WD-B-W3       |
|        | .39                      | 11600           |                                   | .20 | .47 | 1.34 | 1.69            | .57  | .75  | .87  | 40.7                               | 9.28                              |                             |
|        | 10                       | 800             | G 3/8                             | 7   | 12  | 34,5 | 43,5            | 15   | 22   | 22   | 80                                 | 5,60                              | FI-GE-10SR-WD-B-W3          |
|        | .39                      | 11600           |                                   | .28 | .47 | 1.36 | 1.71            | .59  | .87  | .87  | 59.2                               | 12.31                             |                             |
|        | 10                       | 800             | G 1/2                             | 7   | 14  | 39   | 47              | 17,5 | 27   | 22   | 115                                | 9,57                              | FI-GE-10SR1/2-WD-B-W3       |
|        | .39                      | 11600           |                                   | .28 | .55 | 1.54 | 1.85            | .69  | 1.06 | .87  | 85.1                               | 21.06                             |                             |
|        | 12                       | 630             | G 1/4                             | 5   | 12  | 36   | 44              | 16,5 | 22   | 24   | 55                                 | 5,60                              | FI-GE-12SR1/4-WD-B-W3       |
|        | .47                      | 9135            |                                   | .20 | .47 | 1.42 | 1.73            | .65  | .87  | .94  | 40.7                               | 12.32                             |                             |
|        | 12                       | 630             | G 3/8                             | 8   | 12  | 36,5 | 45              | 17   | 22   | 24   | 80                                 | 6,25                              | FI-GE-12SR-WD-B-W3          |
|        | .47                      | 9135            |                                   | .31 | .47 | 1.44 | 1.77            | .67  | .87  | .94  | 59.2                               | 13.75                             |                             |
|        | 12                       | 630             | G 1/2                             | 8   | 14  | 39   | 48              | 17,5 | 27   | 24   | 115                                | 9,52                              | FI-GE-12SR1/2-WD-B-W3       |
|        | .47                      | 9135            |                                   | .31 | .55 | 1.54 | 1.89            | .69  | 1.06 | .94  | 85.1                               | 20.95                             |                             |
|        | 12                       | 630             | G 3/4                             | 8   | 16  | 41   | 50              | 17,5 | 32   | 24   | 180                                | 12,83                             | FI-GE-12SR3/4-WD-B-W3       |
|        | .47                      | 9135            |                                   | .31 | .63 | 1.61 | 1.97            | .69  | 1.26 | .94  | 133.2                              | 28.22                             |                             |
|        | 14                       | 630             | G 3/8                             | 8   | 12  | 38,5 | 48,5            | 18,5 | 24   | 27   | 80                                 | 5,03                              | FI-GE-14SR3/8-WD-B-W3       |
|        | .55                      | 9135            |                                   | .31 | .47 | 1.52 | 1.91            | .73  | .94  | 1.06 | 59.2                               | 11.07                             |                             |
|        | 14                       | 630             | G 1/2                             | 10  | 14  | 41   | 51              | 19   | 27   | 27   | 115                                | 9,67                              | FI-GE-14SR-WD-B-W3          |
|        | .55                      | 9135            |                                   | .39 | .55 | 1.61 | 2.01            | .75  | 1.06 | 1.06 | 85.1                               | 21.27                             |                             |
|        | 14                       | 630             | G 3/4                             | 10  | 16  | 45   | 55              | 21   | 32   | 27   | 180                                | 14,90                             | FI-GE-14SR3/4-WD-B-W3       |
|        | .55                      | 9135            |                                   | .39 | .63 | 1.77 | 2.17            | .83  | 1.26 | 1.06 | 133.2                              | 32.78                             |                             |
|        | 16                       | 630             | G 1/4                             | 7   | 12  | 38   | 48              | 17,5 | 27   | 30   | 55                                 | 8,12                              | FI-GE-16SR1/4-WD-B-W3       |
|        | .63                      | 9135            |                                   | .28 | .47 | 1.50 | 1.89            | .69  | 1.06 | 1.18 | 40.7                               | 17.86                             |                             |
|        | 16                       | 630             | G 3/8                             | 8   | 12  | 38,5 | 48,5            | 18   | 27   | 30   | 80                                 | 7,53                              | FI-GE-16SR3/8-WD-B-W3       |
|        | .63                      | 9135            |                                   | .31 | .47 | 1.52 | 1.91            | .71  | 1.06 | 1.18 | 59.2                               | 16.57                             |                             |
|        | 16                       | 630             | G 1/2                             | 12  | 14  | 41   | 51              | 18,5 | 27   | 30   | 115                                | 9,08                              | FI-GE-16SR-WD-B-W3          |
|        | .63                      | 9135            |                                   | .47 | .55 | 1.61 | 2.01            | .73  | 1.06 | 1.18 | 85.1                               | 19.98                             |                             |
|        | 16                       | 630             | G 3/4                             | 12  | 16  | 45   | 55              | 20,5 | 32   | 30   | 180                                | 15,51                             | FI-GE-16SR3/4-WD-B-W3       |
|        | .63                      | 9135            |                                   | .47 | .63 | 1.77 | 2.17            | .81  | 1.26 | 1.18 | 133.2                              | 34.13                             |                             |
|        | 16                       | 420             | G 1                               | 12  | 18  | 49   | 59              | 22,5 | 41   | 30   | 310                                | 25,20                             | FI-GE-16SR1-WD-B-W3         |
|        | .63                      | 6091            |                                   | .47 | .71 | 1.93 | 2.32            | .89  | 1.61 | 1.18 | 229.4                              | 55.43                             |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to ISO 1179-2 (Type E)

Port acc. to ISO 1179-1

Torque recommendations for Steel mating material.

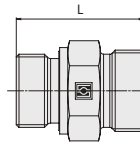
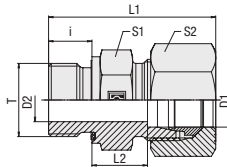
Standard seal material is NBR (Buna-N®).

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.



## Straight Male Stud Fitting Type FI-GE-...-R-WD ■ Series S



C

### Profile Sealing Ring

### Whitworth Parallel Pipe Thread (BSPP)

| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in) | Thread T | D2  | i    | L    | L1 <sup>1</sup> | L2   | S1   | S2    | Torque<br>(Nm/N·lb) | Weight<br>(kg/lbs) Ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|----------|-----|------|------|-----------------|------|------|-------|---------------------|------------------------|-----------------------------|
| S      | D1                 |                 |                       |          |     |      |      |                 |      |      |       | Thread T            | per 100                |                             |
|        | 20                 | 420             | G 1/2                 | 12       | 14  | 45   | 56   | 20,5            | 32   | 36   | 115   | 13,76               |                        | FI-GE-20SR1/2-WD-B-W3       |
|        | .79                | 6091            |                       | .47      | .55 | 1.77 | 2.20 | .81             | 1.26 | 1.42 | 85.1  | 30.28               |                        |                             |
|        | 20                 | 420             | G 3/4                 | 16       | 16  | 47   | 58   | 20,5            | 32   | 36   | 180   | 14,86               |                        | FI-GE-20SR-WD-B-W3          |
|        | .79                | 6091            |                       | .63      | .63 | 1.85 | 2.28 | .81             | 1.26 | 1.42 | 133.2 | 32.70               |                        |                             |
|        | 20                 | 420             | G 1                   | 16       | 18  | 51   | 62   | 22,5            | 41   | 36   | 310   | 21,90               |                        | FI-GE-20SR1-WD-B-W3         |
|        | .79                | 6091            |                       | .63      | .71 | 2.01 | 2.44 | .89             | 1.61 | 1.42 | 229.4 | 48.19               |                        |                             |
|        | 20                 | 420             | G 1 1/4               | 16       | 20  | 53   | 64   | 22,5            | 50   | 36   | 450   | 13,50               |                        | FI-GE-20SR1-1/4-WD-B-W3     |
|        | .79                | 6091            |                       | .63      | .79 | 2.09 | 2.52 | .89             | 1.97 | 1.42 | 333.0 | 29.70               |                        |                             |
|        | 25                 | 400             | G 1/2                 | 12       | 14  | 49   | 61   | 23              | 41   | 46   | 115   | 23,49               |                        | FI-GE-25SR1/2-WD-B-W3       |
|        | .98                | 5800            |                       | .47      | .55 | 1.93 | 2.40 | .91             | 1.61 | 1.81 | 85.1  | 51.68               |                        |                             |
|        | 25                 | 420             | G 3/4                 | 16       | 16  | 51   | 63   | 23              | 41   | 46   | 180   | 20,33               |                        | FI-GE-25SR3/4-WD-B-W3       |
|        | .98                | 6091            |                       | .63      | .63 | 2.01 | 2.48 | .91             | 1.61 | 1.81 | 133.2 | 44.73               |                        |                             |
|        | 25                 | 420             | G 1                   | 20       | 18  | 53   | 65   | 23              | 41   | 46   | 310   | 26,75               |                        | FI-GE-25SR-WD-B-W3          |
|        | .98                | 6091            |                       | .79      | .71 | 2.09 | 2.56 | .91             | 1.61 | 1.81 | 229.4 | 58.84               |                        |                             |
|        | 25                 | 420             | G 1 1/4               | 20       | 20  | 55   | 67   | 23              | 50   | 46   | 450   | 23,28               |                        | FI-GE-25SR1-1/4-WD-B-W3     |
|        | .98                | 6091            |                       | .79      | .79 | 2.17 | 2.64 | .91             | 1.97 | 1.81 | 333.0 | 51.22               |                        |                             |
|        | 25                 | 420             | G 1 1/2               | 32       | 22  | 60   | 73,5 | 26              | 55   | 46   | 540   | 54,35               |                        | FI-GE-25SR1-1/2-WD-B-W3     |
|        | .98                | 6091            |                       | 1.26     | .87 | 2.36 | 2.89 | 1.02            | 2.17 | 1.81 | 399.6 | 119.82              |                        |                             |
|        | 30                 | 420             | G 3/4                 | 16       | 16  | 53   | 66   | 23,5            | 46   | 50   | 180   | 31,16               |                        | FI-GE-30SR3/4-WD-B-W3       |
|        | 1.18               | 6091            |                       | .63      | .63 | 2.09 | 2.60 | .93             | 1.81 | 1.97 | 133.2 | 68.56               |                        |                             |
|        | 30                 | 420             | G 1                   | 20       | 18  | 55   | 68   | 23,5            | 46   | 50   | 310   | 33,20               |                        | FI-GE-30SR1-WD-B-W3         |
|        | 1.18               | 6091            |                       | .79      | .71 | 2.17 | 2.68 | .93             | 1.81 | 1.97 | 229.4 | 73.04               |                        |                             |
|        | 30                 | 420             | G 1 1/4               | 25       | 20  | 57   | 70   | 23,5            | 50   | 50   | 450   | 41,74               |                        | FI-GE-30SR-WD-B-W3          |
|        | 1.18               | 6091            |                       | .98      | .79 | 2.24 | 2.76 | .93             | 1.97 | 1.97 | 333.0 | 91.82               |                        |                             |
|        | 30                 | 315             | G 1 1/2               | 25       | 22  | 62   | 75   | 26,5            | 55   | 50   | 540   | 54,30               |                        | FI-GE-30SR1-1/2-WD-B-W3     |
|        | 1.18               | 4568            |                       | .98      | .87 | 2.44 | 2.95 | 1.04            | 2.17 | 1.97 | 399.6 | 119.46              |                        |                             |
|        | 38                 | 420             | G 3/4                 | 16       | 16  | 58   | 73   | 26              | 55   | 60   | 180   | 50,1                |                        | FI-GE-38SR3/4-WD-B-W3       |
|        | 1.50               | 6091            |                       | .63      | .63 | 2.28 | 2.87 | 1.02            | 2.17 | 2.36 | 133.2 | 110.45              |                        |                             |
|        | 38                 | 420             | G 1                   | 20       | 18  | 60   | 75   | 26              | 55   | 50   | 310   | 52,00               |                        | FI-GE-38SR1-WD-B-W3         |
|        | 1.50               | 6091            |                       | .79      | .71 | 2.36 | 2.95 | 1.02            | 2.17 | 1.97 | 229.4 | 114.40              |                        |                             |
|        | 38                 | 420             | G 1 1/4               | 25       | 20  | 62   | 77   | 26              | 55   | 60   | 450   | 57,22               |                        | FI-GE-38SR1-1/4-WD-B-W3     |
|        | 1.50               | 6091            |                       | .98      | .79 | 2.44 | 3.03 | 1.02            | 2.17 | 2.36 | 333.0 | 125.88              |                        |                             |
|        | 38                 | 420             | G 1 1/2               | 32       | 22  | 64   | 79   | 26              | 55   | 60   | 540   | 55,90               |                        | FI-GE-38SR-WD-B-W3          |
|        | 1.50               | 6091            |                       | 1.26     | .87 | 2.52 | 3.11 | 1.02            | 2.17 | 2.36 | 399.6 | 122.98              |                        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to ISO 1179-2 (Type E)

Port acc. to ISO 1179-1

Torque recommendations for Steel mating material.

Standard seal material is NBR (Buna-N®).

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

**\*FI-GE\*-10\*S\*R\*-WD\*-B\*-W3\*-MS**

|                                    |                                                                                                 |
|------------------------------------|-------------------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting       | FI-GE                                                                                           |
| * Outside Tube Diameter D1 (in mm) | -10                                                                                             |
| * Series                           | Extra-Light Series (page 48) LL<br>Light Series (pages 48/49) L<br>Heavy Series (pages 50/51) S |

|               |                                       |   |
|---------------|---------------------------------------|---|
| * Thread Type | Whitworth Parallel Pipe Thread (BSPP) | R |
|---------------|---------------------------------------|---|

If required, please indicate special sizes, e.g. R1/8!

|                 |                                       |                |
|-----------------|---------------------------------------|----------------|
| * Seal Type     | Profile Sealing Ring                  | -WD            |
| * Seal Material | NBR (Buna-N®)<br>FKM (Viton®)<br>EPDM | -B<br>-V<br>-E |

|                 |                           |     |
|-----------------|---------------------------|-----|
| * Material Code | Steel, zinc/nickel-plated | -W3 |
|-----------------|---------------------------|-----|

Please contact STAUFF for alternative materials and surface finishings.

|                        |                                                                    |      |
|------------------------|--------------------------------------------------------------------|------|
| * Assembling / Kitting | Fitting body only                                                  | —    |
|                        | Fitting body supplied with cutting ring and union nut              | -MS  |
|                        | Fitting body supplied with soft-sealing cutting ring and union nut | -MSV |

### Connecting Parts

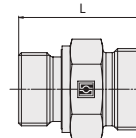
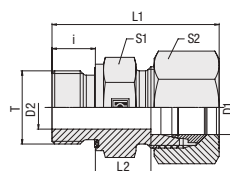
|  |                                            |         |
|--|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |

### Spare Parts / Accessories

|  |                                  |          |
|--|----------------------------------|----------|
|  | Profile Sealing Ring<br>Type WDG | Page 238 |
|--|----------------------------------|----------|



## Straight Male Stud Fitting Type FI-GE-...-M-WD ▪ Series L



### Ordering Codes

**\*FI-GE\*-10\*L\*M\*-WD\*-B\*-W3\*-MS**

\* Straight Male Stud Fitting **FI-GE**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series (pages 52/53) **L**  
Heavy Series (page 54) **S**

\* Thread Type Metric Parallel Thread **M**

If required, please indicate special sizes, e.g. M12x1.5!

\* Seal Type Profile Sealing Ring **-WD**

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only **—**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

### Spare Parts / Accessories



Profile Sealing Ring  
Type **WDG** Page 238

### Metric Parallel Thread

### Profile Sealing Ring

| Series | Tube OD                           | PN                                  | Dimensions                        |     |     |      |                 |      |      |                                       | Torque                                 | Weight  | Ordering Codes <sup>3</sup> |
|--------|-----------------------------------|-------------------------------------|-----------------------------------|-----|-----|------|-----------------|------|------|---------------------------------------|----------------------------------------|---------|-----------------------------|
|        | ( <sup>mm</sup> / <sub>in</sub> ) | ( <sup>bar</sup> / <sub>psi</sub> ) | ( <sup>mm</sup> / <sub>in</sub> ) |     |     |      |                 |      |      | ( <sup>N·m</sup> / <sub>ft·lb</sub> ) | ( <sup>kg</sup> / <sub>lbs</sub> ) ca. |         |                             |
|        | D1                                |                                     | Thread T                          | D2  | i   | L    | L1 <sup>1</sup> | L2   | S1   | S2                                    | Thread T                               | per 100 |                             |
| L      | 6                                 | 500                                 | M 10 x 1                          | 4   | 8   | 23,5 | 31,5            | 8,5  | 14   | 14                                    | 18                                     | 1,36    | FI-GE-06LM-WD-B-W3          |
|        | .24                               | 7250                                |                                   | .16 | .31 | .93  | 1.24            | .33  | .55  | .55                                   | 13.3                                   | 2.99    |                             |
|        | 6                                 | 500                                 | M 12 x 1,5                        | 4   | 12  | 29   | 37              | 10   | 17   | 14                                    | 25                                     | 2,26    | FI-GE-06LM12x1.5-WD-B-W3    |
|        | .24                               | 7250                                |                                   | .16 | .47 | 1.14 | 1.46            | .39  | .67  | .55                                   | 18.5                                   | 4.98    |                             |
|        | 8                                 | 500                                 | M 10 x 1                          | 4   | 8   | 23,5 | 31,5            | 8,5  | 14   | 17                                    | 18                                     | 1,54    | FI-GE-08LM10x1-WD-B-W3      |
|        | .31                               | 7250                                |                                   | .16 | .31 | .93  | 1.24            | .33  | .55  | .67                                   | 13.3                                   | 3.39    |                             |
|        | 8                                 | 500                                 | M 12 x 1,5                        | 6   | 12  | 29   | 37              | 10   | 17   | 17                                    | 25                                     | 2,16    | FI-GE-08LM-WD-B-W3          |
|        | .31                               | 7250                                |                                   | .24 | .47 | 1.14 | 1.46            | .39  | .67  | .67                                   | 18.5                                   | 4.75    |                             |
|        | 8                                 | 500                                 | M 14 x 1,5                        | 6   | 12  | 29   | 37              | 10   | 19   | 17                                    | 45                                     | 3,11    | FI-GE-08LM14x1.5-WD-B-W3    |
|        | .31                               | 7250                                |                                   | .24 | .47 | 1.14 | 1.46            | .39  | .75  | .67                                   | 33.3                                   | 6.83    |                             |
|        | 8                                 | 400                                 | M 16 x 1,5                        | 6   | 12  | 30   | 38              | 11   | 22   | 17                                    | 55                                     | 4,05    | FI-GE-08LM16x1.5-WD-B-W3    |
|        | .31                               | 5800                                |                                   | .24 | .47 | 1.18 | 1.50            | .43  | .87  | .67                                   | 40.7                                   | 8.91    |                             |
|        | 8                                 | 400                                 | M 18 x 1,5                        | 11  | 12  | 30,5 | 37              | 11,5 | 24   | 17                                    | 90                                     | 4,34    | FI-GE-08LM18x1.5-WD-B-W3    |
|        | .31                               | 5800                                |                                   | .43 | .47 | 1.20 | 1.46            | .45  | .94  | .67                                   | 66.6                                   | 9.57    |                             |
|        | 8                                 | 400                                 | M 22 x 1,5                        | 14  | 14  | 34   | 41              | 13   | 27   | 17                                    | 125                                    | 7,66    | FI-GE-08LM22x1.5-WD-B-W3    |
|        | .31                               | 5800                                |                                   | .55 | .55 | 1.34 | 1.61            | .51  | 1.06 | .67                                   | 92.5                                   | 16.89   |                             |
|        | 10                                | 500                                 | M 10 x 1                          | 4   | 8   | 25,5 | 33              | 10,5 | 17   | 19                                    | 18                                     | 2,14    | FI-GE-10LM10x1-WD-B-W3      |
|        | .39                               | 7250                                |                                   | .16 | .31 | 1.00 | 1.30            | .41  | .67  | .75                                   | 13.3                                   | 4.72    |                             |
|        | 10                                | 500                                 | M 12 x 1,5                        | 6   | 12  | 30   | 38              | 11   | 17   | 19                                    | 25                                     | 2,38    | FI-GE-10LM12x1.5-WD-B-W3    |
|        | .39                               | 7251                                |                                   | .24 | .47 | 1.18 | 1.50            | .43  | .67  | .75                                   | 18.5                                   | 5.23    |                             |
|        | 10                                | 500                                 | M 14 x 1,5                        | 7   | 12  | 30   | 38              | 11   | 19   | 19                                    | 45                                     | 2,88    | FI-GE-10LM-WD-B-W3          |
|        | .39                               | 7251                                |                                   | .28 | .47 | 1.18 | 1.50            | .43  | .75  | .75                                   | 33.3                                   | 6.33    |                             |
|        | 10                                | 500                                 | M 16 x 1,5                        | 8   | 12  | 31,5 | 39,5            | 12,5 | 22   | 19                                    | 55                                     | 4,05    | FI-GE-10LM16x1.5-WD-B-W3    |
|        | .39                               | 7251                                |                                   | .31 | .47 | 1.24 | 1.56            | .49  | .87  | .75                                   | 40.7                                   | 8.91    |                             |
|        | 10                                | 500                                 | M 18 x 1,5                        | 8   | 12  | 31,5 | 39,5            | 12,5 | 24   | 19                                    | 90                                     | 4,94    | FI-GE-10LM18x1.5-WD-B-W3    |
|        | .39                               | 7251                                |                                   | .31 | .47 | 1.24 | 1.56            | .49  | .94  | .75                                   | 66.6                                   | 10.86   |                             |
|        | 10                                | 400                                 | M 22 x 1,5                        | 8   | 14  | 34   | 42              | 13   | 27   | 19                                    | 125                                    | 7,36    | FI-GE-10LM22x1.5-WD-B-W3    |
|        | .39                               | 5800                                |                                   | .31 | .55 | 1.34 | 1.65            | .51  | 1.06 | .75                                   | 92.5                                   | 16.19   |                             |
|        | 12                                | 400                                 | M 10 x 1                          | 4   | 8   | 25,5 | 33              | 10,5 | 17   | 19                                    | 18                                     | 2,38    | FI-GE-12LM10x1-WD-B-W3      |
|        | .47                               | 5800                                |                                   | .16 | .31 | 1.00 | 1.30            | .41  | .67  | .75                                   | 13.3                                   | 5.25    |                             |
|        | 12                                | 400                                 | M 12 x 1,5                        | 4   | 12  | 32   | 40              | 11   | 19   | 22                                    | 25                                     | 2,84    | FI-GE-12LM12x1.5-WD-B-W3    |
|        | .47                               | 5800                                |                                   | .16 | .47 | 1.26 | 1.57            | .43  | .75  | .87                                   | 18.5                                   | 6.25    |                             |
|        | 12                                | 400                                 | M 14 x 1,5                        | 7   | 12  | 30   | 38              | 11   | 19   | 22                                    | 45                                     | 3,06    | FI-GE-12LM14x1.5-WD-B-W3    |
|        | .47                               | 5800                                |                                   | .28 | .47 | 1.18 | 1.50            | .43  | .75  | .87                                   | 33.3                                   | 6.72    |                             |
|        | 12                                | 400                                 | M 16 x 1,5                        | 9   | 12  | 31,5 | 39,5            | 12,5 | 22   | 22                                    | 55                                     | 3,94    | FI-GE-12LM-WD-B-W3          |
|        | .47                               | 5800                                |                                   | .35 | .47 | 1.24 | 1.56            | .49  | .87  | .87                                   | 40.7                                   | 8.66    |                             |
|        | 12                                | 400                                 | M 18 x 1,5                        | 10  | 12  | 31,5 | 39,5            | 12,5 | 24   | 22                                    | 90                                     | 4,90    | FI-GE-12LM18x1.5-WD-B-W3    |
|        | .47                               | 5800                                |                                   | .39 | .47 | 1.24 | 1.56            | .49  | .94  | .87                                   | 66.6                                   | 10.78   |                             |
|        | 12                                | 400                                 | M 22 x 1,5                        | 10  | 14  | 35   | 42              | 14   | 27   | 22                                    | 125                                    | 6,96    | FI-GE-12LM22x1.5-WD-B-W3    |
|        | .47                               | 5800                                |                                   | .39 | .55 | 1.38 | 1.65            | .55  | 1.06 | .87                                   | 92.5                                   | 15.31   |                             |
|        | 15                                | 400                                 | M 16 x 1,5                        | 9   | 12  | 32,5 | 40,5            | 13,5 | 24   | 27                                    | 55                                     | 5,15    | FI-GE-15LM16x1.5-WD-B-W3    |
|        | .59                               | 5800                                |                                   | .35 | .47 | 1.28 | 1.59            | .53  | .94  | 1.06                                  | 40.7                                   | 11.33   |                             |
|        | 15                                | 400                                 | M 18 x 1,5                        | 11  | 12  | 32,5 | 40,5            | 13,5 | 24   | 27                                    | 90                                     | 5,05    | FI-GE-15LM-WD-B-W3          |
|        | .59                               | 5800                                |                                   | .43 | .47 | 1.28 | 1.59            | .53  | .94  | 1.06                                  | 66.6                                   | 11.11   |                             |
|        | 15                                | 400                                 | M 22 x 1,5                        | 12  | 14  | 35   | 43              | 14   | 27   | 27                                    | 125                                    | 7,15    | FI-GE-15LM22x1.5-WD-B-W3    |
|        | .59                               | 5800                                |                                   | .47 | .55 | 1.38 | 1.69            | .55  | 1.06 | 1.06                                  | 92.5                                   | 15.73   |                             |
|        | 15                                | 250                                 | M 26 x 1,5                        | 18  | 16  | 38   | 46              | 15   | 32   | 27                                    | 180                                    | 9,56    | FI-GE-15LM26x1.5-WD-B-W3    |
|        | .59                               | 3625                                |                                   | .71 | .63 | 1.50 | 1.81            | .59  | 1.26 | 1.06                                  | 133.2                                  | 21.08   |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is NBR (Buna-N®).

Male stud acc. to ISO 9974-2 (Type E)  
Port acc. to ISO 9974-1

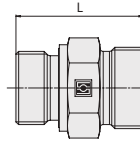
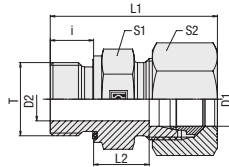
Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.







## Straight Male Stud Fitting Type FI-GE-...-M-WD ▪ Series L



C

### Metric Parallel Thread

### Profile Sealing Ring

| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |     |      |                 |      |      |      |          | Torque<br>(N·m/lb·ft) | Weight<br>(kg/lbs) Ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------|-----|------|-----------------|------|------|------|----------|-----------------------|------------------------|-----------------------------|
|        | D1                 |                 | Thread T              | D2   | i   | L    | L1 <sup>1</sup> | L2   | S1   | S2   | Thread T | per 100               |                        |                             |
| L      | 18                 | 400             | M 18 x 1,5            | 11   | 12  | 33,5 | 42,5            | 14   | 27   | 32   | 90       | 6,26                  |                        | FI-GE-18LM18x1.5-WD-B-W3    |
|        | .71                | 5800            |                       | .43  | .47 | 1.32 | 1.67            | .55  | 1.06 | 1.26 | 66.6     | 13.77                 |                        |                             |
|        | 18                 | 400             | M 22 x 1,5            | 14   | 14  | 36   | 45              | 14,5 | 27   | 32   | 125      | 7,43                  |                        | FI-GE-18LM-WD-B-W3          |
|        | .71                | 5800            |                       | .55  | .55 | 1.42 | 1.77            | .57  | 1.06 | 1.26 | 92.5     | 16.35                 |                        |                             |
|        | 18                 | 250             | M 26 x 1,5            | 15   | 16  | 38   | 47              | 16   | 32   | 32   | 180      | 10,88                 |                        | FI-GE-18LM26x1.5-WD-B-W3    |
|        | .71                | 3625            |                       | .59  | .63 | 1.50 | 1.85            | .63  | 1.26 | 1.26 | 133.2    | 23.99                 |                        |                             |
|        | 18                 | 250             | M 27 x 2              | 15   | 16  | 38   | 47              | 14,5 | 32   | 32   | 180      | 11,17                 |                        | FI-GE-18LM27x2-WD-B-W3      |
|        | .71                | 3625            |                       | .59  | .63 | 1.50 | 1.85            | .57  | 1.26 | 1.26 | 133.2    | 24.63                 |                        |                             |
|        | 18                 | 250             | M 33 x 2              | 15   | 18  | 41   | 49              | 15,5 | 41   | 32   | 310      | 13,17                 |                        | FI-GE-18LM33x2-WD-B-W3      |
|        | .71                | 3625            |                       | .59  | .71 | 1.61 | 1.93            | .61  | 1.61 | 1.26 | 229.4    | 29.03                 |                        |                             |
|        | 18                 | 250             | M 18 x 1,5            | 15   | 12  | 35,5 | 44              | 16   | 32   | 36   | 90       | 8,00                  |                        | FI-GE-22LM18x1.5-WD-B-W3    |
|        | .71                | 3625            |                       | .59  | .47 | 1.40 | 1.73            | .63  | 1.26 | 1.42 | 66.6     | 17.64                 |                        |                             |
|        | 22                 | 250             | M 22 x 1,5            | 14   | 14  | 38   | 47              | 16,5 | 32   | 36   | 125      | 9,10                  |                        | FI-GE-22LM22x1.5-WD-B-W3    |
|        | .87                | 3625            |                       | .55  | .55 | 1.50 | 1.85            | .65  | 1.26 | 1.42 | 92.5     | 20.02                 |                        |                             |
|        | 22                 | 250             | M 26 x 1,5            | 18   | 16  | 40   | 49              | 16,5 | 32   | 36   | 180      | 10,23                 |                        | FI-GE-22LM-WD-B-W3          |
|        | .87                | 3625            |                       | .71  | .63 | 1.57 | 1.93            | .65  | 1.26 | 1.42 | 133.2    | 22.51                 |                        |                             |
|        | 22                 | 250             | M 27 x 2              | 18   | 16  | 40   | 50              | 16,5 | 32   | 36   | 180      | 10,45                 |                        | FI-GE-22LM27x2-WD-B-W3      |
|        | .87                | 3625            |                       | .71  | .63 | 1.57 | 1.97            | .65  | 1.26 | 1.42 | 133.2    | 23.04                 |                        |                             |
|        | 22                 | 250             | M 33 x 2              | 23   | 18  | 43   | 52              | 17,5 | 41   | 36   | 310      | 16,15                 |                        | FI-GE-22LM33x2-WD-B-W3      |
|        | .87                | 3625            |                       | .91  | .71 | 1.69 | 2.05            | .69  | 1.61 | 1.42 | 229.4    | 35.60                 |                        |                             |
|        | 28                 | 250             | M 26 x 1,5            | 18   | 16  | 41   | 50              | 17,5 | 41   | 41   | 180      | 14,39                 |                        | FI-GE-28LM26x1.5-WD-B-W3    |
|        | 1.10               | 3625            |                       | .71  | .63 | 1.61 | 1.97            | .69  | 1.61 | 1.61 | 133.2    | 31.72                 |                        |                             |
|        | 28                 | 250             | M 33 x 2              | 23   | 18  | 43   | 52              | 17,5 | 41   | 41   | 310      | 16,76                 |                        | FI-GE-28LM-WD-B-W3          |
|        | 1.10               | 3625            |                       | .91  | .71 | 1.69 | 2.05            | .69  | 1.61 | 1.61 | 229.4    | 36.87                 |                        |                             |
|        | 28                 | 250             | M 42 x 2              | 30   | 20  | 46   | 55              | 18,5 | 50   | 41   | 450      | 26,5                  |                        | FI-GE-28LM42x2-WD-B-W3      |
|        | 1.10               | 3625            |                       | 1.18 | .79 | 1.81 | 2.17            | .73  | 1.97 | 1.61 | 333.0    | 58.42                 |                        |                             |
|        | 35                 | 250             | M 33 x 2              | 23   | 18  | 46   | 57              | 17,5 | 46   | 50   | 310      | 21,56                 |                        | FI-GE-35LM33x2-WD-B-W3      |
|        | 1.38               | 3625            |                       | .91  | .71 | 1.81 | 2.24            | .69  | 1.81 | 1.97 | 229.4    | 47.53                 |                        |                             |
|        | 35                 | 250             | M 42 x 2              | 30   | 20  | 48   | 59              | 17,5 | 50   | 50   | 450      | 27,63                 |                        | FI-GE-35LM-WD-B-W3          |
|        | 1.38               | 3625            |                       | 1.18 | .79 | 1.89 | 2.32            | .69  | 1.97 | 1.97 | 333.0    | 60.79                 |                        |                             |
|        | 42                 | 250             | M 42 x 2              | 30   | 20  | 50   | 61              | 19   | 55   | 60   | 450      | 21,09                 |                        | FI-GE-42LM42x2-WD-B-W3      |
|        | 1.65               | 3625            |                       | 1.18 | .79 | 1.97 | 2.40            | .75  | 2.17 | 2.36 | 333.0    | 46.50                 |                        |                             |
|        | 42                 | 250             | M 48 x 2              | 36   | 22  | 52   | 64              | 19   | 55   | 60   | 540      | 34,63                 |                        | FI-GE-42LM-WD-B-W3          |
|        | 1.65               | 3625            |                       | 1.42 | .87 | 2.05 | 2.52            | .75  | 2.17 | 2.36 | 399.6    | 76.19                 |                        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is NBR (Buna-N®).

Male stud acc. to ISO 9974-2 (Type E)

Port acc. to ISO 9974-1

Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

\*FI-GE\*-10\*L\*M\*-WD\*-B\*-W3\*-MS

\* Straight Male Stud Fitting FI-GE

\* Outside Tube Diameter D1 (in mm) -10

\* Series Light Series (pages 52/53) L  
Heavy Series (page 54) S

\* Thread Type Metric Parallel Thread M

If required, please indicate special sizes, e.g. M12x1.5!

\* Seal Type Profile Sealing Ring -WD

\* Seal Material NBR (Buna-N®) -B  
FKM (Viton®) -V  
EPDM -E

\* Material Code Steel, zinc/nickel-plated -W3

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only —

Fitting body supplied with cutting ring and union nut -MS

Fitting body supplied with soft-sealing cutting ring and union nut -MSV

### Connecting Parts



Cutting Ring Type FI-DS Page 28



Soft-Sealing Cutting Ring Type FI-WDDS Page 29



Support Sleeve Type FI-VH Page 31



STAUFF Form EVO Sealing Ring Type FI-FD Page 32



Union Nut Type FI-M Page 33



37° Flared Tube Fitting Set Type FI-AB Page 37

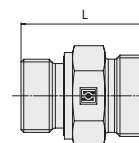
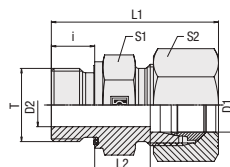
### Spare Parts / Accessories



Profile Sealing Ring Type WDG Page 238



## Straight Male Stud Fitting Type FI-GE-...-M-WD ▪ Series S



C

### Ordering Codes

**\*FI-GE\*-10\*S\*M\*-WD\*-B\*-W3\*-MS**

\* Straight Male Stud Fitting **FI-GE**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series (pages 52/53) **L**  
Heavy Series (page 54) **S**

\* Thread Type Metric Parallel Thread **M**

If required, please indicate special sizes, e.g. M12x1.5!

\* Seal Type Profile Sealing Ring **-WD**

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only **—**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

### Spare Parts / Accessories



Profile Sealing Ring  
Type **WDG** Page 238

### Profile Sealing Ring

### Metric Parallel Thread

| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in)                             | Torque<br>(Nm/lb.ft) | Weight<br>(kg/lbs) ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|---------------------------------------------------|----------------------|------------------------|-----------------------------|
|        | D1                 |                 | Thread T D2 i L L1 <sup>1</sup> L2 S1 S2 Thread T |                      | per 100                |                             |
| S      | 6                  | 800             | M 12 x 1,5 4 12 32 40 13 17 17 35                 | 2,93                 |                        | FI-GE-06SM-WD-B-W3          |
|        | .24                | 11600           | .16 .47 1.26 1.57 .51 .67 .67 25.9                | 6.44                 |                        |                             |
|        | 8                  | 800             | 4 12 34 41 14,5 19 19 35                          | 3,18                 |                        | FI-GE-08SM12x1.5-WD-B-W3    |
|        | .31                | 11600           | .16 .47 1.34 1.61 .57 .75 .75 25.9                | 7.01                 |                        |                             |
|        | 8                  | 800             | 5 12 34 42 15 19 19 55                            | 4,16                 |                        | FI-GE-08SM-WD-B-W3          |
|        | .31                | 11600           | .20 .47 1.34 1.65 .59 .75 .75 40.7                | 9.16                 |                        |                             |
|        | 10                 | 800             | 5 12 34,5 43,5 15 19 22 55                        | 4,97                 |                        | FI-GE-10SM14x1.5-WD-B-W3    |
|        | .39                | 11600           | .20 .47 1.36 1.71 .59 .75 .87 40.7                | 10.93                |                        |                             |
|        | 10                 | 800             | 7 12 34,5 43,5 15 22 22 70                        | 5,36                 |                        | FI-GE-10SM-WD-B-W3          |
|        | .39                | 11600           | .28 .47 1.36 1.71 .59 .87 .87 51.8                | 11.79                |                        |                             |
|        | 12                 | 800             | 5 12 36 45 16,5 22 24 55                          | 6,00                 |                        | FI-GE-12SM14x1.5-WD-B-W3    |
|        | .47                | 11600           | .20 .47 1.42 1.77 .65 .87 .94 40.7                | 13.20                |                        |                             |
|        | 12                 | 800             | 8 12 36 45 16,5 22 24 70                          | 6,12                 |                        | FI-GE-12SM16x1.5-WD-B-W3    |
|        | 0,47               | 11600           | .31 .47 1.42 1.77 .65 .87 .94 51.8                | 13.47                |                        |                             |
|        | 12                 | 630             | 8 12 36,5 45,5 17 24 24 90                        | 7,12                 |                        | FI-GE-12SM-WD-B-W3          |
|        | .47                | 9135            | .31 .47 1.44 1.79 .67 .94 .94 66.6                | 15.67                |                        |                             |
|        | 12                 | 630             | 8 14 39 48 17,5 27 24 135                         | 9,28                 |                        | FI-GE-12SM22x1.5-WD-B-W3    |
|        | .47                | 9135            | .31 .55 1.54 1.89 .69 1.06 .94 99.9               | 20.42                |                        |                             |
|        | 14                 | 630             | 10 14 41 51 19 27 27 125                          | 9,46                 |                        | FI-GE-14SM-WD-B-W3          |
|        | .55                | 9135            | .39 .55 1.61 2.01 .75 1.06 1.06 92.5              | 20.82                |                        |                             |
|        | 16                 | 630             | 8 12 38,5 48,5 18 24 30 90                        | 7,82                 |                        | FI-GE-16SM18x1.5-WD-B-W3    |
|        | .63                | 9135            | .31 .47 1.52 1.91 .71 .94 1.18 66.6               | 17.20                |                        |                             |
|        | 16                 | 630             | 12 14 41 51 18,5 27 30 135                        | 9,52                 |                        | FI-GE-16SM-WD-B-W3          |
|        | .63                | 9135            | .47 .55 1.61 2.01 .73 1.06 1.18 99.9              | 20.95                |                        |                             |
|        | 16                 | 420             | 12 16 43 53 18,5 32 30 180                        | 14,46                |                        | FI-GE-16SM27x2-WD-B-W3      |
|        | .63                | 6091            | .47 .63 1.69 2.09 .73 1.26 1.18 133.2             | 31.88                |                        |                             |
|        | 20                 | 420             | 12 14 45 56 20,5 32 36 135                        | 14,03                |                        | FI-GE-20SM22x1.5-WD-B-W3    |
|        | .79                | 6091            | .47 .55 1.77 2.20 .81 1.26 1.42 99.9              | 30.93                |                        |                             |
|        | 20                 | 420             | 16 16 47 58 20,5 32 36 180                        | 15,10                |                        | FI-GE-20SM-WD-B-W3          |
|        | .79                | 6091            | .63 .63 1.85 2.28 .81 1.26 1.42 133.2             | 33.22                |                        |                             |
|        | 25                 | 420             | 15 16 51 62 23 41 46 180                          | 24,27                |                        | FI-GE-25SM26x1.5-WD-B-W3    |
|        | .98                | 6091            | .59 .63 2.01 2.44 .91 1.61 1.81 133.2             | 53.51                |                        |                             |
|        | 25                 | 420             | 16 16 51 62 23 41 46 180                          | 24,42                |                        | FI-GE-25SM27x2-WD-B-W3      |
|        | .98                | 6091            | .63 .63 2.01 2.44 .91 1.61 1.81 133.2             | 53.84                |                        |                             |
|        | 25                 | 420             | 20 18 53 65 23 41 46 310                          | 26,43                |                        | FI-GE-25SM-WD-B-W3          |
|        | .98                | 6091            | .79 .71 2.09 2.56 .91 1.61 1.81 229.4             | 58.15                |                        |                             |
|        | 30                 | 420             | 20 18 55 68 23,5 50 50 310                        | 37,1                 |                        | FI-GE-30SM33x2-WD-B-W3      |
|        | 1.18               | 6091            | .79 .71 2.17 2.68 .93 1.97 1.97 229.4             | 81.79                |                        |                             |
|        | 30                 | 420             | 25 20 57 70 23,5 50 50 450                        | 41,84                |                        | FI-GE-30SM-WD-B-W3          |
|        | 1.18               | 6091            | .98 .79 2.24 2.76 .93 1.97 1.97 333.0             | 92.06                |                        |                             |
|        | 38                 | 420             | 32 22 64 79 26 55 60 540                          | 57,00                |                        | FI-GE-38SM-WD-B-W3          |
|        | 1.50               | 6091            | 1.26 .87 2.52 3.11 1.02 2.17 2.36 399.6           | 125.40               |                        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is NBR (Buna-N®).

Male stud acc. to ISO 9974-2 (Type E)

Port acc. to ISO 9974-1

Torque recommendations for Steel mating material.

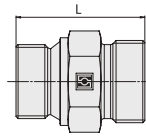
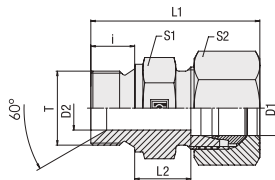
Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.





# Straight Male Stud Fitting Type FI-GE-...-R-DF • Series L



C

Whitworth Parallel Pipe Thread (BSPP)

60° Conical Bore / Sealing Surface for Gaskets

| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |     |      |                 |      |      |      |          | Torque<br>(Nm/ft-lb) | Weight<br>(kg/lbs) Ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------|-----|------|-----------------|------|------|------|----------|----------------------|------------------------|-----------------------------|
| L      | D1                 |                 | Thread T              | D2   | i   | L    | L1 <sup>1</sup> | L2   | S1   | S2   | Thread T |                      | per 100                |                             |
|        | 6                  | 250             | G 1/8                 | 3,5  | 8   | 23,5 | 31,5            | 8,5  | 14   | 14   | 20       | 1,38                 |                        | FI-GE-06LR-DF-W3            |
|        | .24                | 3625            |                       | .14  | .31 | .93  | 1.24            | .33  | .55  | .55  | 14.8     | 3.04                 |                        |                             |
|        | 6                  | 250             | G 1/4                 | 4    | 12  | 29   | 36              | 10   | 19   | 14   | 50       | 2,75                 |                        | FI-GE-06LR1/4-DF-W3         |
|        | .24                | 3625            |                       | .16  | .47 | 1.14 | 1.42            | .39  | .75  | .55  | 37.0     | 6.05                 |                        |                             |
|        | 6                  | 250             | G 3/8                 | 7,9  | 12  | 30,5 | 38              | 11   | 22   | 14   | 80       | 3,94                 |                        | FI-GE-06LR3/8-DF-W3         |
|        | .24                | 3625            |                       | .31  | .47 | 1.20 | 1.50            | .43  | .87  | .55  | 59.2     | 8.68                 |                        |                             |
|        | 8                  | 250             | G 1/8                 | 3,5  | 8   | 24,5 | 32              | 10   | 14   | 17   | 20       | 1,71                 |                        | FI-GE-08LR1/8-DF-W3         |
|        | .31                | 3625            |                       | .14  | .31 | .96  | 1.26            | .39  | .55  | .67  | 14.8     | 3.76                 |                        |                             |
|        | 8                  | 250             | G 1/4                 | 4,7  | 12  | 29   | 37              | 10   | 19   | 17   | 50       | 2,87                 |                        | FI-GE-08LR-DF-W3            |
|        | .31                | 3625            |                       | .19  | .47 | 1.14 | 1.46            | .39  | .75  | .67  | 37.0     | 6.31                 |                        |                             |
|        | 8                  | 250             | G 3/8                 | 6    | 12  | 30,5 | 38              | 11   | 22   | 17   | 80       | 4,28                 |                        | FI-GE-08LR3/8-DF-W3         |
|        | .31                | 3625            |                       | .24  | .47 | 1.20 | 1.50            | .43  | .87  | .67  | 59.2     | 9.41                 |                        |                             |
|        | 10                 | 250             | G 1/4                 | 4,7  | 12  | 30   | 38              | 11   | 19   | 19   | 50       | 2,82                 |                        | FI-GE-10LR-DF-W3            |
|        | .39                | 3625            |                       | .19  | .47 | 1.18 | 1.50            | .43  | .75  | .75  | 37.0     | 6.21                 |                        |                             |
|        | 10                 | 250             | G 3/8                 | 7,9  | 12  | 31,5 | 39              | 12,5 | 22   | 19   | 80       | 4,18                 |                        | FI-GE-10LR3/8-DF-W3         |
|        | .39                | 3625            |                       | .31  | .47 | 1.24 | 1.54            | .49  | .87  | .75  | 59.2     | 9.19                 |                        |                             |
|        | 10                 | 160             | G 1/2                 | 11,1 | 14  | 34   | 41              | 13   | 27   | 19   | 140      | 6,28                 |                        | FI-GE-10LR1/2-DF-W3         |
|        | .39                | 2320            |                       | .44  | .55 | 1.34 | 1.61            | .51  | 1.06 | .75  | 103.6    | 13.81                |                        |                             |
|        | 12                 | 250             | G 1/4                 | 4,7  | 12  | 31   | 39              | 12   | 19   | 22   | 50       | 3,30                 |                        | FI-GE-12LR1/4-DF-W3         |
|        | .47                | 3625            |                       | .19  | .47 | 1.22 | 1.54            | .47  | .75  | .87  | 37.0     | 7.26                 |                        |                             |
|        | 12                 | 250             | G 3/8                 | 7,9  | 12  | 31,5 | 39,5            | 12,5 | 22   | 22   | 80       | 4,39                 |                        | FI-GE-12LR-DF-W3            |
|        | .47                | 3625            |                       | .31  | .47 | 1.24 | 1.56            | .49  | .87  | .87  | 59.2     | 9.66                 |                        |                             |
|        | 12                 | 160             | G 1/2                 | 10   | 14  | 34   | 42              | 13   | 27   | 22   | 140      | 6,47                 |                        | FI-GE-12LR1/2-DF-W3         |
|        | .47                | 2320            |                       | .39  | .55 | 1.34 | 1.65            | .51  | 1.06 | .87  | 103.6    | 14.23                |                        |                             |
|        | 15                 | 250             | G 3/8                 | 7,9  | 12  | 32,5 | 40              | 13,5 | 24   | 27   | 80       | 5,18                 |                        | FI-GE-15LR3/8-DF-W3         |
|        | .59                | 3625            |                       | .31  | .47 | 1.28 | 1.57            | .53  | .94  | 1.06 | 59.2     | 11.39                |                        |                             |
|        | 15                 | 160             | G 1/2                 | 11,1 | 14  | 35   | 40,5            | 14   | 27   | 27   | 140      | 6,98                 |                        | FI-GE-15LR-DF-W3            |
|        | .59                | 2320            |                       | .44  | .55 | 1.38 | 1.59            | .55  | 1.06 | 1.06 | 103.6    | 15.35                |                        |                             |
|        | 18                 | 250             | G 3/8                 | 7,9  | 12  | 33,5 | 41              | 14   | 27   | 32   | 80       | 4,90                 |                        | FI-GE-18LR3/8-DF-W3         |
|        | .71                | 3625            |                       | .31  | .47 | 1.32 | 1.61            | .55  | 1.06 | 1.26 | 59.2     | 10.78                |                        |                             |
|        | 18                 | 160             | G 1/2                 | 11,1 | 14  | 35   | 45              | 13,5 | 27   | 32   | 140      | 5,35                 |                        | FI-GE-18LR-DF-W3            |
|        | .71                | 2320            |                       | .44  | .55 | 1.38 | 1.77            | .53  | 1.06 | 1.26 | 103.6    | 11.77                |                        |                             |
|        | 18                 | 160             | G 3/4                 | 15   | 16  | 38   | 47              | 14,5 | 32   | 32   | 190      | 10,79                |                        | FI-GE-18LR3/4-DF-W3         |
|        | .71                | 2320            |                       | .59  | .63 | 1.50 | 1.85            | .57  | 1.26 | 1.26 | 140.6    | 23.74                |                        |                             |
|        | 22                 | 160             | G 1/2                 | 11,1 | 14  | 38   | 47              | 16,5 | 32   | 36   | 140      | 9,53                 |                        | FI-GE-22LR1/2-DF-W3         |
|        | .87                | 2320            |                       | .44  | .55 | 1.50 | 1.85            | .65  | 1.26 | 1.42 | 103.6    | 20.96                |                        |                             |
|        | 22                 | 160             | G 3/4                 | 16,7 | 16  | 40   | 49              | 16,5 | 32   | 36   | 190      | 9,94                 |                        | FI-GE-22LR-DF-W3            |
|        | .87                | 2320            |                       | .66  | .63 | 1.57 | 1.93            | .65  | 1.26 | 1.42 | 140.6    | 21.88                |                        |                             |
|        | 22                 | 160             | G 1                   | 22,2 | 18  | 43   | 51              | 17,5 | 41   | 36   | 330      | 16,58                |                        | FI-GE-22LR1-DF-W3           |
|        | .87                | 2320            |                       | .87  | .71 | 1.69 | 2.01            | .69  | 1.61 | 1.42 | 244.2    | 36.48                |                        |                             |
|        | 28                 | 160             | G 1/2                 | 11,1 | 14  | 39   | 48              | 17,5 | 41   | 41   | 140      | 13,58                |                        | FI-GE-28LR1/2-DF-W3         |
|        | 1.10               | 2320            |                       | .44  | .55 | 1.54 | 1.89            | .69  | 1.61 | 1.61 | 103.6    | 29.88                |                        |                             |
|        | 28                 | 160             | G 3/4                 | 16,7 | 16  | 41   | 50              | 17,5 | 41   | 41   | 190      | 15,87                |                        | FI-GE-28LR3/4-DF-W3         |
|        | 1.10               | 2320            |                       | .66  | .63 | 1.61 | 1.97            | .69  | 1.61 | 1.61 | 140.6    | 34.91                |                        |                             |
|        | 28                 | 160             | G 1                   | 22,2 | 18  | 43   | 52              | 17,5 | 41   | 41   | 330      | 17,46                |                        | FI-GE-28LR-DF-W3            |
|        | 1.10               | 2320            |                       | .87  | .71 | 1.69 | 2.05            | .69  | 1.61 | 1.61 | 244.2    | 38.41                |                        |                             |
|        | 28                 | 160             | G 1 1/4               | 28,6 | 20  | 48   | 57              | 20,5 | 50   | 41   | 540      | 20,04                |                        | FI-GE-28LR1-1/4-DF-W3       |
|        | 1.10               | 2320            |                       | 1.13 | .79 | 1.89 | 2.24            | .81  | 1.97 | 1.61 | 399.6    | 44.09                |                        |                             |
|        | 35                 | 160             | G 1                   | 22,2 | 18  | 46   | 57              | 17,5 | 50   | 50   | 330      | 24,26                |                        | FI-GE-35LR1-DF-W3           |
|        | 1.38               | 2320            |                       | .87  | .71 | 1.81 | 2.24            | .69  | 1.97 | 1.97 | 244.2    | 53.37                |                        |                             |
|        | 35                 | 125             | G 1 1/4               | 28,6 | 20  | 48   | 59              | 17,5 | 50   | 50   | 540      | 28,81                |                        | FI-GE-35LR-DF-W3            |
|        | 1.38               | 1813            |                       | 1.13 | .79 | 1.89 | 2.32            | .69  | 1.97 | 1.97 | 399.6    | 63.37                |                        |                             |
|        | 42                 | 125             | G 1 1/4               | 28,6 | 20  | 50   | 62              | 19   | 55   | 60   | 540      | 33,91                |                        | FI-GE-42LR1-1/4-DF-W3       |
|        | 1.65               | 1813            |                       | 1.13 | .79 | 1.97 | 2.44            | .75  | 2.17 | 2.36 | 399.6    | 74.59                |                        |                             |
|        | 42                 | 125             | G 1 1/2               | 33,3 | 22  | 52   | 64              | 19   | 55   | 60   | 630      | 36,75                |                        | FI-GE-42LR-DF-W3            |
|        | 1.65               | 1813            |                       | 1.31 | .87 | 2.05 | 2.52            | .75  | 2.17 | 2.36 | 466.2    | 80.85                |                        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-2 (Form A)

Port acc. to DIN 3852-2 (Form X) / ISO 1179-1

Torque recommendations for Steel mating material.

## Ordering Codes

\*FI-GE\*-10\*L\*R\*-DF\*-W3\*-MS

\* Straight Male Stud Fitting FI-GE

\* Outside Tube Diameter D1 (in mm) -10

\* Series Light Series (page 55) L  
Heavy Series (page 56) S

\* Thread Type Whitworth Parallel Pipe Thread (BSPP) R

If required, please indicate special sizes, e.g. R1/8!

\* Seal Type 60° Conical Bore (BS 5200) / Sealing Surface for Gasket (DIN 7603) -DF

\* Material Code Steel, zinc/nickel-plated -W3

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only —

Fitting body supplied with cutting ring and union nut -MS

Fitting body supplied with soft-sealing cutting ring and union nut -MSV

## Connecting Parts


Cutting Ring  
Type FI-DS Page 28

Soft-Sealing Cutting Ring  
Type FI-WDDS Page 29

Support Sleeve  
Type FI-VH Page 31

STAUFF Form EVO Sealing Ring  
Type FI-FD Page 32

Union Nut  
Type FI-M Page 33

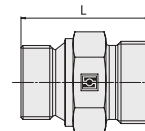
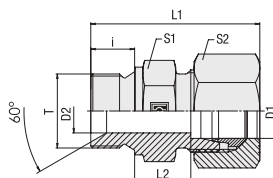
37° Flared Tube Fitting Set  
Type FI-AB Page 37

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.



## Straight Male Stud Fitting Type FI-GE-...-R-DF • Series S



### 60° Conical Bore / Sealing Surface for Gaskets

### Whitworth Parallel Pipe Thread (BSPP)

#### Ordering Codes

#### \*FI-GE\*-10\*S\*-R\*-DF\*-W3\*-MS

|                                                                         |                                                                                |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | <b>FI-GE</b>                                                                   |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                     |
| * Series                                                                | Light Series (page 55) <b>L</b><br>Heavy Series (page 56) <b>S</b>             |
| * Thread Type                                                           | Whitworth Parallel Pipe Thread (BSPP) <b>R</b>                                 |
| If required, please indicate special sizes, e.g. R1/8!                  |                                                                                |
| * Seal Type                                                             | 60° Conical Bore (BS 5200) / Sealing Surface for Gasket (DIN 7603) <b>-DF</b>  |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                           |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b>                                                     |
|                                                                         | Fitting body supplied with cutting ring and union nut <b>-MS</b>               |
|                                                                         | Fitting body supplied with soft-sealing cutting ring and union nut <b>-MSV</b> |

#### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-2 (Form A)

Port acc. to DIN 3852-2 (Form X) / ISO 1179-1

Torque recommendations for Steel mating material.

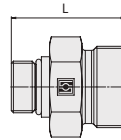
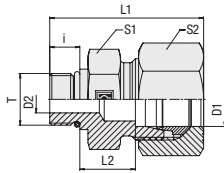
Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in)<br>Thread T | D2   | i   | L    | L1 <sup>1</sup> | L2   | S1   | S2   | Torque<br>(N·m/ft·lb)<br>Thread T | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------------------|------|-----|------|-----------------|------|------|------|-----------------------------------|-----------------------------------|-----------------------------|
| S      | 6                        | 250             | G 1/8                             | 3,5  | 8   | 27,5 | 35              | 12,5 | 14   | 17   | 20                                | 2,09                              | FI-GE-06SR1/8-DF-W3         |
|        | .24                      | 3625            | G 1/8                             | .14  | .31 | 1.08 | 1.38            | .49  | .55  | .67  | 14.7                              | 4.59                              | FI-GE-06SR1/8-DF-W3         |
|        | 6                        | 250             | G 1/4                             | 4    | 12  | 32   | 40              | 13   | 19   | 17   | 60                                | 3,48                              | FI-GE-06SR1/4-DF-W3         |
|        | .24                      | 3625            | G 1/4                             | .16  | .47 | 1.26 | 1.57            | .51  | .75  | .67  | 44.4                              | 7.66                              | FI-GE-06SR1/4-DF-W3         |
|        | 6                        | 250             | G 3/8                             | 7,9  | 12  | 34,5 | 42              | 15,5 | 22   | 17   | 100                               | 4,63                              | FI-GE-06SR3/8-DF-W3         |
|        | .24                      | 3625            | G 3/8                             | .31  | .47 | 1.36 | 1.65            | .61  | .87  | .67  | 74.0                              | 10.18                             | FI-GE-06SR3/8-DF-W3         |
|        | 6                        | 250             | G 1/2                             | 11,1 | 14  | 35   | 43              | 14   | 27   | 17   | 160                               | 6,22                              | FI-GE-06SR1/2-DF-W3         |
|        | .24                      | 3625            | G 1/2                             | .44  | .55 | 1.38 | 1.69            | .55  | 1.06 | .67  | 118.4                             | 13.68                             | FI-GE-06SR1/2-DF-W3         |
|        | 8                        | 250             | G 1/8                             | 3,5  | 8   | 27,5 | 35              | 12,5 | 14   | 17   | 20                                | 2,71                              | FI-GE-08SR1/8-DF-W3         |
|        | .31                      | 3625            | G 1/8                             | .14  | .31 | 1.08 | 1.38            | .49  | .55  | .67  | 14.7                              | 5.97                              | FI-GE-08SR1/8-DF-W3         |
|        | 8                        | 250             | G 1/4                             | 4,7  | 12  | 34   | 42              | 15   | 19   | 19   | 60                                | 4,10                              | FI-GE-08SR1/4-DF-W3         |
|        | .31                      | 3625            | G 1/4                             | .19  | .47 | 1.34 | 1.65            | .59  | .75  | .75  | 44.4                              | 9.01                              | FI-GE-08SR1/4-DF-W3         |
|        | 8                        | 250             | G 3/8                             | 7,9  | 12  | 34,5 | 42              | 15,5 | 22   | 19   | 100                               | 5,25                              | FI-GE-08SR3/8-DF-W3         |
|        | .31                      | 3625            | G 3/8                             | .31  | .47 | 1.36 | 1.65            | .61  | .87  | .75  | 74.0                              | 11.56                             | FI-GE-08SR3/8-DF-W3         |
|        | 8                        | 250             | G 1/2                             | 11,1 | 14  | 39   | 47              | 18   | 27   | 19   | 160                               | 8,47                              | FI-GE-08SR1/2-DF-W3         |
|        | .31                      | 3625            | G 1/2                             | .44  | .55 | 1.54 | 1.85            | .71  | 1.06 | .75  | 118.4                             | 18.63                             | FI-GE-08SR1/2-DF-W3         |
|        | 10                       | 250             | G 1/4                             | 4,7  | 12  | 34   | 42              | 14,5 | 19   | 22   | 60                                | 4,33                              | FI-GE-10SR1/4-DF-W3         |
|        | .39                      | 3625            | G 1/4                             | .19  | .47 | 1.34 | 1.65            | .57  | .75  | .87  | 44.4                              | 9.52                              | FI-GE-10SR1/4-DF-W3         |
|        | 10                       | 250             | G 3/8                             | 7    | 12  | 34,5 | 43,5            | 15   | 22   | 22   | 100                               | 5,46                              | FI-GE-10SR3/8-DF-W3         |
|        | .39                      | 3625            | G 3/8                             | .28  | .47 | 1.36 | 1.71            | .59  | .87  | .87  | 74.0                              | 12.01                             | FI-GE-10SR3/8-DF-W3         |
|        | 10                       | 160             | G 1/2                             | 11,1 | 14  | 35   | 43              | 13,5 | 27   | 22   | 160                               | 6,76                              | FI-GE-10SR1/2-DF-W3         |
|        | .39                      | 2320            | G 1/2                             | .44  | .55 | 1.38 | 1.69            | .53  | 1.06 | .87  | 118.4                             | 14.87                             | FI-GE-10SR1/2-DF-W3         |
|        | 12                       | 250             | G 1/4                             | 4,7  | 12  | 36   | 44              | 16,5 | 22   | 24   | 60                                | 5,70                              | FI-GE-12SR1/4-DF-W3         |
|        | .47                      | 3625            | G 1/4                             | .19  | .47 | 1.42 | 1.73            | .65  | .87  | .94  | 44.4                              | 12.53                             | FI-GE-12SR1/4-DF-W3         |
|        | 12                       | 250             | G 3/8                             | 7,9  | 12  | 36,5 | 45,5            | 17   | 22   | 24   | 100                               | 6,17                              | FI-GE-12SR3/8-DF-W3         |
|        | .47                      | 3625            | G 3/8                             | .31  | .47 | 1.44 | 1.79            | .67  | .87  | .94  | 74.0                              | 13.57                             | FI-GE-12SR3/8-DF-W3         |
|        | 12                       | 160             | G 1/2                             | 11,1 | 14  | 39   | 48              | 17,5 | 27   | 24   | 160                               | 8,75                              | FI-GE-12SR1/2-DF-W3         |
|        | .47                      | 2320            | G 1/2                             | .44  | .55 | 1.54 | 1.89            | .69  | 1.06 | .94  | 118.4                             | 19.25                             | FI-GE-12SR1/2-DF-W3         |
|        | 12                       | 160             | G 3/4                             | 16,7 | 16  | 43   | 51              | 19,5 | 32   | 24   | 280                               | 12,90                             | FI-GE-12SR3/4-DF-W3         |
|        | .47                      | 2320            | G 3/4                             | .66  | .63 | 1.69 | 2.01            | .77  | 1.26 | .94  | 207.2                             | 28.37                             | FI-GE-12SR3/4-DF-W3         |
|        | 14                       | 160             | G 1/2                             | 10   | 14  | 41   | 51              | 19   | 27   | 27   | 160                               | 9,56                              | FI-GE-14SR1/2-DF-W3         |
|        | .55                      | 2320            | G 1/2                             | .39  | .55 | 1.61 | 2.01            | .75  | 1.06 | 1.06 | 118.4                             | 21.03                             | FI-GE-14SR1/2-DF-W3         |
|        | 16                       | 250             | G 3/8                             | 7,9  | 12  | 38,5 | 48              | 18   | 27   | 30   | 100                               | 6,82                              | FI-GE-16SR3/8-DF-W3         |
|        | .63                      | 3625            | G 3/8                             | .31  | .47 | 1.52 | 1.89            | .71  | 1.06 | 1.18 | 74.0                              | 15.01                             | FI-GE-16SR3/8-DF-W3         |
|        | 16                       | 160             | G 1/2                             | 11,1 | 14  | 41   | 51              | 18,5 | 27   | 30   | 160                               | 9,05                              | FI-GE-16SR1/2-DF-W3         |
|        | .63                      | 2320            | G 1/2                             | .44  | .55 | 1.61 | 2.01            | .73  | 1.06 | 1.18 | 118.4                             | 19.92                             | FI-GE-16SR1/2-DF-W3         |
|        | 16                       | 160             | G 3/4                             | 16,7 | 16  | 45   | 55              | 20,5 | 32   | 30   | 280                               | 13,31                             | FI-GE-16SR3/4-DF-W3         |
|        | .63                      | 2320            | G 3/4                             | .66  | .63 | 1.77 | 2.17            | .81  | 1.26 | 1.18 | 207.2                             | 29.27                             | FI-GE-16SR3/4-DF-W3         |
|        | 20                       | 160             | G 1/2                             | 11,1 | 14  | 45   | 54              | 20,5 | 32   | 36   | 160                               | 13,74                             | FI-GE-20SR1/2-DF-W3         |
|        | .79                      | 2320            | G 1/2                             | .44  | .55 | 1.77 | 2.13            | .81  | 1.26 | 1.42 | 118.4                             | 30.22                             | FI-GE-20SR1/2-DF-W3         |
|        | 20                       | 160             | G 3/4                             | 16   | 16  | 47   | 58              | 20,5 | 32   | 36   | 280                               | 14,90                             | FI-GE-20SR3/4-DF-W3         |
|        | .79                      | 2320            | G 3/4                             | .63  | .63 | 1.85 | 2.28            | .81  | 1.26 | 1.42 | 207.2                             | 32.77                             | FI-GE-20SR3/4-DF-W3         |
|        | 20                       | 160             | G 1                               | 22,2 | 18  | 51   | 62              | 22,5 | 41   | 36   | 440                               | 23,12                             | FI-GE-20SR1-DF-W3           |
|        | .79                      | 2320            | G 1                               | .87  | .71 | 2.01 | 2.44            | .89  | 1.61 | 1.42 | 325.6                             | 50.86                             | FI-GE-20SR1-DF-W3           |
|        | 25                       | 160             | G 1/2                             | 11,1 | 14  | 49   | 56              | 23   | 41   | 46   | 160                               | 23,68                             | FI-GE-25SR1/2-DF-W3         |
|        | .98                      | 2320            | G 1/2                             | .44  | .55 | 1.93 | 2.20            | .91  | 1.61 | 1.81 | 118.4                             | 52.10                             | FI-GE-25SR1/2-DF-W3         |
|        | 25                       | 160             | G 3/4                             | 16,7 | 16  | 51   | 63              | 23   | 41   | 46   | 280                               | 23,73                             | FI-GE-25SR3/4-DF-W3         |
|        | .98                      | 2320            | G 3/4                             | .66  | .63 | 2.01 | 2.48            | .91  | 1.61 | 1.81 | 207.2                             | 52.21                             | FI-GE-25SR3/4-DF-W3         |
|        | 25                       | 160             | G 1                               | 20   | 18  | 53   | 65              | 23   | 41   | 46   | 440                               | 20,71                             | FI-GE-25SR1-DF-W3           |
|        | .98                      | 2320            | G 1                               | .79  | .71 | 2.09 | 2.56            | .91  | 1.61 | 1.81 | 325.6                             | 45.55                             | FI-GE-25SR1-DF-W3           |
|        | 30                       | 160             | G 3/4                             | 16,7 | 16  | 53   | 66              | 23,5 | 50   | 50   | 280                               | 33,85                             | FI-GE-30SR3/4-DF-W3         |
|        | 1.18                     | 2320            | G 3/4                             | .66  | .63 | 2.09 | 2.60            | .93  | 1.97 | 1.97 | 207.2                             | 74.47                             | FI-GE-30SR3/4-DF-W3         |
|        | 30                       | 160             | G 1                               | 22,2 | 18  | 55   | 68              | 23,5 | 46   | 50   | 440                               | 32,20                             | FI-GE-30SR1-DF-W3           |
|        | 1.18                     | 2320            | G 1                               | .87  | .71 | 2.17 | 2.68            | .93  | 1.81 | 1.97 | 325.6                             | 70.84                             | FI-GE-30SR1-DF-W3           |
|        | 30                       | 125             | G 1 1/4                           | 25   | 20  | 57   | 70              | 23,5 | 50   | 50   | 580                               | 40,27                             | FI-GE-30SR1-1/4-DF-W3       |
|        | 1.18                     | 1813            | G 1 1/4                           | .98  | .79 | 2.24 | 2.76            | .93  | 1.97 | 1.97 | 429.2                             | 88.59                             | FI-GE-30SR1-1/4-DF-W3       |
|        | 38                       | 160             | G 1                               | 22,2 | 18  | 60   | 73              | 26   | 55   | 60   | 440                               | 47,79                             | FI-GE-38SR1-DF-W3           |
|        | 1.50                     | 2320            | G 1                               | .87  | .71 | 2.36 | 2.87            | 1.02 | 2.17 | 2.36 | 325.6                             | 105.13                            | FI-GE-38SR1-DF-W3           |
|        | 38                       | 125             | G 1 1/4                           | 38,6 | 20  | 62   | 77              | 26   | 55   | 60   | 580                               | 51,40                             | FI-GE-38SR1-1/4-DF-W3       |
|        | 1.50                     | 1813            | G 1 1/4                           | 1.52 | .79 | 2.44 | 3.03            | 1.02 | 2.17 | 2.36 | 429.2                             | 113.08                            | FI-GE-38SR1-1/4-DF-W3       |
|        | 38                       | 125             | G 1 1/2                           | 32   | 22  | 64   | 79              | 26   | 55   | 60   | 700                               | 54,70                             | FI-GE-38SR1-1/2-DF-W3       |
|        | 1,50                     | 1813            | G 1 1/2                           | 1.26 | .87 | 2.52 | 3.11            | 1.02 | 2.17 | 2.36 | 518.0                             | 120.34                            | FI-GE-38SR1-1/2-DF-W3       |



## Straight Male Stud Fitting Type FI-GE-...-M-OR • Series L



C

### Metric Parallel Thread

### O-Ring

| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |      |      |                 |      |      |      |          |       | Torque<br>(Nm/Nt.lb) | Weight<br>(kg/lbs) Ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------|------|------|-----------------|------|------|------|----------|-------|----------------------|------------------------|-----------------------------|
|        | D1                 |                 | Thread T              | D2   | i    | L    | L1 <sup>1</sup> | L2   | S1   | S2   | Thread T |       |                      | per 100                |                             |
| L      | 6                  | 500             | M 10 x 1              | 4    | 8,5  | 25   | 33              | 9,5  | 14   | 14   | 15       | 1,53  |                      |                        | FI-GE-06LM-OR-B-W3          |
|        | .24                | 7250            |                       | .16  | .33  | .98  | 1.30            | .37  | .55  | .55  | 11.1     | 3.36  |                      |                        |                             |
|        | 8                  | 500             | M 10 x 1              | 3    | 8,5  | 25   | 32              | 9,5  | 14   | 17   | 15       | 1,66  |                      |                        | FI-GE-08LM10x1-OR-B-W3      |
|        | .31                | 7250            |                       | .12  | .33  | .98  | 1.26            | .37  | .55  | .67  | 11.1     | 3.66  |                      |                        |                             |
|        | 8                  | 500             | M 12 x 1,5            | 6    | 11   | 28   | 36              | 10   | 17   | 17   | 25       | 2,16  |                      |                        | FI-GE-08LM-OR-B-W3          |
|        | .31                | 7250            |                       | .24  | .43  | 1.10 | 1.42            | .39  | .67  | .67  | 18.5     | 4.75  |                      |                        |                             |
|        | 8                  | 500             | M 14 x 1,5            | 6    | 11   | 33   | 40              | 15   | 19   | 17   | 35       | 3,9   |                      |                        | FI-GE-08LM14x1.5-OR-B-W3    |
|        | .31                | 7250            |                       | .24  | .43  | 1.30 | 1.57            | .59  | .75  | .67  | 25.9     | 8.60  |                      |                        |                             |
|        | 8                  | 400             | M 18 x 1,5            | 11   | 12,5 | 31   | 36              | 11,5 | 24   | 17   | 45       | 4,43  |                      |                        | FI-GE-08LM18x1.5-OR-B-W3    |
|        | .31                | 5800            |                       | .43  | .49  | 1.22 | 1.42            | .45  | .94  | .67  | 33.3     | 9.76  |                      |                        |                             |
|        | 10                 | 500             | M 12 x 1,5            | 6    | 11   | 29   | 36              | 11   | 19   | 19   | 25       | 2,66  |                      |                        | FI-GE-10LM12x1.5-OR-B-W3    |
|        | .39                | 7250            |                       | .24  | .43  | 1.14 | 1.42            | .43  | .75  | .75  | 18.5     | 5.86  |                      |                        |                             |
|        | 10                 | 500             | M 14 x 1,5            | 7,5  | 11   | 29   | 37              | 11   | 19   | 19   | 35       | 2,87  |                      |                        | FI-GE-10LM-OR-B-W3          |
|        | .39                | 7250            |                       | .30  | .43  | 1.14 | 1.46            | .43  | .75  | .75  | 25.9     | 6.31  |                      |                        |                             |
|        | 10                 | 400             | M 18 x 1,5            | 8    | 12,5 | 32   | 39              | 12,5 | 24   | 19   | 45       | 5,23  |                      |                        | FI-GE-10LM18x1.5-OR-B-W3    |
|        | .39                | 5800            |                       | .31  | .49  | 1.26 | 1.54            | .49  | .94  | .75  | 33.3     | 11.53 |                      |                        |                             |
|        | 12                 | 400             | M 12 x 1,5            | 6    | 11   | 30,5 | 38              | 12,5 | 19   | 22   | 25       | 2,89  |                      |                        | FI-GE-12LM12x1.5-OR-B-W3    |
|        | .47                | 5800            |                       | .24  | .43  | 1.20 | 1.50            | .49  | .75  | .87  | 18.5     | 6.37  |                      |                        |                             |
|        | 12                 | 400             | M 14 x 1,5            | 7,5  | 11   | 31   | 39              | 13   | 19   | 22   | 35       | 3,45  |                      |                        | FI-GE-12LM14x1.5-OR-B-W3    |
|        | .47                | 5800            |                       | .30  | .43  | 1.22 | 1.54            | .51  | .75  | .87  | 25.9     | 7.61  |                      |                        |                             |
|        | 12                 | 400             | M 16 x 1,5            | 9    | 11,5 | 31   | 39              | 12,5 | 22   | 22   | 40       | 4,10  |                      |                        | FI-GE-12LM-OR-B-W3          |
|        | .47                | 5800            |                       | .35  | .45  | 1.22 | 1.54            | .49  | .87  | .87  | 29.6     | 9.01  |                      |                        |                             |
|        | 12                 | 400             | M 18 x 1,5            | 10   | 12,5 | 32   | 40              | 12,5 | 24   | 22   | 45       | 5,14  |                      |                        | FI-GE-12LM18x1.5-OR-B-W3    |
|        | .47                | 5800            |                       | .39  | .49  | 1.26 | 1.57            | .49  | .94  | .87  | 33.3     | 11,33 |                      |                        |                             |
|        | 15                 | 400             | M 18 x 1,5            | 11   | 12,5 | 33   | 41              | 13,5 | 24   | 27   | 45       | 5,32  |                      |                        | FI-GE-15LM-OR-B-W3          |
|        | .59                | 5800            |                       | .43  | .49  | 1.30 | 1.61            | .53  | .94  | 1.06 | 33.3     | 11,71 |                      |                        |                             |
|        | 18                 | 400             | M 22 x 1,5            | 14   | 13   | 35   | 44              | 14,5 | 27   | 32   | 60       | 7,55  |                      |                        | FI-GE-18LM-OR-B-W3          |
|        | .71                | 5800            |                       | .55  | .51  | 1.38 | 1.73            | .57  | 1.06 | 1.26 | 44.4     | 16.60 |                      |                        |                             |
|        | 22                 | 400             | M 22 x 1,5            | 14   | 13   | 37   | 46              | 16,5 | 32   | 36   | 60       | 9,22  |                      |                        | FI-GE-22LM22x1.5-OR-B-W3    |
|        | .87                | 5800            |                       | .55  | .51  | 1.46 | 1.81            | .65  | 1.26 | 1.42 | 44.4     | 20.33 |                      |                        |                             |
|        | 22                 | 250             | M 27 x 2              | 18   | 16   | 40   | 49              | 16,5 | 32   | 36   | 100      | 10,79 |                      |                        | FI-GE-22LM27x2-OR-B-W3      |
|        | .87                | 3625            |                       | .71  | .63  | 1.57 | 1.93            | .65  | 1.26 | 1.42 | 74.0     | 23.73 |                      |                        |                             |
|        | 22                 | 250             | M 33 x 2              | 14   | 16   | 41   | 46              | 16,5 | 41   | 36   | 160      | 16,14 |                      |                        | FI-GE-22LM33x2-OR-B-W3      |
|        | .87                | 3625            |                       | .55  | .63  | 1.61 | 1.81            | .65  | 1.61 | 1.42 | 118.4    | 35.58 |                      |                        |                             |
|        | 28                 | 250             | M 27 x 2              | 18   | 16   | 40,5 | 52              | 17   | 41   | 41   | 100      | 14,47 |                      |                        | FI-GE-28LM27x2-OR-B-W3      |
|        | 1.10               | 3625            |                       | .71  | .63  | 1.59 | 2.05            | .67  | 1.61 | 1.61 | 74.0     | 31.90 |                      |                        |                             |
|        | 28                 | 250             | M 33 x 2              | 23   | 16   | 41   | 50              | 17,5 | 41   | 41   | 160      | 16,73 |                      |                        | FI-GE-28LM-OR-B-W3          |
|        | 1.10               | 3625            |                       | .91  | .63  | 1.61 | 1.97            | .69  | 1.61 | 1.61 | 118.4    | 36.81 |                      |                        |                             |
|        | 35                 | 250             | M 42 x 2              | 30   | 16   | 44   | 55              | 17,5 | 50   | 50   | 210      | 26,66 |                      |                        | FI-GE-35LM-OR-B-W3          |
|        | 1.38               | 3625            |                       | 1.18 | .63  | 1.73 | 2.17            | .69  | 1.97 | 1.97 | 155.4    | 58.66 |                      |                        |                             |
|        | 42                 | 250             | M 48 x 2              | 36   | 17,5 | 47,5 | 59,5            | 19   | 55   | 60   | 260      | 33,79 |                      |                        | FI-GE-42LM-OR-B-W3          |
|        | 1.65               | 3625            |                       | 1.42 | .69  | 1.87 | 2.34            | .75  | 2.17 | 2.36 | 192.4    | 74.34 |                      |                        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to ISO 6149-2/-3

Port acc. to ISO 6149-1

Torque recommendations for Steel mating material.

Standard seal material is NBR (Buna-N®).

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

**\*FI-GE\*-10\*L\*M\*-OR\*-B\*-W3\*-MS**

|                                                                         |                                                                                |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | FI-GE                                                                          |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                                            |
| * Series                                                                | Light Series (page 57) <b>L</b><br>Heavy Series (page 58) <b>S</b>             |
| * Thread Type                                                           | Metric Parallel Thread <b>M</b>                                                |
| If required, please indicate special sizes, e.g. M12x1.5!               |                                                                                |
| * Seal Type                                                             | O-Ring <b>-OR</b>                                                              |
| * Seal Material                                                         | NBR (Buna-N®) <b>-B</b><br>FKM (Viton®) <b>-V</b><br>EPDM <b>-E</b>            |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                           |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                |
| * Assembling / Kitting                                                  | Fitting body only —                                                            |
|                                                                         | Fitting body supplied with cutting ring and union nut <b>-MS</b>               |
|                                                                         | Fitting body supplied with soft-sealing cutting ring and union nut <b>-MSV</b> |

### Connecting Parts

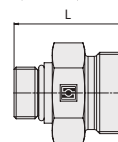
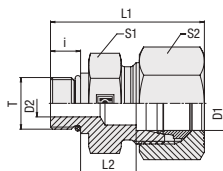
|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

### Spare Parts / Accessories

|  |                              |          |
|--|------------------------------|----------|
|  | O-Ring<br>Type <b>O-RING</b> | Page 239 |
|--|------------------------------|----------|



## Straight Male Stud Fitting Type FI-GE-...-M-OR • Series S



### Metric Parallel Thread

### O-Ring

#### Ordering Codes

**\*FI-GE\*-10\*S\*M\*-OR\*-B\*-W3\*-MS**

|                                                                         |                                                                                                                                                                                  |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | <b>FI-GE</b>                                                                                                                                                                     |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                                                                                                                       |
| * Series                                                                | Light Series (page 57) <b>L</b><br>Heavy Series (page 58) <b>S</b>                                                                                                               |
| * Thread Type                                                           | Metric Parallel Thread <b>M</b>                                                                                                                                                  |
| If required, please indicate special sizes, e.g. M12x1.5!               |                                                                                                                                                                                  |
| * Seal Type                                                             | O-Ring <b>-OR</b>                                                                                                                                                                |
| * Seal Material                                                         | NBR (Buna-N®) <b>-B</b><br>FKM (Viton®) <b>-V</b><br>EPDM <b>-E</b>                                                                                                              |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                                                                                                                             |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                                                                                  |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b><br>Fitting body supplied with cutting ring and union nut <b>-MS</b><br>Fitting body supplied with soft-sealing cutting ring and union nut <b>-MSV</b> |

| Series | Tube OD | PN        | Dimensions |      |      |      |                 |      |      |             | Torque       | Weight  | Ordering Codes <sup>3</sup> |
|--------|---------|-----------|------------|------|------|------|-----------------|------|------|-------------|--------------|---------|-----------------------------|
|        | (mm/in) | (bar/PSI) | (mm/in)    |      |      |      |                 |      |      | (N-m/lb-ft) | (kg/lbs) Ca. |         |                             |
|        | D1      |           | Thread T   | D2   | i    | L    | L1 <sup>1</sup> | L2   | S1   | S2          | Thread T     | per 100 |                             |
| S      | 6       | 800       | M 12 x 1,5 | 4    | 11   | 31   | 39              | 13   | 17   | 17          | 35           | 2,93    | FI-GE-06SM-OR-B-W3          |
|        | .24     | 11600     |            | .16  | .43  | 1.22 | 1.54            | .51  | .67  | .67         | 25.9         | 6.44    |                             |
|        | 8       | 800       | M 14 x 1,5 | 5    | 11   | 33   | 41              | 15   | 19   | 19          | 40           | 4,22    | FI-GE-08SM-OR-B-W3          |
|        | .31     | 11600     |            | .20  | .43  | 1.30 | 1.61            | .59  | .75  | .75         | 29.6         | 9.28    |                             |
|        | 10      | 800       | M 16 x 1,5 | 7    | 12,5 | 35   | 44              | 15   | 22   | 22          | 55           | 6,11    | FI-GE-10SM-OR-B-W3          |
|        | .39     | 11600     |            | .28  | .49  | 1.38 | 1.73            | .59  | .87  | .87         | 40,7         | 13.43   |                             |
|        | 12      | 630       | M 14 x 1,5 | 6    | 11   | 35,5 | 44              | 17   | 24   | 19          | 40           | 6       | FI-GE-12SM14x1.5-OR-B-W3    |
|        | .47     | 9135      |            | .24  | .43  | 1.40 | 1.73            | .67  | .94  | .75         | 29.6         | 13.23   |                             |
|        | 12      | 630       | M 18 x 1,5 | 8    | 14   | 38,5 | 47,5            | 17   | 24   | 24          | 70           | 3,41    | FI-GE-12SM-OR-B-W3          |
|        | .47     | 9135      |            | .31  | .55  | 1.52 | 1.87            | .67  | .94  | .94         | 51.8         | 7.51    |                             |
|        | 16      | 630       | M 22 x 1,5 | 12   | 15   | 42   | 52              | 18,5 | 27   | 30          | 100          | 6,37    | FI-GE-16SM-OR-B-W3          |
|        | .63     | 9135      |            | .47  | .59  | 1.65 | 2.05            | .73  | 1.06 | 1.18        | 74.0         | 14.01   |                             |
|        | 20      | 420       | M 27 x 2   | 15   | 18,5 | 49,5 | 60,5            | 20,5 | 32   | 36          | 170          | 16,88   | FI-GE-20SM-OR-B-W3          |
|        | .79     | 6091      |            | .59  | .73  | 1.95 | 2.38            | .81  | 1.26 | 1.42        | 125.8        | 37.13   |                             |
|        | 25      | 420       | M 33 x 2   | 20   | 18,5 | 53,5 | 65,5            | 23   | 41   | 46          | 310          | 27,42   | FI-GE-25SM-OR-B-W3          |
|        | .98     | 6091      |            | .79  | .73  | 2.11 | 2.58            | .91  | 1.61 | 1.81        | 229.4        | 60.33   |                             |
|        | 30      | 420       | M 42 x 2   | 25   | 19   | 56   | 69              | 23,5 | 50   | 50          | 330          | 42,45   | FI-GE-30SM-OR-B-W3          |
|        | 1.18    | 6091      |            | .98  | .75  | 2.20 | 2.72            | .93  | 1.97 | 1.97        | 244.2        | 93.39   |                             |
|        | 38      | 420       | M 48 x 2   | 32   | 21,5 | 63,5 | 78,5            | 26   | 55   | 60          | 420          | 58,60   | FI-GE-38SM-OR-B-W3          |
|        | 1.50    | 6091      |            | 1.26 | .85  | 2.50 | 3.09            | 1.02 | 2.17 | 2.36        | 310.8        | 128.92  |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to ISO 6149-2/-3

Port acc. to ISO 6149-1

Torque recommendations for Steel mating material.

Standard seal material is NBR (Buna-N®).

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.  
Please contact STAUFF prior to the assembly for further information.

#### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



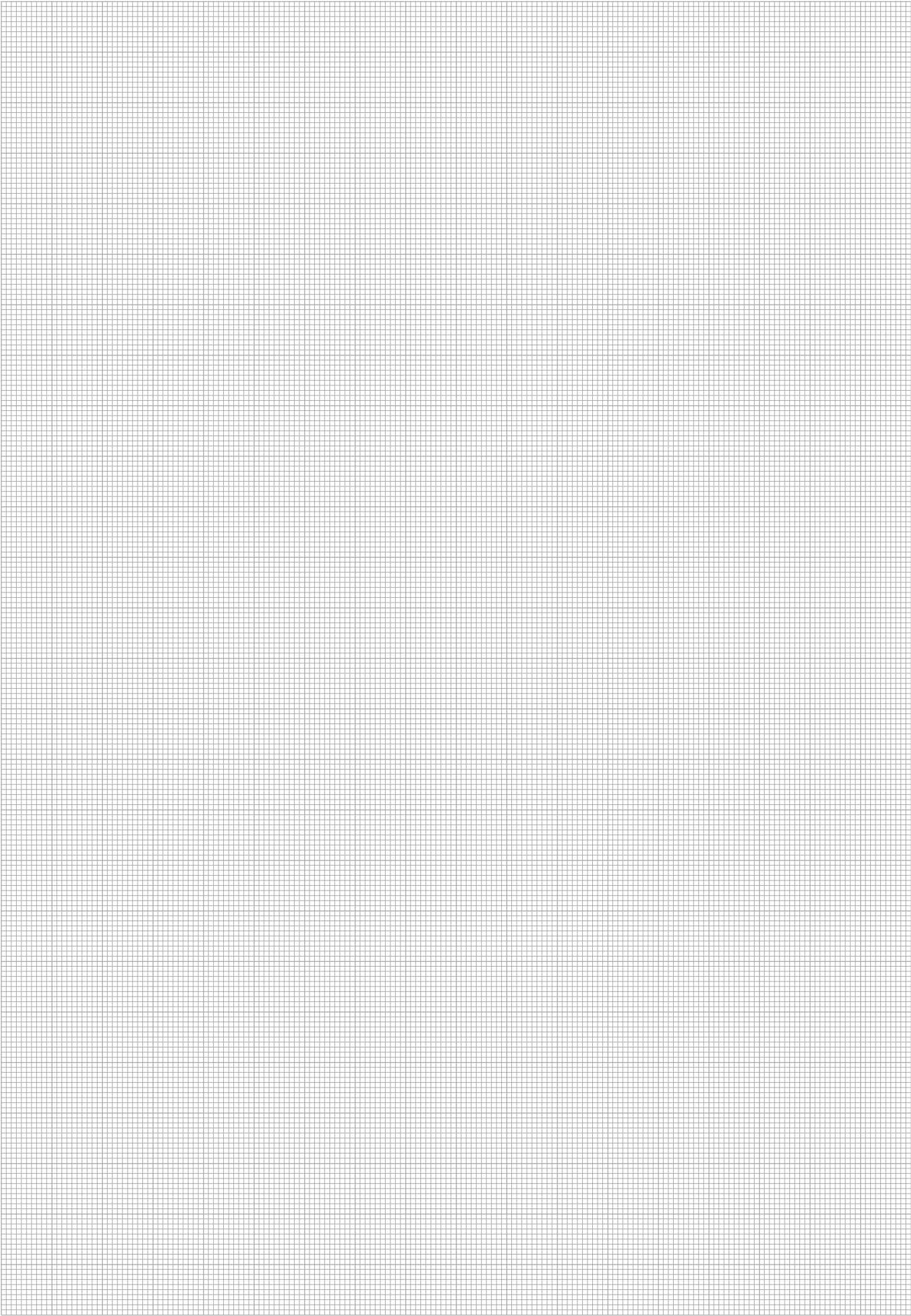
37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

#### Spare Parts / Accessories



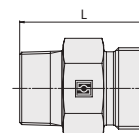
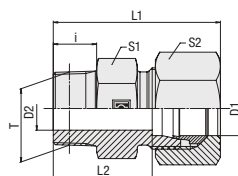
O-Ring  
Type **O-RING** Page 239







## Straight Male Stud Fitting Type FI-GE-...-Rk • Series LL



### Whitworth Taper Pipe Thread (BSPT)

#### Ordering Codes

**\*FI-GE\*-10\*LL\*Rk\*-W3\*-MS**

|                                                                         |                                                                                                                                                                                  |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | <b>FI-GE</b>                                                                                                                                                                     |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                                                                                                                       |
| * Series                                                                | Extra-Light Series (page 60) <b>LL</b><br>Light Series (page 61) <b>L</b><br>Heavy Series (page 62) <b>S</b>                                                                     |
| * Thread Type                                                           | Whitworth Taper Pipe Thread (BSPT) <b>Rk</b>                                                                                                                                     |
| If required, please indicate special sizes, e.g. R1/8k!                 |                                                                                                                                                                                  |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                                                                                                                             |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                                                                                  |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b><br>Fitting body supplied with cutting ring and union nut <b>-MS</b><br>Fitting body supplied with soft-sealing cutting ring and union nut <b>-MSV</b> |

| Series | Tube OD                           | PN (PB) Dimensions                  |                                   |     |      |      |                 |      |     |      | Weight<br>( <sup>kg</sup> / <sub>lbs</sub> ) ca.<br>per 100 | Ordering Codes <sup>3</sup> |  |
|--------|-----------------------------------|-------------------------------------|-----------------------------------|-----|------|------|-----------------|------|-----|------|-------------------------------------------------------------|-----------------------------|--|
|        | ( <sup>mm</sup> / <sub>in</sub> ) | ( <sup>bar</sup> / <sub>psi</sub> ) | ( <sup>mm</sup> / <sub>in</sub> ) | D2  | i    | L    | L1 <sup>1</sup> | L2   | S1  | S2   |                                                             |                             |  |
| LL     | D1                                |                                     | Thread T                          |     |      |      |                 |      |     |      |                                                             |                             |  |
|        | 4                                 | 100                                 | R 1/8 keg.                        | 3   | 8    | 20   | 26              | 16   | 10  | 10   | 0,77                                                        | FI-GE-04LLRK-W3             |  |
|        | .16                               | 1450                                |                                   | .12 | .31  | .79  | 1.02            | .63  | .39 | .39  | 1.70                                                        |                             |  |
|        | 6                                 | 100                                 | R 1/8 keg.                        | 4,5 | 8    | 20   | 26              | 14,5 | 11  | 12   | 0,79                                                        | FI-GE-06LLRK-W3             |  |
|        | .24                               | 1450                                |                                   | .18 | .31  | .79  | 1.02            | .57  | .43 | .47  | 1.75                                                        |                             |  |
|        | 6                                 | 100                                 | R 1/4 keg                         | 4,5 | 12   | 26   | 33              | 20,5 | 14  | 12   | 1,85                                                        | FI-GE-06LLR1/4k-W3          |  |
|        | .24                               | 1450                                |                                   | .18 | .47  | 1.02 | 1.30            | .81  | .55 | .47  | 4.08                                                        |                             |  |
|        | 8                                 | 100                                 | R 1/8 keg.                        | 4,5 | 8    | 22   | 28              | 16,5 | 12  | 14   | 1,08                                                        | FI-GE-08LLRK-W3             |  |
|        | .31                               | 1450                                |                                   | .18 | .31  | .87  | 1.10            | .65  | .47 | .55  | 2.38                                                        |                             |  |
|        | 8                                 | 100                                 | R 1/4 keg.                        | 6   | 12   | 26   | 32              | 20,5 | 14  | 14   | 1,71                                                        | FI-GE-08LLR1/4k-W3          |  |
|        | .31                               | 1450                                |                                   | .24 | .47  | 1.02 | 1.26            | .81  | .55 | .55  | 3.77                                                        |                             |  |
|        | 10                                | 100                                 | R 1/4 keg.                        | 8   | 12   | 26   | 32              | 20,5 | 14  | 17   | 2,70                                                        | FI-GE-10LLRK-W3             |  |
|        | .39                               | 1450                                |                                   | .31 | .47  | 1.02 | 1.26            | .81  | .55 | .67  | 5.94                                                        |                             |  |
|        | 12                                | 100                                 | R 3/8 keg.                        | 10  | 12   | 26   | 32,5            | 20   | 19  | 19   | 2,44                                                        | FI-GE-12LLR3/8K-W3          |  |
| .47    | 1450                              |                                     | .39                               | .47 | 1.02 | 1.28 | .79             | .75  | .75 | 5.38 |                                                             |                             |  |

#### Connecting Parts

|                                                                                     |                                                   |         |
|-------------------------------------------------------------------------------------|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-2 (Form C)

Port acc. to DIN 3852-2 (Form Z)

Suitable liquid / plastic sealant required.

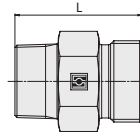
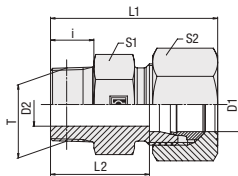
Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.





# Straight Male Stud Fitting Type FI-GE-...-Rk • Series L



C

## Whitworth Taper Pipe Thread (BSPT)

| Series | Tube OD<br>(mm/in) | PN (PB)<br>(bar/PSI) | Dimensions<br>(mm/in) |      |     |      |                 |      |      |      |       | Weight<br>(kg/lbs) Ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|----------------------|-----------------------|------|-----|------|-----------------|------|------|------|-------|-----------------------------------|-----------------------------|
| L      | D1                 |                      | Thread T              | D2   | i   | L    | L1 <sup>1</sup> | L2   | S1   | S2   |       |                                   |                             |
|        | 6                  | 315                  | R 1/8 keg.            | 4    | 8   | 22   | 30              | 15   | 12   | 14   | 1,11  |                                   | FI-GE-06LRk-W3              |
|        | .24                | 4568                 |                       | .16  | .31 | .87  | 1.18            | .59  | .47  | .55  | 2.43  |                                   |                             |
|        | 6                  | 315                  | R 1/4 keg.            | 4    | 12  | 27   | 35              | 20   | 14   | 14   | 1,99  |                                   | FI-GE-06LR1/4k-W3           |
|        | .24                | 4568                 |                       | .16  | .47 | 1.06 | 1.38            | .79  | .55  | .55  | 4.37  |                                   |                             |
|        | 6                  | 315                  | R 3/8 keg.            | 4    | 12  | 28   | 36              | 21   | 19   | 14   | 2,80  |                                   | FI-GE-06LR3/8k-W3           |
|        | .24                | 4568                 |                       | .16  | .47 | 1.10 | 1.42            | .83  | .75  | .55  | 6.17  |                                   |                             |
|        | 6                  | 315                  | R 1/2 keg.            | 4    | 14  | 30   | 38              | 23   | 22   | 14   | 5,19  |                                   | FI-GE-06LR1/2k-W3           |
|        | .24                | 4568                 |                       | .16  | .55 | 1.18 | 1.50            | .91  | .87  | .55  | 11.42 |                                   |                             |
|        | 8                  | 315                  | R 1/8 keg.            | 4    | 8   | 25   | 33              | 18   | 14   | 17   | 1,78  |                                   | FI-GE-08LR1/8k-W3           |
|        | .31                | 4568                 |                       | .16  | .31 | .98  | 1.30            | .71  | .55  | .67  | 3.92  |                                   |                             |
|        | 8                  | 315                  | R 1/4 keg.            | 6    | 12  | 27   | 35              | 20   | 14   | 17   | 1,88  |                                   | FI-GE-08LRk-W3              |
|        | .31                | 4568                 |                       | .24  | .47 | 1.06 | 1.38            | .79  | .55  | .67  | 4.13  |                                   |                             |
|        | 8                  | 315                  | R 3/8 keg.            | 6    | 12  | 28   | 36              | 21   | 19   | 17   | 3,44  |                                   | FI-GE-08LR3/8k-W3           |
|        | .31                | 4568                 |                       | .24  | .47 | 1.10 | 1.42            | .83  | .75  | .67  | 7.58  |                                   |                             |
|        | 8                  | 315                  | R 1/2 keg.            | 6    | 14  | 30   | 38              | 23   | 24   | 17   | 5,02  |                                   | FI-GE-08LR1/2k-W3           |
|        | .31                | 4568                 |                       | .24  | .55 | 1.18 | 1.50            | .91  | .94  | .67  | 11.04 |                                   |                             |
|        | 10                 | 315                  | R 1/8 keg.            | 4    | 8   | 24   | 32              | 17   | 17   | 19   | 1,97  |                                   | FI-GE-10LR1/8k-W3           |
|        | .39                | 4568                 |                       | .16  | .31 | .94  | 1.26            | .67  | .67  | .75  | 4.33  |                                   |                             |
|        | 10                 | 315                  | R 1/4 keg.            | 7    | 12  | 28   | 36              | 21   | 17   | 19   | 2,28  |                                   | FI-GE-10LRk-W3              |
|        | .39                | 4568                 |                       | .28  | .47 | 1.10 | 1.42            | .83  | .67  | .75  | 5.02  |                                   |                             |
|        | 10                 | 315                  | R 3/8 keg.            | 8    | 12  | 29   | 37              | 22   | 19   | 19   | 3,13  |                                   | FI-GE-10LR3/8k-W3           |
|        | .39                | 4568                 |                       | .31  | .47 | 1.14 | 1.46            | .87  | .75  | .75  | 6.88  |                                   |                             |
|        | 10                 | 315                  | R 1/2 keg.            | 8    | 14  | 30   | 38              | 23   | 24   | 19   | 1,22  |                                   | FI-GE-10LR1/2k-W3           |
|        | .39                | 4568                 |                       | .31  | .55 | 1.18 | 1.50            | .91  | .94  | .75  | 2.69  |                                   |                             |
|        | 12                 | 315                  | R 1/4 keg.            | 6    | 12  | 29   | 37              | 22   | 19   | 22   | 3,03  |                                   | FI-GE-12LR1/4k-W3           |
|        | .47                | 4568                 |                       | .24  | .47 | 1.14 | 1.46            | .87  | .75  | .87  | 6.67  |                                   |                             |
|        | 12                 | 315                  | R 3/8 keg.            | 9    | 12  | 29   | 37              | 22   | 19   | 22   | 3,28  |                                   | FI-GE-12LRk-W3              |
|        | .47                | 4568                 |                       | .35  | .47 | 1.14 | 1.46            | .87  | .75  | .87  | 7.22  |                                   |                             |
|        | 12                 | 315                  | R 1/2 keg.            | 10   | 14  | 31   | 39              | 24   | 22   | 22   | 5,02  |                                   | FI-GE-12LR1/2k-W3           |
|        | .47                | 4568                 |                       | .39  | .55 | 1.22 | 1.54            | .94  | .87  | .87  | 11.03 |                                   |                             |
|        | 15                 | 315                  | R 3/8 keg.            | 9    | 12  | 30   | 38              | 23   | 24   | 27   | 5,06  |                                   | FI-GE-15LR3/8k-W3           |
|        | .59                | 4568                 |                       | .35  | .47 | 1.18 | 1.50            | .91  | .94  | 1.06 | 11.13 |                                   |                             |
|        | 15                 | 315                  | R 1/2 keg.            | 12   | 14  | 32   | 40              | 25   | 24   | 27   | 5,35  |                                   | FI-GE-15LRk-W3              |
|        | .59                | 4568                 |                       | .47  | .55 | 1.26 | 1.57            | .98  | .94  | 1.06 | 11.76 |                                   |                             |
|        | 15                 | 160                  | R 3/4 keg.            | 12   | 17  | 36   | 44              | 29   | 27   | 27   | 16,48 |                                   | FI-GE-15LR3/4k-W3           |
|        | .59                | 2320                 |                       | .47  | .67 | 1.42 | 1.73            | 1.14 | 1.06 | 1.06 | 36.26 |                                   |                             |
|        | 18                 | 315                  | R 1/2 keg.            | 14   | 14  | 33   | 42              | 25,5 | 27   | 32   | 6,42  |                                   | FI-GE-18LRk-W3              |
|        | .71                | 4568                 |                       | .55  | .55 | 1.30 | 1.65            | 1.00 | 1.06 | 1.26 | 14.13 |                                   |                             |
|        | 18                 | 315                  | R 3/8 keg.            | 9    | 12  | 31   | 40              | 23,5 | 27   | 32   | 6,4   |                                   | FI-GE-18LR3/8k-W3           |
|        | .71                | 4568                 |                       | .35  | .47 | 1.22 | 1.57            | .93  | 1.06 | 1.26 | 14.12 |                                   |                             |
|        | 18                 | 160                  | R 3/4 keg.            | 15   | 17  | 36   | 47              | 28,5 | 32   | 32   | 10,47 |                                   | FI-GE-18LR3/4k-W3           |
|        | .71                | 2320                 |                       | .59  | .67 | 1.42 | 1.85            | 1.12 | 1.26 | 1.26 | 23.08 |                                   |                             |
|        | 22                 | 160                  | R 1/2 keg.            | 12   | 14  | 38   | 47              | 30,5 | 32   | 36   | 10,20 |                                   | FI-GE-22LR1/2k-W3           |
|        | .87                | 2320                 |                       | .47  | .55 | 1.50 | 1.85            | 1.20 | 1.26 | 1.42 | 22.43 |                                   |                             |
|        | 22                 | 160                  | R 3/4 keg.            | 17   | 17  | 37   | 46              | 29,5 | 32   | 36   | 8,91  |                                   | FI-GE-22LRk-W3              |
|        | .87                | 2320                 |                       | .67  | .67 | 1.46 | 1.81            | 1.16 | 1.26 | 1.42 | 19.61 |                                   |                             |
|        | 22                 | 160                  | R 1 keg.              | 19   | 18  | 41   | 51              | 33,5 | 36   | 36   | 15,89 |                                   | FI-GE-22LR1k-W3             |
|        | .87                | 2320                 |                       | .75  | .71 | 1.61 | 2.01            | 1.32 | 1.42 | 1.42 | 35.03 |                                   |                             |
|        | 28                 | 160                  | R 3/4 keg.            | 18   | 16  | 38   | 47              | 31,5 | 41   | 41   | 14,59 |                                   | FI-GE-28LR3/4k-W3           |
|        | 1.10               | 2320                 |                       | .71  | .63 | 1.50 | 1.85            | 1.24 | 1.61 | 1.61 | 32.10 |                                   |                             |
|        | 28                 | 160                  | R 1 keg.              | 23   | 18  | 42   | 51              | 34,5 | 41   | 41   | 16,49 |                                   | FI-GE-28LRk-W3              |
|        | 1.10               | 2320                 |                       | .91  | .71 | 1.65 | 2.01            | 1.36 | 1.61 | 1.61 | 36.28 |                                   |                             |
|        | 35                 | 160                  | R 1 keg.              | 23   | 20  | 45   | 56              | 34,5 | 46   | 50   | 23,76 |                                   | FI-GE-35LR1k-W3             |
|        | 1.38               | 2320                 |                       | .91  | .79 | 1.77 | 2.20            | 1.36 | 1.81 | 1.97 | 52.38 |                                   |                             |
|        | 35                 | 160                  | R 1 1/4 keg.          | 30   | 20  | 45   | 56              | 34,5 | 46   | 50   | 23,73 |                                   | FI-GE-35LRk-W3              |
|        | 1.38               | 2320                 |                       | 1.18 | .79 | 1.77 | 2.20            | 1.36 | 1.81 | 1.97 | 52.21 |                                   |                             |
|        | 42                 | 160                  | R 1 1/2 keg.          | 36   | 22  | 49   | 61              | 38   | 55   | 60   | 33,09 |                                   | FI-GE-42LRk-W3              |
|        | 1.65               | 2320                 |                       | 1.42 | .87 | 1.93 | 2.40            | 1.50 | 2.17 | 2.36 | 72.81 |                                   |                             |

## Ordering Codes

### \*FI-GE\*-10\*L\*Rk\*-W3\*-MS

|                                                                         |                                                                                         |
|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | FI-GE                                                                                   |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                                                     |
| * Series                                                                | Extra-Light Series (page 60) LL<br>Light Series (page 61) L<br>Heavy Series (page 62) S |
| * Thread Type                                                           | Whitworth Taper Pipe Thread (BSPT) Rk                                                   |
| If required, please indicate special sizes, e.g. R1/8k!                 |                                                                                         |
| * Material Code                                                         | Steel, zinc/nickel-plated -W3                                                           |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                         |
| * Assembling / Kitting                                                  | Fitting body only —                                                                     |
|                                                                         | Fitting body supplied with cutting ring and union nut -MS                               |
|                                                                         | Fitting body supplied with soft-sealing cutting ring and union nut -MSV                 |

## Connecting Parts

|  |                                            |         |
|--|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-2 (Form C)

Port acc. to DIN 3852-2 (Form Z)

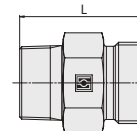
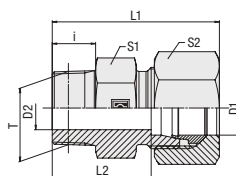
Suitable liquid / plastic sealant required.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.



## Straight Male Stud Fitting Type FI-GE-...-Rk • Series S



### Whitworth Taper Pipe Thread (BSPT)

#### Ordering Codes

#### \*FI-GE\*-10\*S\*Rk\*-W3\*-MS

|                                                                         |                                                                                                                                                                                  |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | <b>FI-GE</b>                                                                                                                                                                     |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                                                                                                                       |
| * Series                                                                | Extra-Light Series (page 60) <b>LL</b><br>Light Series (page 61) <b>L</b><br>Heavy Series (page 62) <b>S</b>                                                                     |
| * Thread Type                                                           | Whitworth Taper Pipe Thread (BSPT) <b>Rk</b>                                                                                                                                     |
| If required, please indicate special sizes, e.g. R1/8k!                 |                                                                                                                                                                                  |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                                                                                                                             |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                                                                                  |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b><br>Fitting body supplied with cutting ring and union nut <b>-MS</b><br>Fitting body supplied with soft-sealing cutting ring and union nut <b>-MSV</b> |

#### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

| Series | Tube OD<br>(mm/in)<br>D1 | PB<br>(bar/psi) | Dimensions<br>(mm/in)<br>Thread T | D2   | i   | L    | L1 <sup>1</sup> | L2   | S1   | S2   | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------------------|------|-----|------|-----------------|------|------|------|-----------------------------------|-----------------------------|
| S      | 6                        | 630             | R 1/4 keg.                        | 4    | 12  | 30   | 38              | 23   | 17   | 17   | 3,01                              | FI-GE-06SRk-W3              |
|        | .24                      | 9135            |                                   | .16  | .47 | 1.18 | 1.50            | .91  | .67  | .67  | 6.62                              |                             |
|        | 8                        | 630             | R 1/4 keg.                        | 5    | 12  | 29   | 37              | 22   | 17   | 19   | 3,50                              | FI-GE-08SRk-W3              |
|        | .31                      | 9135            |                                   | .20  | .47 | 1.14 | 1.46            | .87  | .67  | .75  | 7.69                              |                             |
|        | 10                       | 630             | R 3/8 keg.                        | 7    | 12  | 32   | 41              | 24,5 | 19   | 22   | 4,49                              | FI-GE-10SRk-W3              |
|        | .39                      | 9135            |                                   | .28  | .47 | 1.26 | 1.61            | .96  | .75  | .87  | 9.88                              |                             |
|        | 12                       | 630             | R 3/8 keg.                        | 8    | 12  | 34   | 43              | 26,5 | 22   | 24   | 6,03                              | FI-GE-12SRk-W3              |
|        | .47                      | 9135            |                                   | .31  | .47 | 1.34 | 1.69            | 1.04 | .87  | .94  | 13.27                             |                             |
|        | 14                       | 630             | R 3/8 keg.                        | 8    | 12  | 34,5 | 45              | 26,5 | 24   | 27   | 6,56                              | FI-GE-14SR3/8k-W3           |
|        | .55                      | 9135            |                                   | .31  | .47 | 1.36 | 1.77            | 1.04 | .94  | 1.06 | 14.46                             |                             |
|        | 14                       | 630             | R 1/2 keg.                        | 10   | 14  | 35   | 45              | 27   | 24   | 27   | 7,04                              | FI-GE-14SRk-W3              |
|        | .55                      | 9135            |                                   | .39  | .55 | 1.38 | 1.77            | 1.06 | .94  | 1.06 | 15.48                             |                             |
|        | 16                       | 400             | R 3/8 keg.                        | 9    | 12  | 32   | 47              | 23,5 | 27   | 30   | 6,13                              | FI-GE-16SR3/8k-W3           |
|        | .63                      | 5800            |                                   | .35  | .47 | 1.26 | 1.85            | .93  | 1.06 | 1.18 | 13.51                             |                             |
|        | 16                       | 400             | R 1/2 keg.                        | 12   | 14  | 38   | 48              | 29,5 | 27   | 30   | 8,52                              | FI-GE-16SRk-W3              |
|        | .63                      | 5800            |                                   | .47  | .55 | 1.50 | 1.89            | 1.16 | 1.06 | 1.18 | 18.75                             |                             |
|        | 20                       | 400             | R 3/4 keg.                        | 16   | 17  | 45,5 | 57              | 35   | 32   | 36   | 14,43                             | FI-GE-20SRk-W3              |
|        | .79                      | 5800            |                                   | .63  | .67 | 1.79 | 2.24            | 1.38 | 1.26 | 1.42 | 31.75                             |                             |
|        | 25                       | 400             | R 3/4 keg.                        | 16   | 17  | 48   | 62,5            | 37   | 41   | 46   | 10,15                             | FI-GE-25SR3/4k-W3           |
|        | .98                      | 5800            |                                   | .63  | .67 | 1.89 | 2.46            | 1.46 | 1.61 | 1.81 | 22.38                             |                             |
|        | 25                       | 400             | R 1 keg.                          | 20   | 18  | 49   | 63,5            | 37   | 41   | 46   | 25,81                             | FI-GE-25SRk-W3              |
|        | .98                      | 5800            |                                   | .79  | .71 | 1.93 | 2.50            | 1.46 | 1.61 | 1.81 | 56,90                             |                             |
|        | 30                       | 400             | R 1 keg.                          | 20   | 18  | 52   | 67,5            | 39   | 50   | 50   | 31,78                             | FI-GE-30SR1k-W3             |
|        | 1.18                     | 5800            |                                   | .79  | .71 | 2.05 | 2.66            | 1.54 | 1.97 | 1.97 | 70,06                             |                             |
|        | 30                       | 250             | R 1-1/4 keg.                      | 25   | 20  | 54   | 69,5            | 41   | 50   | 50   | 36,69                             | FI-GE-30SRk-W3              |
|        | 1.18                     | 3626            |                                   | .98  | .79 | 2.13 | 2.74            | 1.61 | 1.97 | 1.97 | 80.89                             |                             |
|        | 38                       | 250             | R 1 1/2 keg.                      | 32   | 22  | 59   | 75              | 43   | 55   | 60   | 50,8                              | FI-GE-38SRk-W3              |
|        | 1.50                     | 3626            |                                   | 1.26 | .87 | 2.32 | 2.95            | 1.69 | 2.17 | 2.36 | 111.99                            |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-2 (Form C)

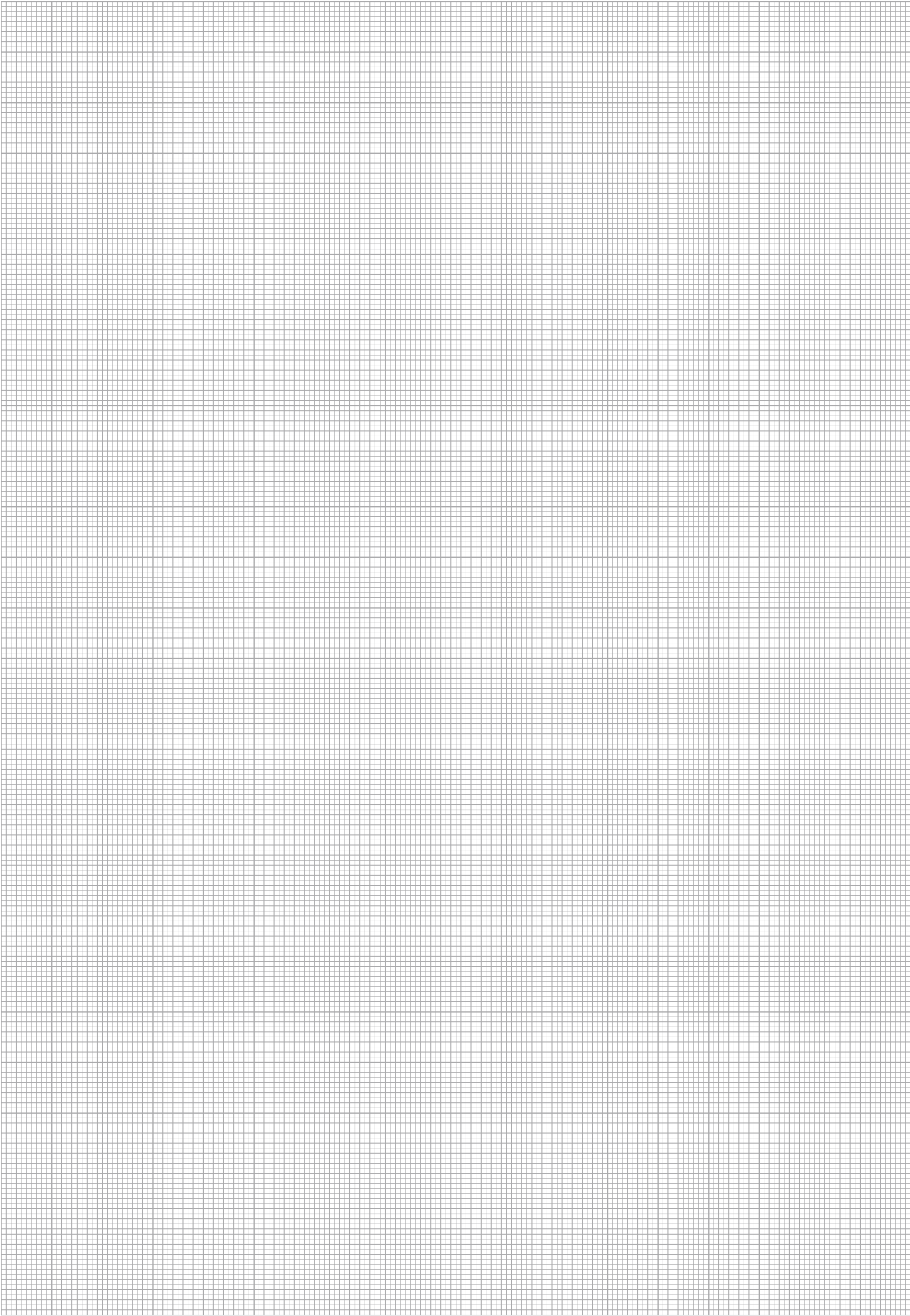
Port acc. to DIN 3852-2 (Form Z)

Suitable liquid / plastic sealant required.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

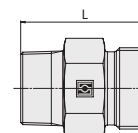
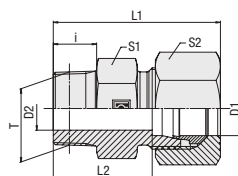
Please contact STAUFF prior to the assembly for further information.





## Straight Male Stud Fitting

### Type FI-GE-...-Mk ▪ Series LL / L



### Metric Taper Thread

#### Ordering Codes

#### \*FI-GE\*-10\*L\*Mk\*-W3\*-MS

|                                                                         |                                                                                                                                                                                  |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | <b>FI-GE</b>                                                                                                                                                                     |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                                                                                                                       |
| * Series                                                                | Extra-Light Series <b>LL</b><br>Light Series <b>L</b>                                                                                                                            |
| * Thread Type                                                           | Metric Taper Thread <b>Mk</b>                                                                                                                                                    |
| If required, please indicate special sizes, e.g. M16x1.5k!              |                                                                                                                                                                                  |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                                                                                                                             |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                                                                                  |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b><br>Fitting body supplied with cutting ring and union nut <b>-MS</b><br>Fitting body supplied with soft-sealing cutting ring and union nut <b>-MSV</b> |

#### Connecting Parts

|                                                                                     |                                                   |         |
|-------------------------------------------------------------------------------------|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in) | Weight<br>(kg/lbs) ca.<br>per 100      | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|----------------------------------------|-----------------------------|
|        | D1                 |                 | Thread T              | D2 i L L1 <sup>1</sup> L2 S1 S2        |                             |
| LL     | 4                  | 100             | M 6 x 1 keg.          | 2,5 8 20 26 16 9 10 0,50               | FI-GE-04LLM6x1k-W3          |
|        | .16                | 1450            |                       | .10 .31 .79 1.02 .63 .35 .39 1.09      |                             |
|        | 4                  | 100             | M 8 x 1 keg.          | 3 8 20 26 16 10 10 0,63                | FI-GE-04LLMk-W3             |
|        | .16                | 1450            |                       | .12 .31 .79 1.02 .63 .39 .39 1.39      |                             |
|        | 4                  | 100             | M 10 x 1 keg.         | 3 8 20 26 16 11 10 0,85                | FI-GE-04LLM10x1k-W3         |
|        | .16                | 1450            |                       | .12 .31 .79 1.02 .63 .43 .39 1.87      |                             |
|        | 6                  | 100             | M 6 x 1 keg.          | 2 8 20 26 14,5 11 12 0,68              | FI-GE-06LLM6x1k-W3          |
|        | .24                | 1450            |                       | .08 .31 .79 1.02 .57 .43 .47 1.50      |                             |
|        | 6                  | 100             | M 8 x 1 keg.          | 3 8 20 26 14,5 11 12 0,75              | FI-GE-06LLM8x1k-W3          |
|        | .24                | 1450            |                       | .12 .31 .79 1.02 .57 .43 .47 1.66      |                             |
|        | 6                  | 100             | M 10 x 1 keg.         | 4 8 20 26 14,5 11 12 0,85              | FI-GE-06LLMk-W3             |
|        | .24                | 1450            |                       | .16 .31 .79 1.02 .57 .43 .47 1.88      |                             |
|        | 8                  | 100             | M 8 x 1 keg.          | 3,5 8 22 28 16,5 12 14 1,29            | FI-GE-08LLM8x1k-W3          |
|        | .31                | 1450            |                       | .14 .31 .87 1.10 .65 .47 .55 2.83      |                             |
|        | 8                  | 100             | M 10 x 1 keg.         | 6 8 22 28 16,5 12 14 0,98              | FI-GE-08LLMk-W3             |
|        | .31                | 1450            |                       | .24 .31 .87 1.10 .65 .47 .55 2.15      |                             |
| L      | 6                  | 315             | M 10 x 1 keg.         | 4 8 23 31 16 14 14 1,44                | FI-GE-06LMk-W3              |
|        | .24                | 4568            |                       | .16 .31 .91 1.22 .63 .55 .55 3.17      |                             |
|        | 6                  | 315             | M 12 x 1,5 keg.       | 4 12 27 35 20 14 14 1,56               | FI-GE-06LM12x1.5k-W3        |
|        | .24                | 4568            |                       | .16 .47 1.06 1.38 .79 .55 .55 3.44     |                             |
|        | 8                  | 315             | M 12 x 1,5 keg.       | 6 12 27 35 20 14 17 1,74               | FI-GE-08LMk-W3              |
|        | .31                | 4568            |                       | .24 .47 1.06 1.38 .79 .55 .67 3.83     |                             |
|        | 8                  | 315             | M 14 x 1,5 keg.       | 6 12 27 35 20 17 17 3,11               | FI-GE-08LM14x1.5k-W3        |
|        | .31                | 4568            |                       | .24 .47 1.06 1.38 .79 .67 .67 6.83     |                             |
|        | 10                 | 315             | M 14 x 1,5 keg.       | 7 12 28 36 21 17 19 2,51               | FI-GE-10LMk-W3              |
|        | .39                | 4568            |                       | .28 .47 1.10 1.42 .83 .67 .75 5.53     |                             |
|        | 10                 | 315             | M 16 x 1,5 keg.       | 8 12 28 36 21 17 19 4,05               | FI-GE-10LM16x1.5k-W3        |
|        | .39                | 4568            |                       | .31 .47 1.10 1.42 .83 .67 .75 8.91     |                             |
|        | 12                 | 315             | M 16 x 1,5 keg.       | 9 12 29 37 22 19 22 3,18               | FI-GE-12LMk-W3              |
|        | .47                | 4568            |                       | .35 .47 1.14 1.46 .87 .75 .87 6.99     |                             |
|        | 12                 | 315             | M 18 x 1,5 keg.       | 10 12 29 37 22 19 22 4,90              | FI-GE-12LM18x1.5k-W3        |
|        | .47                | 4568            |                       | .39 .47 1.14 1.46 .87 .75 .87 10.78    |                             |
|        | 15                 | 315             | M 18 x 1,5 keg.       | 11 12 30 41 23 24 27 4,73              | FI-GE-15LMk-W3              |
|        | .59                | 4568            |                       | .43 .47 1.18 1.61 .91 .94 1.06 10.41   |                             |
|        | 18                 | 315             | M 22 x 1,5 keg.       | 14 14 33 42 25,5 27 32 7,02            | FI-GE-18LMk-W3              |
|        | .71                | 4568            |                       | .55 .55 1.30 1.65 1.00 1.06 1.26 15.44 |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-1 (Form C)

Port acc. to DIN 3852-1 (Form Z)

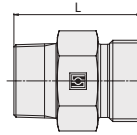
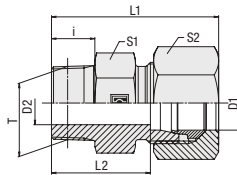
Suitable liquid / plastic sealant required.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.



## Straight Male Stud Fitting Type FI-GE-...-N • Series LL / L



C

### NPT Thread

| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in)                    | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|------------------------------------------|-----------------------------------|-----------------------------|
|        | D1                 |                 | Thread T D2 i L L1 <sup>1</sup> L2 S1 S2 |                                   |                             |
| LL     | 4                  | 100             | 1/8 NPT 3 10 22 28 18 11 10              | 0,98                              | FI-GE-04LL1/8N-W3           |
|        | .16                | 1450            | .12 .39 .87 1.10 .71 .43 .39             | 2.15                              |                             |
|        | 6                  | 100             | 1/8 NPT 4.5 10 22 28 16.5 11 12          | 0,90                              | FI-GE-06LL1/8N-W3           |
|        | .24                | 1450            | .18 .39 .87 1.10 .65 .43 .47             | 1.97                              |                             |
|        | 8                  | 100             | 1/8 NPT 5 10 24 30 18.5 12 14            | 1,16                              | FI-GE-08LL1/8N-W3           |
| L      | .31                | 1450            | .20 .39 .94 1.18 .73 .47 .55             | 2.55                              |                             |
|        | 6                  | 315             | 1/8 NPT 4 10 24 32 17 12 14              | 1,21                              | FI-GE-06L1/8N-W3            |
|        | .24                | 4568            | .16 .39 .94 1.26 .67 .47 .55             | 2.66                              |                             |
|        | 6                  | 315             | 1/4 NPT 4 15.5 30 38 23 17 14            | 2,63                              | FI-GE-06L1/4N-W3            |
|        | .24                | 4568            | .16 .61 1.18 1.50 .91 .67 .55            | 5.79                              |                             |
|        | 6                  | 315             | 3/8 NPT 4 15.5 31 39 24 19 14            | 4,01                              | FI-GE-06L3/8N-W3            |
|        | .24                | 4568            | .16 .61 1.22 1.54 .94 .75 .55            | 8.82                              |                             |
|        | 6                  | 315             | 1/2 NPT 4 20 36 44 29 22 14              | 5,62                              | FI-GE-06L1/2N-W3            |
|        | .24                | 4568            | .16 .79 1.42 1.73 1.14 .87 .55           | 12.37                             |                             |
|        | 8                  | 315             | 1/8 NPT 4 10 25 33 18 14 17              | 1,65                              | FI-GE-08L1/8N-W3            |
|        | .31                | 4568            | .16 .39 .98 1.30 .71 .55 .67             | 3.63                              |                             |
|        | 8                  | 315             | 1/4 NPT 6 15 30 38 23 17 17              | 2,49                              | FI-GE-08L1/4N-W3            |
|        | .31                | 4568            | .24 .59 1.18 1.50 .91 .67 .67            | 5.48                              |                             |
|        | 8                  | 315             | 3/8 NPT 6 15.5 30 38 23 19 17            | 3,70                              | FI-GE-08L3/8N-W3            |
|        | .31                | 4568            | .24 .61 1.18 1.50 .91 .75 .67            | 8.14                              |                             |
|        | 8                  | 315             | 1/2 NPT 6 20 36 44 29 22 17              | 6,78                              | FI-GE-08L1/2N-W3            |
|        | .31                | 4568            | .24 .79 1.42 1.73 1.14 .87 .67           | 14.91                             |                             |
|        | 10                 | 315             | 1/8 NPT 4 10 25 33 18 17 19              | 1,90                              | FI-GE-10L1/8N-W3            |
|        | .39                | 4568            | .16 .39 .98 1.30 .71 .67 .75             | 4.18                              |                             |
|        | 10                 | 315             | 1/4 NPT 7 15 31 39 24 17 19              | 2,53                              | FI-GE-10L1/4N-W3            |
|        | .39                | 4568            | .28 .59 1.22 1.54 .94 .67 .75            | 5.57                              |                             |
|        | 10                 | 315             | 3/8 NPT 7 15 32 40 25 19 19              | 3,97                              | FI-GE-10L3/8N-W3            |
|        | .39                | 4568            | .28 .59 1.26 1.57 .98 .75 .75            | 8.73                              |                             |
|        | 10                 | 315             | 1/2 NPT 7 20 37 45 30 22 19              | 6,99                              | FI-GE-10L1/2N-W3            |
|        | .39                | 4568            | .28 .79 1.46 1.77 1.18 .87 .75           | 15.39                             |                             |
|        | 10                 | 315             | 3/4 NPT 8 20 38 46 31 27 19              | 5,67                              | FI-GE-10L3/4N-W3            |
|        | .39                | 4568            | .31 .79 1.50 1.81 1.22 1.06 .75          | 12.47                             |                             |
|        | 12                 | 315             | 1/8 NPT 4 10 26 34 19 19 22              | 2,48                              | FI-GE-12L1/8N-W3            |
|        | .47                | 4568            | .16 .39 1.02 1.34 .75 .75 .87            | 5.45                              |                             |
|        | 12                 | 315             | 1/4 NPT 7 15 32 40 25 19 22              | 3,21                              | FI-GE-12L1/4N-W3            |
|        | .47                | 4568            | .28 .59 1.26 1.57 .98 .75 .87            | 7.05                              |                             |
|        | 12                 | 315             | 3/8 NPT 8 15 32 40 25 19 22              | 3,95                              | FI-GE-12L3/8N-W3            |
|        | .47                | 4568            | .31 .59 1.26 1.57 .98 .75 .87            | 8.69                              |                             |
|        | 12                 | 315             | 1/2 NPT 10 20 37 45 30 24 22             | 6,48                              | FI-GE-12L1/2N-W3            |
|        | .47                | 4568            | .39 .79 1.46 1.77 1.18 .94 .87           | 14.25                             |                             |
|        | 12                 | 315             | 3/4 NPT 8 20 38 46 31 27 22              | 10,93                             | FI-GE-12L3/4N-W3            |
|        | .47                | 4568            | .31 .79 1.50 1.81 1.22 1.06 .87          | 24.04                             |                             |
|        | 15                 | 315             | 1/4 NPT 7 15 33 41 26 24 27              | 4,72                              | FI-GE-15L1/4N-W3            |
|        | .59                | 4568            | .28 .59 1.30 1.61 1.02 .94 1.06          | 10.38                             |                             |
|        | 15                 | 315             | 3/8 NPT 11 15.5 38 41 31 24 27           | 5,12                              | FI-GE-15L3/8N-W3            |
|        | .59                | 4568            | .43 .61 1.50 1.61 1.22 .94 1.06          | 11.26                             |                             |
|        | 15                 | 315             | 1/2 NPT 12 20 38 46 31 24 27             | 6,44                              | FI-GE-15L1/2N-W3            |
|        | .59                | 4568            | .47 .79 1.50 1.81 1.22 .94 1.06          | 14.16                             |                             |
|        | 15                 | 315             | 3/4 NPT 12 20 40 48 33 27 27             | 10,60                             | FI-GE-15L3/4N-W3            |
|        | .59                | 4568            | .47 .79 1.57 1.89 1.30 1.06 1.06         | 23.31                             |                             |

### Ordering Codes

**\*FI-GE\*-10\*L\*1/4\*N\*-W3\*-MS**

|                                                                         |                                                                                                 |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | FI-GE                                                                                           |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                                                             |
| * Series                                                                | Extra-Light Series (page 65) LL<br>Light Series (pages 65/66) L<br>Heavy Series (pages 67/68) S |
| * Thread Size                                                           | acc. to dimension table 1/4                                                                     |
| Please always indicate thread sizes, e.g. 1/4!                          |                                                                                                 |
| * Thread Type                                                           | NPT Thread N                                                                                    |
| * Material Code                                                         | Steel, zinc/nickel-plated -W3                                                                   |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                 |
| * Assembling / Kitting                                                  | Fitting body only —                                                                             |
|                                                                         | Fitting body supplied with cutting ring and union nut -MS                                       |
|                                                                         | Fitting body supplied with soft-sealing cutting ring and union nut -MSV                         |

### Connecting Parts

|  |                                            |         |
|--|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to ANSI/ASME B1.20.1-1983

Port acc. to ANSI/ASME B1.20.1-1983

Suitable liquid / plastic sealant required.

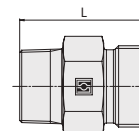
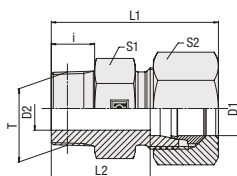
Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.





## Straight Male Stud Fitting Type FI-GE-...-N • Series L



### NPT Thread

#### Ordering Codes

#### \*FI-GE\*-10\*L\*1/4\*N\*-W3\*-MS

|                                                                         |                                                                                                                      |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | <b>FI-GE</b>                                                                                                         |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                                                           |
| * Series                                                                | Extra-Light Series (page 65) <b>LL</b><br>Light Series (pages 65/66) <b>L</b><br>Heavy Series (pages 67/68) <b>S</b> |
| * Thread Size                                                           | acc. to dimension table <b>1/4</b>                                                                                   |
| Please always indicate thread sizes, e.g. 1/4!                          |                                                                                                                      |
| * Thread Type                                                           | NPT Thread <b>N</b>                                                                                                  |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                                                                 |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                      |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b>                                                                                           |
|                                                                         | Fitting body supplied with cutting ring and union nut <b>-MS</b>                                                     |
|                                                                         | Fitting body supplied with soft-sealing cutting ring and union nut <b>-MSV</b>                                       |

#### Connecting Parts

|                                                                                     |                                                   |         |
|-------------------------------------------------------------------------------------|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

| Series | Tube OD                           | PN                                  | Dimensions                        |      |      |      |                 |      |      |       |                                                   |                    | Weight | Ordering Codes <sup>3</sup> |
|--------|-----------------------------------|-------------------------------------|-----------------------------------|------|------|------|-----------------|------|------|-------|---------------------------------------------------|--------------------|--------|-----------------------------|
|        | ( <sup>mm</sup> / <sub>in</sub> ) | ( <sup>bar</sup> / <sub>PSI</sub> ) | ( <sup>mm</sup> / <sub>in</sub> ) | D2   | i    | L    | L1 <sup>1</sup> | L2   | S1   | S2    | ( <sup>kg</sup> / <sub>lbs</sub> ) ca.<br>per 100 |                    |        |                             |
| L      | D1                                |                                     | Thread T                          |      |      |      |                 |      |      |       |                                                   |                    |        |                             |
|        | 18                                | 315                                 | 3/8 NPT                           | 8    | 15,5 | 34   | 43              | 26,5 | 27   | 32    | 6,78                                              | FI-GE-18L3/8N-W3   |        |                             |
|        | .71                               | 4568                                |                                   | .31  | .61  | 1.34 | 1.69            | 1.04 | 1.06 | 1.26  | 14.92                                             |                    |        |                             |
|        | 18                                | 315                                 | 1/2 NPT                           | 12   | 20   | 39   | 48              | 31,5 | 27   | 32    | 8,10                                              | FI-GE-18L1/2N-W3   |        |                             |
|        | .71                               | 4568                                |                                   | .47  | .79  | 1.54 | 1.89            | 1.24 | 1.06 | 1.26  | 17.82                                             |                    |        |                             |
|        | 18                                | 315                                 | 3/4 NPT                           | 15   | 20   | 39   | 48              | 31,5 | 27   | 32    | 10,51                                             | FI-GE-18L3/4N-W3   |        |                             |
|        | .71                               | 4568                                |                                   | .59  | .79  | 1.54 | 1.89            | 1.24 | 1.06 | 1.26  | 23.12                                             |                    |        |                             |
|        | 18                                | 315                                 | 1 NPT                             | 15   | 25   | 45   | 54              | 37,5 | 36   | 32    | 16,85                                             | FI-GE-18L1N-W3     |        |                             |
|        | .71                               | 4568                                |                                   | .59  | .98  | 1.77 | 2.13            | 1.48 | 1.42 | 1.26  | 37.08                                             |                    |        |                             |
|        | 22                                | 160                                 | 1/2 NPT                           | 14   | 20   | 41   | 50              | 33,5 | 32   | 36    | 9,26                                              | FI-GE-22L1/2N-W3   |        |                             |
|        | .87                               | 2320                                |                                   | .55  | .79  | 1.61 | 1.97            | 1.32 | 1.26 | 1.42  | 20.37                                             |                    |        |                             |
|        | 22                                | 160                                 | 3/4 NPT                           | 16   | 20   | 41   | 50              | 33,5 | 32   | 36    | 11,07                                             | FI-GE-22L3/4N-W3   |        |                             |
|        | .87                               | 2320                                |                                   | .63  | .79  | 1.61 | 1.97            | 1.32 | 1.26 | 1.42  | 24.35                                             |                    |        |                             |
|        | 22                                | 160                                 | 1 NPT                             | 19   | 25   | 47   | 56              | 39,5 | 36   | 36    | 18,05                                             | FI-GE-22L1N-W3     |        |                             |
|        | .87                               | 2320                                |                                   | .75  | .98  | 1.85 | 2.20            | 1.56 | 1.42 | 1.42  | 39.70                                             |                    |        |                             |
|        | 28                                | 160                                 | 3/4 NPT                           | 18   | 20   | 42   | 51              | 34,5 | 41   | 41    | 18,00                                             | FI-GE-28L3/4N-W3   |        |                             |
|        | 1.10                              | 2320                                |                                   | .71  | .79  | 1.65 | 2.01            | 1.36 | 1.61 | 1.61  | 39.60                                             |                    |        |                             |
|        | 28                                | 160                                 | 1 NPT                             | 21   | 25   | 47   | 56              | 39,5 | 41   | 41    | 19,89                                             | FI-GE-28L1N-W3     |        |                             |
|        | 1.10                              | 2320                                |                                   | .83  | .98  | 1.85 | 2.20            | 1.56 | 1.61 | 1.61  | 43.76                                             |                    |        |                             |
|        | 28                                | 160                                 | 1 1/4 NPT                         | 24   | 26   | 49   | 58              | 41,5 | 46   | 41    | 27,00                                             | FI-GE-28L1-1/4N-W3 |        |                             |
|        | 1.10                              | 2320                                |                                   | .94  | 1.02 | 1.93 | 2.28            | 1.63 | 1.81 | 1.61  | 59.40                                             |                    |        |                             |
|        | 35                                | 160                                 | 1 NPT                             | 21   | 21   | 46   | 57              | 40,5 | 46   | 50    | 24,03                                             | FI-GE-35L1N-W3     |        |                             |
|        | 1.38                              | 2320                                |                                   | .83  | .83  | 1.81 | 2.24            | 1.59 | 1.81 | 1.97  | 52.98                                             |                    |        |                             |
|        | 35                                | 160                                 | 1 1/4 NPT                         | 28   | 26   | 51   | 62              | 40,5 | 46   | 50    | 39,59                                             | FI-GE-35L1-1/4N-W3 |        |                             |
|        | 1.38                              | 2320                                |                                   | 1.10 | 1.02 | 2.01 | 2.44            | 1.59 | 1.81 | 1.97  | 87.09                                             |                    |        |                             |
|        | 42                                | 160                                 | 1 1/4 NPT                         | 28   | 26   | 53   | 65              | 42   | 55   | 60    | 35,36                                             | FI-GE-42L1-1/4N-W3 |        |                             |
|        | 1.65                              | 2320                                |                                   | 1.10 | 1.02 | 2.09 | 2.56            | 1.65 | 2.17 | 2.36  | 77.79                                             |                    |        |                             |
|        | 42                                | 160                                 | 1 1/2 NPT                         | 36   | 26   | 53   | 65              | 42   | 55   | 60    | 35,36                                             | FI-GE-42L1-1/2N-W3 |        |                             |
| 1.65   | 2320                              | 1.42                                |                                   | 1.02 | 2.09 | 2.56 | 1.65            | 2.17 | 2.36 | 77.79 |                                                   |                    |        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to ANSI/ASME B1.20.1-1983

Port acc. to ANSI/ASME B1.20.1-1983

Suitable liquid / plastic sealant required.

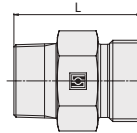
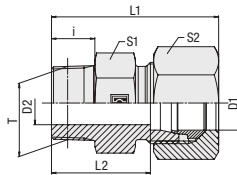
Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.





# Straight Male Stud Fitting Type FI-GE-...-N • Series S



C

## NPT Thread

| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in) |     |      |      |                 |      |      |      |       | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|-----|------|------|-----------------|------|------|------|-------|-----------------------------------|-----------------------------|
| S      | D1                 |                 | Thread T              | D2  | i    | L    | L1 <sup>1</sup> | L2   | S1   | S2   |       |                                   |                             |
|        | 6                  | 630             | 1/8 NPT               | 4   | 10   | 28   | 36              | 21   | 14   | 17   | 2,30  |                                   | FI-GE-06S1/8N-W3            |
|        | .24                | 9135            |                       | .16 | .39  | 1.10 | 1.42            | .83  | .55  | .67  | 5.06  |                                   |                             |
|        | 6                  | 630             | 1/4 NPT               | 4   | 15   | 35   | 43              | 28   | 17   | 17   | 3,71  |                                   | FI-GE-06S1/4N-W3            |
|        | .24                | 9135            |                       | .16 | .59  | 1.38 | 1.69            | 1.10 | .67  | .67  | 8.17  |                                   |                             |
|        | 6                  | 630             | 3/8 NPT               | 4   | 15,5 | 33   | 41              | 26   | 19   | 17   | 4,50  |                                   | FI-GE-06S3/8N-W3            |
|        | .24                | 9135            |                       | .16 | .61  | 1.30 | 1.61            | 1.02 | .75  | .67  | 9.91  |                                   |                             |
|        | 6                  | 630             | 1/2 NPT               | 12  | 20   | 38   | 45              | 30,5 | 22   | 17   | 8,8   |                                   | FI-GE-06S1/2N-W3            |
|        | .24                | 9135            |                       | .47 | .79  | 1.50 | 1.77            | 1.20 | .87  | .67  | 19.40 |                                   |                             |
|        | 8                  | 630             | 1/8 NPT               | 4   | 10   | 29,5 | 37,5            | 22,5 | 17   | 19   | 3,20  |                                   | FI-GE-08S1/8N-W3            |
|        | .31                | 9135            |                       | .16 | .39  | 1.16 | 1.48            | .89  | .67  | .75  | 7.04  |                                   |                             |
|        | 8                  | 630             | 1/4 NPT               | 5   | 15   | 35   | 43              | 28   | 17   | 19   | 3,81  |                                   | FI-GE-08S1/4N-W3            |
|        | .31                | 9135            |                       | .20 | .59  | 1.38 | 1.69            | 1.10 | .67  | .75  | 8.37  |                                   |                             |
|        | 8                  | 630             | 3/8 NPT               | 5   | 15,5 | 36   | 44              | 29   | 19   | 19   | 5,31  |                                   | FI-GE-08S3/8N-W3            |
|        | .31                | 9135            |                       | .20 | .61  | 1.42 | 1.73            | 1.14 | .75  | .75  | 11.68 |                                   |                             |
|        | 8                  | 630             | 1/2 NPT               | 5   | 20   | 40   | 48              | 33   | 22   | 19   | 8,17  |                                   | FI-GE-08S1/2N-W3            |
|        | .31                | 9135            |                       | .20 | .79  | 1.57 | 1.89            | 1.30 | .87  | .75  | 17.97 |                                   |                             |
|        | 10                 | 630             | 1/4 NPT               | 5   | 15   | 35   | 44              | 27,5 | 19   | 22   | 4,36  |                                   | FI-GE-10S1/4N-W3            |
|        | .39                | 9135            |                       | .20 | .59  | 1.38 | 1.73            | 1.08 | .75  | .87  | 9.59  |                                   |                             |
|        | 10                 | 630             | 3/8 NPT               | 7   | 15   | 35   | 44              | 27,5 | 19   | 22   | 4,95  |                                   | FI-GE-10S3/8N-W3            |
|        | .39                | 9135            |                       | .28 | .59  | 1.38 | 1.73            | 1.08 | .75  | .87  | 10.89 |                                   |                             |
|        | 10                 | 630             | 1/2 NPT               | 7   | 20   | 38   | 47              | 30,5 | 22   | 22   | 7,32  |                                   | FI-GE-10S1/2N-W3            |
|        | .39                | 9135            |                       | .28 | .79  | 1.50 | 1.85            | 1.20 | .87  | .87  | 16.11 |                                   |                             |
|        | 12                 | 630             | 1/4 NPT               | 5   | 15   | 37   | 46              | 29,5 | 22   | 24   | 4,84  |                                   | FI-GE-12S1/4N-W3            |
|        | .47                | 9135            |                       | .20 | .59  | 1.46 | 1.81            | 1.16 | .87  | .94  | 10.66 |                                   |                             |
|        | 12                 | 630             | 3/8 NPT               | 8   | 15   | 37   | 46              | 29,5 | 22   | 24   | 6,21  |                                   | FI-GE-12S3/8N-W3            |
|        | .47                | 9135            |                       | .31 | .59  | 1.46 | 1.81            | 1.16 | .87  | .94  | 13.67 |                                   |                             |
|        | 12                 | 630             | 1/2 NPT               | 8   | 20   | 42   | 51              | 34,5 | 22   | 24   | 8,52  |                                   | FI-GE-12S1/2N-W3            |
|        | .47                | 9135            |                       | .31 | .79  | 1.65 | 2.01            | 1.36 | .87  | .94  | 18.74 |                                   |                             |
|        | 12                 | 630             | 3/4 NPT               | 8   | 20   | 44   | 53              | 36,5 | 30   | 24   | 12,38 |                                   | FI-GE-12S3/4N-W3            |
|        | .47                | 9135            |                       | .31 | .79  | 1.73 | 2.09            | 1.44 | 1.18 | .94  | 27.23 |                                   |                             |
|        | 14                 | 630             | 3/8 NPT               | 8   | 15,5 | 39   | 49              | 31   | 24   | 27   | 7,32  |                                   | FI-GE-14S3/8N-W3            |
|        | .55                | 9135            |                       | .31 | .61  | 1.54 | 1.93            | 1.22 | .94  | 1.06 | 16.11 |                                   |                             |
|        | 14                 | 630             | 1/2 NPT               | 10  | 20   | 44   | 54              | 36   | 24   | 27   | 6,76  |                                   | FI-GE-14S1/2N-W3            |
|        | .55                | 9135            |                       | .39 | .79  | 1.73 | 2.13            | 1.42 | .94  | 1.06 | 14.88 |                                   |                             |
|        | 14                 | 630             | 3/4 NPT               | 16  | 20   | 46   | 56              | 38   | 32   | 27   | 15,36 |                                   | FI-GE-14S3/4N-W3            |
|        | .55                | 9135            |                       | .63 | .79  | 1.81 | 2.20            | 1.50 | 1.26 | 1.06 | 33.86 |                                   |                             |
|        | 16                 | 400             | 3/8 NPT               | 8   | 15   | 39   | 49              | 30,5 | 27   | 30   | 8,66  |                                   | FI-GE-16S3/8N-W3            |
|        | .63                | 5800            |                       | .31 | .59  | 1.54 | 1.93            | 1.20 | 1.06 | 1.18 | 19.06 |                                   |                             |
|        | 16                 | 400             | 1/2 NPT               | 12  | 20   | 44   | 54              | 35,5 | 27   | 30   | 4,42  |                                   | FI-GE-16S1/2N-W3            |
|        | .63                | 5800            |                       | .47 | .79  | 1.73 | 2.13            | 1.40 | 1.06 | 1.18 | 9.72  |                                   |                             |
|        | 16                 | 400             | 3/4 NPT               | 12  | 20   | 45   | 55              | 36,5 | 30   | 30   | 13,97 |                                   | FI-GE-16S3/4N-W3            |
|        | .63                | 5800            |                       | .47 | .79  | 1.77 | 2.17            | 1.44 | 1.18 | 1.18 | 30.73 |                                   |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to ANSI/ASME B1.20.1-1983

Port acc. to ANSI/ASME B1.20.1-1983

Suitable liquid / plastic sealant required.

## Ordering Codes

\*FI-GE\*-10\*S\*1/4\*N\*-W3\*-MS

\* Straight Male Stud Fitting FI-GE

\* Outside Tube Diameter D1 (in mm) -10

\* Series Extra-Light Series (page 65) LL  
Light Series (pages 65/66) L  
Heavy Series (pages 67/68) S

\* Thread Size acc. to dimension table 1/4

Please always indicate thread sizes, e.g. 1/4!

\* Thread Type NPT Thread N

\* Material Code Steel, zinc/nickel-plated -W3

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only —

Fitting body supplied with cutting ring and union nut -MS

Fitting body supplied with soft-sealing cutting ring and union nut -MSV

## Connecting Parts


Cutting Ring  
Type FI-DS Page 28

Soft-Sealing Cutting Ring  
Type FI-WDDS Page 29

Support Sleeve  
Type FI-VH Page 31

STAUFF Form EVO Sealing Ring  
Type FI-FD Page 32

Union Nut  
Type FI-M Page 33

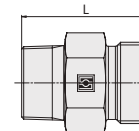
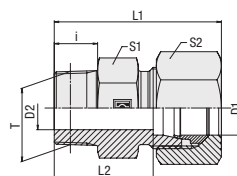
37° Flared Tube Fitting Set  
Type FI-AB Page 37

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.



## Straight Male Stud Fitting Type FI-GE-...-N • Series S



### NPT Thread

#### Ordering Codes

**\*FI-GE\*-10\*S\*1/4\*N\*-W3\*-MS**

|                                                                         |                                                                                                                      |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | <b>FI-GE</b>                                                                                                         |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                                                           |
| * Series                                                                | Extra-Light Series (page 65) <b>LL</b><br>Light Series (pages 65/66) <b>L</b><br>Heavy Series (pages 67/68) <b>S</b> |
| * Thread Size                                                           | acc. to dimension table <b>1/4</b>                                                                                   |
| Please always indicate thread sizes, e.g. 1/4!                          |                                                                                                                      |
| * Thread Type                                                           | NPT Thread <b>N</b>                                                                                                  |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                                                                 |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                      |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b>                                                                                           |
|                                                                         | Fitting body supplied with cutting ring and union nut <b>-MS</b>                                                     |
|                                                                         | Fitting body supplied with soft-sealing cutting ring and union nut <b>-MSV</b>                                       |

| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in) | Thread | T    | D2   | i    | L    | L1 <sup>1</sup> | L2   | S1     | S2 | Weight<br>(kg/lbs) Ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|--------|------|------|------|------|-----------------|------|--------|----|-----------------------------------|-----------------------------|
| S      | 20                 | 400             | 1/2 NPT               | 12     | 20   | 48   | 59   | 37,5 | 32              | 36   | 12,18  |    |                                   | FI-GE-20S1/2N-W3            |
|        | .79                | 5800            |                       | .47    | .79  | 1.89 | 2.32 | 1.48 | 1.26            | 1.42 | 26.80  |    |                                   |                             |
|        | 20                 | 400             | 3/4 NPT               | 16     | 20   | 48   | 59   | 37,5 | 32              | 36   | 15,05  |    |                                   | FI-GE-20S3/4N-W3            |
|        | .79                | 5800            |                       | .63    | .79  | 1.89 | 2.32 | 1.48 | 1.26            | 1.42 | 33.12  |    |                                   |                             |
|        | 20                 | 400             | 1 NPT                 | 16     | 25   | 55   | 66   | 44,5 | 36              | 36   | 25,37  |    |                                   | FI-GE-20S1N-W3              |
|        | .79                | 5800            |                       | .63    | .98  | 2.17 | 2.60 | 1.75 | 1.42            | 1.42 | 55.81  |    |                                   |                             |
|        | 25                 | 400             | 1/2 NPT               | 20     | 20   | 57   | 59   | 45   | 41              | 46   | 30,60  |    |                                   | FI-GE-25S1/2N-W3            |
|        | .98                | 5800            |                       | .79    | .79  | 2.24 | 2.32 | 1.77 | 1.61            | 1.81 | 67.32  |    |                                   |                             |
|        | 25                 | 400             | 3/4 NPT               | 16     | 20   | 52   | 64   | 40   | 41              | 46   | 23,86  |    |                                   | FI-GE-25S3/4N-W3            |
|        | .98                | 5800            |                       | .63    | .79  | 2.05 | 2.52 | 1.57 | 1.61            | 1.81 | 52.48  |    |                                   |                             |
|        | 25                 | 400             | 1 NPT                 | 20     | 25   | 57   | 69   | 45   | 41              | 46   | 28,19  |    |                                   | FI-GE-25S1N-W3              |
|        | .98                | 5800            |                       | .79    | .98  | 2.24 | 2.72 | 1.77 | 1.61            | 1.81 | 62.01  |    |                                   |                             |
|        | 25                 | 400             | 1 1/4 NPT             | 20     | 26   | 58   | 70   | 46   | 46              | 46   | 47,00  |    |                                   | FI-GE-25S1-1/4N-W3          |
|        | .98                | 5800            |                       | .79    | 1.02 | 2.28 | 2.76 | 1.81 | 1.81            | 1.81 | 103.40 |    |                                   |                             |
|        | 30                 | 400             | 3/4 NPT               | 16     | 20   | 54   | 67   | 40,5 | 46              | 50   | 31,29  |    |                                   | FI-GE-30S3/4N-W3            |
|        | 1.18               | 5800            |                       | .63    | .79  | 2.13 | 2.64 | 1.59 | 1.81            | 1.97 | 68.98  |    |                                   |                             |
|        | 30                 | 400             | 1 NPT                 | 20     | 25   | 59   | 72   | 45,5 | 46              | 50   | 34,70  |    |                                   | FI-GE-30S1N-W3              |
|        | 1.18               | 5800            |                       | .79    | .98  | 2.32 | 2.83 | 1.79 | 1.81            | 1.97 | 76.34  |    |                                   |                             |
|        | 30                 | 400             | 1 1/4 NPT             | 25     | 26   | 60   | 73   | 46,5 | 46              | 50   | 36,50  |    |                                   | FI-GE-30S1-1/4N-W3          |
|        | 1.18               | 5800            |                       | .98    | 1.02 | 2.36 | 2.87 | 1.83 | 1.81            | 1.97 | 80.30  |    |                                   |                             |
|        | 30                 | 400             | 1 1/2 NPT             | 25     | 26   | 60   | 73   | 46,5 | 50              | 50   | 36,50  |    |                                   | FI-GE-30S1-1/2N-W3          |
|        | 1.18               | 5800            |                       | .98    | 1.02 | 2.36 | 2.87 | 1.83 | 1.97            | 1.97 | 80.30  |    |                                   |                             |
|        | 38                 | 315             | 1 NPT                 | 20     | 25   | 64   | 79   | 48   | 55              | 60   | 53,6   |    |                                   | FI-GE-38S1N-W3              |
|        | 1.50               | 4568            |                       | .79    | .98  | 2.52 | 3.11 | 1.89 | 2.17            | 2.36 | 118.17 |    |                                   |                             |
|        | 38                 | 315             | 1 1/4 NPT             | 25     | 26   | 65   | 80   | 49   | 55              | 60   | 50,70  |    |                                   | FI-GE-38S1-1/4N-W3          |
|        | 1.50               | 4568            |                       | .98    | 1.02 | 2.56 | 3.15 | 1.93 | 2.17            | 2.36 | 111.54 |    |                                   |                             |
|        | 38                 | 315             | 1 1/2 NPT             | 32     | 26   | 65   | 80   | 49   | 55              | 60   | 50,70  |    |                                   | FI-GE-38S1-1/2N-W3          |
|        | 1.50               | 4568            |                       | 1.26   | 1.02 | 2.56 | 3.15 | 1.93 | 2.17            | 2.36 | 111.54 |    |                                   |                             |

#### Connecting Parts

|                                                                                     |                                                   |         |
|-------------------------------------------------------------------------------------|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to ANSI/ASME B1.20.1-1983

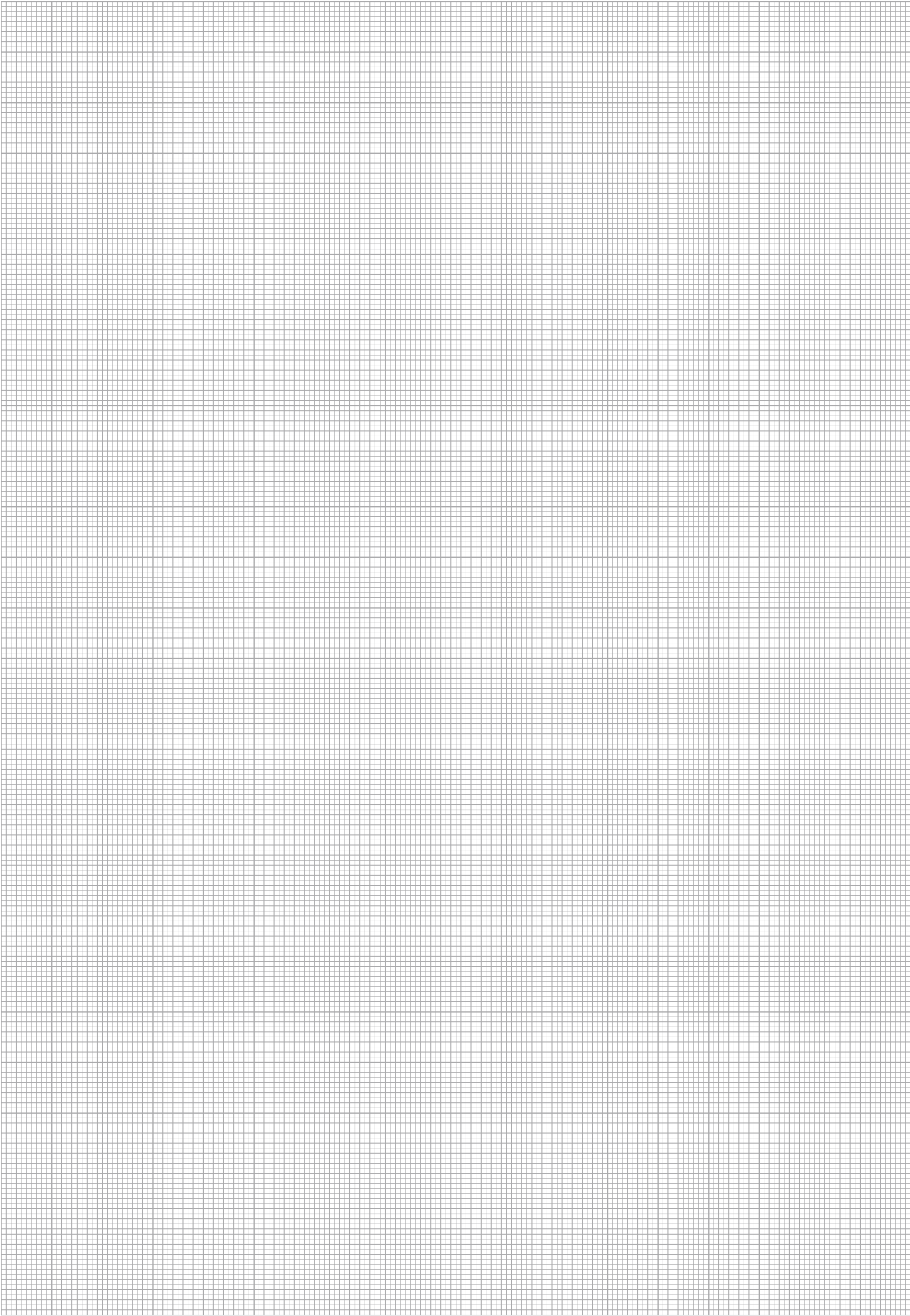
Port acc. to ANSI/ASME B1.20.1-1983

Suitable liquid / plastic sealant required.

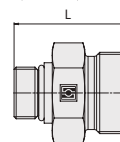
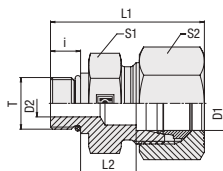
Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.





## Straight Male Stud Fitting Type FI-GE-...-U • Series L



### UN/UNF Thread

### O-Ring

#### Ordering Codes

**\*FI-GE\*-10\*L\*3/4\*U\*-B\*-W3\*-MS**

|                                                                         |                                                                                                                                                                                  |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | <b>FI-GE</b>                                                                                                                                                                     |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                                                                                                                       |
| * Series                                                                | Light Series (pages 70/71) <b>L</b><br>Heavy Series (page 71) <b>S</b>                                                                                                           |
| * Thread Size                                                           | acc. to dimension table <b>3/4</b>                                                                                                                                               |
| Please always indicate thread sizes, e.g. 3/4!                          |                                                                                                                                                                                  |
| * Thread Type                                                           | UN/UNF Thread with O-Ring <b>U</b>                                                                                                                                               |
| * Seal Material                                                         | NBR (Buna-N®) <b>-B</b><br>FKM (Viton®) <b>-V</b><br>EPDM <b>-E</b>                                                                                                              |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                                                                                                                             |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                                                                                  |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b><br>Fitting body supplied with cutting ring and union nut <b>-MS</b><br>Fitting body supplied with soft-sealing cutting ring and union nut <b>-MSV</b> |

#### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

#### Spare Parts / Accessories

|  |                              |          |
|--|------------------------------|----------|
|  | O-Ring<br>Type <b>O-RING</b> | Page 239 |
|--|------------------------------|----------|

| Bau-<br>reihe | Rohr-Ø<br>(mm/in) | PN<br>(bar/PSI) | Abmessungen<br>(mm/in) |     |      |      |                 |      |      |      |           | Drehm.<br>(N·m/ft·lb) | Gewicht<br>(kg/lbs) ca. | Bestellbezeichnungen <sup>3</sup> |
|---------------|-------------------|-----------------|------------------------|-----|------|------|-----------------|------|------|------|-----------|-----------------------|-------------------------|-----------------------------------|
|               | D1                |                 | Gewinde T              | D2  | i    | L    | L1 <sup>1</sup> | L2   | S1   | S2   | Gewinde T | per 100               |                         |                                   |
| L             | 6                 | 400             | 7/16-20 UNF            | 4   | 9    | 26   | 34              | 10   | 17   | 14   | 18        | 2,08                  | FI-GE-06L7/16U-B-W3     |                                   |
|               | .24               | 5800            |                        | .16 | .35  | 1.02 | 1.34            | .39  | .67  | .55  | 13.3      | 4.57                  |                         |                                   |
|               | 6                 | 400             | 9/16-18 UNF            | 4   | 10   | 27   | 35              | 10   | 19   | 14   | 30        | 2,47                  | FI-GE-06L9/16U-B-W3     |                                   |
|               | .24               | 5800            |                        | .16 | .39  | 1.06 | 1.38            | .39  | .75  | .55  | 22.1      | 5.44                  |                         |                                   |
|               | 8                 | 400             | 7/16-20 UNF            | 4,5 | 9    | 26   | 34              | 10   | 17   | 17   | 18        | 2,18                  | FI-GE-08L7/16U-B-W3     |                                   |
|               | .31               | 5800            |                        | .18 | .35  | 1.02 | 1.34            | .39  | .67  | .67  | 13.3      | 4.79                  |                         |                                   |
|               | 8                 | 400             | 1/2-20 UNF             | 6   | 9    | 26   | 34              | 10   | 17   | 17   | 28        | 2,21                  | FI-GE-08L1/2U-B-W3      |                                   |
|               | .31               | 5800            |                        | .24 | .35  | 1.02 | 1.34            | .39  | .67  | .67  | 20.6      | 4.87                  |                         |                                   |
|               | 8                 | 400             | 9/16-18 UNF            | 6   | 10   | 27   | 35              | 10   | 19   | 17   | 30        | 2,76                  | FI-GE-08L9/16U-B-W3     |                                   |
|               | .31               | 5800            |                        | .24 | .39  | 1.06 | 1.38            | .39  | .75  | .67  | 22.1      | 6.06                  |                         |                                   |
|               | 10                | 400             | 7/16-20 UNF            | 4,5 | 9    | 27   | 35              | 11   | 17   | 19   | 18        | 2,17                  | FI-GE-10L7/16U-B-W3     |                                   |
|               | .39               | 5800            |                        | .18 | .35  | 1.06 | 1.38            | .43  | .67  | .75  | 13.3      | 4.78                  |                         |                                   |
|               | 10                | 400             | 9/16-18 UNF            | 7,5 | 10   | 28   | 36              | 11   | 19   | 19   | 30        | 2,70                  | FI-GE-10L9/16U-B-W3     |                                   |
|               | .39               | 5800            |                        | .30 | .39  | 1.10 | 1.42            | .43  | .75  | .75  | 22.1      | 5.94                  |                         |                                   |
|               | 10                | 400             | 3/4-16 UNF             | 8   | 11   | 31   | 39              | 13   | 24   | 19   | 50        | 5,21                  | FI-GE-10L3/4U-B-W3      |                                   |
|               | .39               | 5800            |                        | .31 | .43  | 1.22 | 1.54            | .51  | .94  | .75  | 37.0      | 11.47                 |                         |                                   |
|               | 12                | 400             | 7/16-20 UNF            | 4,5 | 9    | 28   | 35              | 12   | 19   | 22   | 18        | 2,77                  | FI-GE-12L7/16U-B-W3     |                                   |
|               | .47               | 5800            |                        | .18 | .35  | 1.10 | 1.38            | .47  | .75  | .87  | 13.3      | 6.11                  |                         |                                   |
|               | 12                | 400             | 9/16-18 UNF            | 7,5 | 10   | 28   | 36              | 11   | 19   | 22   | 30        | 3,00                  | FI-GE-12L9/16U-B-W3     |                                   |
|               | .47               | 5800            |                        | .30 | .39  | 1.10 | 1.42            | .43  | .75  | .87  | 22.1      | 6.61                  |                         |                                   |
|               | 12                | 400             | 3/4-16 UNF             | 10  | 11   | 31   | 39              | 13   | 24   | 22   | 50        | 4,89                  | FI-GE-12L3/4U-B-W3      |                                   |
|               | .47               | 5800            |                        | .39 | .43  | 1.22 | 1.54            | .51  | .94  | .87  | 37.0      | 10.75                 |                         |                                   |
|               | 12                | 400             | 7/8-14 UNF             | 10  | 12,7 | 34   | 42              | 14,3 | 27   | 22   | 60        | 7,48                  | FI-GE-12L7/8U-B-W3      |                                   |
|               | .47               | 5800            |                        | .39 | .50  | 1.34 | 1.65            | .56  | 1.06 | .87  | 44.4      | 16.46                 |                         |                                   |
|               | 15                | 400             | 9/16-18UNF             | 7,5 | 10   | 31   | 40              | 14   | 24   | 27   | 30        | 4,79                  | FI-GE-15L9/16U-B-W3     |                                   |
|               | .59               | 5800            |                        | .3  | .39  | 1.22 | 1.57            | .55  | .94  | 1.06 | 22.1      | 10.56                 |                         |                                   |
|               | 15                | 400             | 3/4-16 UNF             | 10  | 11   | 32   | 40              | 14   | 24   | 27   | 50        | 2,40                  | FI-GE-15L3/4U-B-W3      |                                   |
|               | .59               | 5800            |                        | .39 | .43  | 1.26 | 1.57            | .55  | .94  | 1.06 | 37.0      | 5.29                  |                         |                                   |
|               | 15                | 400             | 7/8-14 UNF             | 12  | 12,7 | 34,7 | 42,7            | 15   | 27   | 27   | 60        | 7,41                  | FI-GE-15L7/8U-B-W3      |                                   |
|               | .59               | 5800            |                        | .47 | .50  | 1.37 | 1.68            | .59  | 1.06 | 1.06 | 44.4      | 16.30                 |                         |                                   |
|               | 15                | 400             | 1-1/16-12UNF           | 15  | 15   | 39   | 47              | 16,5 | 32   | 27   | 95        | 11,19                 | FI-GE-15L1-1/16U-B-W3   |                                   |
|               | .59               | 5800            |                        | .59 | .59  | 1.54 | 1.85            | .65  | 1.26 | 1.06 | 70.1      | 24.67                 |                         |                                   |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is NBR (Buna-N®).

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

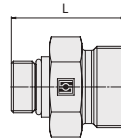
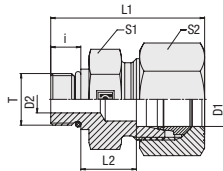
Male stud acc. to ISO 11926-2/-3

Port acc. to ISO 11926-1

Torque recommendations for Steel mating material.



# Straight Male Stud Fitting Type FI-GE-...-U • Series L



C

## UN/UNF Thread

## O-Ring

| Bau-<br>reihe | Rohr-Ø<br>(mm/in) | PN<br>(bar/PSI) | Abmessungen<br>(mm/in) |      |      |      |                 |      |      |      |           |         | Drehm.<br>(N·m/Nt·lb) | Gewicht<br>(kg/lbs) ca. | Bestellbezeichnungen <sup>3</sup> |
|---------------|-------------------|-----------------|------------------------|------|------|------|-----------------|------|------|------|-----------|---------|-----------------------|-------------------------|-----------------------------------|
|               |                   |                 | Gewinde T              | D2   | i    | L    | L1 <sup>1</sup> | L2   | S1   | S2   | Gewinde T | per 100 |                       |                         |                                   |
| L             | 18                | 400             | 3/4-16 UNF             | 10   | 11   | 33   | 42              | 14,5 | 27   | 32   | 50        | 6,86    |                       |                         | FI-GE-18L3/4U-B-W3                |
|               | .71               | 5800            |                        | .39  | .43  | 1.30 | 1.65            | .57  | 1.06 | 1.26 | 37.0      | 15.09   |                       |                         |                                   |
|               | 18                | 400             | 7/8-14 UNF             | 12,5 | 12,7 | 34,7 | 43,7            | 14,5 | 27   | 32   | 60        | 7,36    |                       |                         | FI-GE-18L7/8U-B-W3                |
|               | .71               | 5800            |                        | .49  | .50  | 1.37 | 1.72            | .57  | 1.06 | 1.26 | 44.4      | 16.19   |                       |                         |                                   |
|               | 18                | 400             | 1 1/16-12 UNF          | 15   | 15   | 37   | 45              | 14,5 | 32   | 32   | 95        | 11,04   |                       |                         | FI-GE-18L1-1/16U-B-W3             |
|               | .71               | 5800            |                        | .59  | .59  | 1.46 | 1.77            | .57  | 1.26 | 1.26 | 70.1      | 24.34   |                       |                         |                                   |
|               | 18                | 250             | 1 5/16-12 UNF          | 21,5 | 15   | 15,5 | 47              | 15,5 | 41   | 32   | 150       | 16,08   |                       |                         | FI-GE-18L1-5/16U-B-W3             |
|               | .71               | 3625            |                        | .85  | .59  | .61  | 1.85            | .61  | 1.61 | 1.26 | 111.0     | 35.45   |                       |                         |                                   |
|               | 22                | 250             | 7/8-14 UNF             | 12,5 | 12,7 | 37   | 46              | 16,8 | 32   | 36   | 60        | 9,44    |                       |                         | FI-GE-22L7/8U-B-W3                |
|               | .87               | 3625            |                        | .49  | .50  | 1.46 | 1.81            | .66  | 1.26 | 1.42 | 44.4      | 20.78   |                       |                         |                                   |
|               | 22                | 250             | 1 1/16-12 UN           | 18   | 15   | 39   | 48              | 16,5 | 32   | 36   | 95        | 10,50   |                       |                         | FI-GE-22L1-1/16U-B-W3             |
|               | .87               | 3625            |                        | .71  | .59  | 1.54 | 1.89            | .65  | 1.26 | 1.42 | 70.3      | 23.10   |                       |                         |                                   |
|               | 22                | 250             | 1 5/16-12 UN           | 19   | 15   | 40   | 49              | 17,5 | 41   | 36   | 150       | 18,00   |                       |                         | FI-GE-22L1-5/16U-B-W3             |
|               | .87               | 3625            |                        | .75  | .59  | 1.57 | 1.93            | .69  | 1.61 | 1.42 | 111.0     | 39.60   |                       |                         |                                   |
|               | 28                | 250             | 7/8-14 UNF             | 12,5 | 12,7 | 37,7 | 45,7            | 17,5 | 41   | 41   | 60        | 14,09   |                       |                         | FI-GE-28L7/8U-B-W3                |
|               | 1.10              | 3625            |                        | .49  | .50  | 1.48 | 1.80            | .69  | 1.61 | 1.61 | 44.4      | 31.01   |                       |                         |                                   |
|               | 28                | 250             | 1 1/16-12 UN           | 15   | 15   | 40   | 49              | 17,5 | 41   | 41   | 95        | 15,30   |                       |                         | FI-GE-28L1-1/16U-B-W3             |
|               | 1.10              | 3625            |                        | .59  | .59  | 1.57 | 1.93            | .69  | 1.61 | 1.61 | 70.3      | 33.66   |                       |                         |                                   |
|               | 28                | 250             | 1 5/16-12 UN           | 21,5 | 15   | 40   | 49              | 17,5 | 41   | 41   | 150       | 17,20   |                       |                         | FI-GE-28L1-5/16U-B-W3             |
|               | 1.10              | 3625            |                        | .85  | .59  | 1.57 | 1.93            | .69  | 1.61 | 1.61 | 111.0     | 38.84   |                       |                         |                                   |
|               | 28                | 250             | 1 5/8-12 UN            | 27,5 | 15   | 40   | 51              | 17,5 | 50   | 41   | 200       | 24,51   |                       |                         | FI-GE-28L1-5/8U-B-W3              |
|               | 1.10              | 3625            |                        | 1.08 | .59  | 1.57 | 2.01            | .69  | 1.97 | 1.61 | 148.0     | 54.04   |                       |                         |                                   |
|               | 35                | 250             | 1 5/16-12 UN           | 21,5 | 15   | 43   | 54              | 17,5 | 46   | 50   | 150       | 22,80   |                       |                         | FI-GE-35L1-5/16U-B-W3             |
|               | 1.38              | 3625            |                        | .85  | .59  | 1.69 | 2.13            | .69  | 1.81 | 1.97 | 111.0     | 50.16   |                       |                         |                                   |
|               | 35                | 250             | 1 5/8-12 UN            | 27,5 | 15   | 43   | 54              | 17,5 | 50   | 50   | 200       | 28,00   |                       |                         | FI-GE-35L1-5/8U-B-W3              |
|               | 1.38              | 3625            |                        | 1.08 | .59  | 1.69 | 2.13            | .69  | 1.97 | 1.97 | 148.0     | 61.60   |                       |                         |                                   |
|               | 35                | 250             | 1 7/8-12 UN            | 30   | 15   | 45   | 57              | 19,5 | 55   | 50   | 325       | 31,2    |                       |                         | FI-GE-35L1-7/8U-B-W3              |
|               | 1.38              | 3625            |                        | 1.18 | .59  | 1.77 | 2.24            | .77  | 2.17 | 1.97 | 239.7     | 68.78   |                       |                         |                                   |
|               | 42                | 250             | 1 5/8-12 UN            | 27,5 | 15   | 45   | 57              | 19   | 55   | 60   | 200       | 35,36   |                       |                         | FI-GE-42L1-5/8U-B-W3              |
|               | 1.65              | 3625            |                        | 1.08 | .59  | 1.77 | 2.24            | .75  | 2.17 | 2.36 | 148.0     | 77.79   |                       |                         |                                   |
|               | 42                | 250             | 1 7/8-12 UN            | 33,5 | 15   | 45   | 57              | 19   | 55   | 60   | 325       | 35,5    |                       |                         | FI-GE-42L1-7/8U-B-W3              |
|               | 1.65              | 3625            |                        | 1.32 | .59  | 1.77 | 2.24            | .75  | 2.17 | 2.36 | 239.7     | 78.26   |                       |                         |                                   |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to ISO 11926-2/-3

Port acc. to ISO 11926-1

Torque recommendations for Steel mating material.

Standard seal material is NBR (Buna-N®).

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

## Ordering Codes

\*FI-GE\*-10\*L\*3/4\*U\*-B\*-W3\*-MS

\* Straight Male Stud Fitting FI-GE

\* Outside Tube Diameter D1 (in mm) -10

\* Series Light Series (pages 70/71) L  
Heavy Series (page 71) S

\* Thread Size acc. to dimension table 3/4

Please always indicate thread sizes, e.g. 3/4!

\* Thread Type UN/UNF Thread with O-Ring U

\* Seal Material NBR (Buna-N®) -B  
FKM (Viton®) -V  
EPDM -E

\* Material Code Steel, zinc/nickel-plated -W3

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only —

Fitting body supplied with cutting ring and union nut -MS

Fitting body supplied with soft-sealing cutting ring and union nut -MSV

## Connecting Parts


Cutting Ring  
Type FI-DS Page 28

Soft-Sealing Cutting Ring  
Type FI-WDDS Page 29

Support Sleeve  
Type FI-VH Page 31

STAUFF Form EVO Sealing Ring  
Type FI-FD Page 32

Union Nut  
Type FI-M Page 33

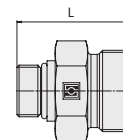
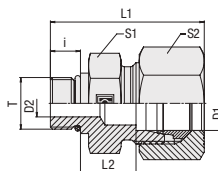
37° Flared Tube Fitting Set  
Type FI-AB Page 37

## Spare Parts / Accessories


O-Ring  
Type O-RING Page 239




## Straight Male Stud Fitting Type FI-GE-...-U • Series S



### O-Ring

### UN/UNF Thread

### Ordering Codes

#### \*FI-GE\*-10\*S\*3/4\*U\*-B\*-W3\*-MS

|                                                                         |                                                                                                                                                                                  |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * Straight Male Stud Fitting                                            | <b>FI-GE</b>                                                                                                                                                                     |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                                                                                                                       |
| * Series                                                                | Light Series (pages 70/71) <b>L</b><br>Heavy Series (page 71) <b>S</b>                                                                                                           |
| * Thread Size                                                           | acc. to dimension table <b>3/4</b>                                                                                                                                               |
| Please always indicate thread sizes, e.g. 3/4!                          |                                                                                                                                                                                  |
| * Thread Type                                                           | UN/UNF Thread with O-Ring <b>U</b>                                                                                                                                               |
| * Seal Material                                                         | NBR (Buna-N®) <b>-B</b><br>FKM (Viton®) <b>-V</b><br>EPDM <b>-E</b>                                                                                                              |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                                                                                                                             |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                                                                                  |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b><br>Fitting body supplied with cutting ring and union nut <b>-MS</b><br>Fitting body supplied with soft-sealing cutting ring and union nut <b>-MSV</b> |

### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

### Spare Parts / Accessories

|  |                              |          |
|--|------------------------------|----------|
|  | O-Ring<br>Type <b>O-RING</b> | Page 239 |
|--|------------------------------|----------|

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in)<br>Thread T | D2   | i    | L    | L1 <sup>1</sup> | L2   | S1   | S2   | Torque<br>(N·m/lb·ft)<br>Thread T | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------------------|------|------|------|-----------------|------|------|------|-----------------------------------|-----------------------------------|-----------------------------|
| S      | 6                        | 630             | 7/16-20 UNF                       | 4    | 9    | 26   | 36              | 10   | 17   | 17   | 20                                | 2,16                              | FI-GE-06S7/16U-B-W3         |
|        | .24                      | 9135            |                                   | .16  | .35  | 1.02 | 1.42            | .39  | .67  | .67  | 14.7                              | 4.76                              |                             |
|        | 8                        | 630             | 7/16-20 UNF                       | 4,5  | 11   | 29   | 38              | 11   | 17   | 19   | 20                                | 2,65                              | FI-GE-08S7/16U-B-W3         |
|        | .31                      | 9135            |                                   | .18  | .43  | 1.14 | 1.50            | .43  | .67  | .75  | 14.7                              | 5.83                              |                             |
|        | 8                        | 630             | 9/16-18 UNF                       | 5    | 12   | 32   | 39,5            | 12,5 | 19   | 19   | 35                                | 3,91                              | FI-GE-08S9/16U-B-W3         |
|        | .31                      | 9135            |                                   | .2   | .47  | 1.26 | 1.56            | .49  | .75  | .75  | 25.8                              | 8.62                              |                             |
|        | 10                       | 630             | 9/16-18 UNF                       | 7    | 12   | 32   | 41              | 12,5 | 19   | 22   | 35                                | 3,73                              | FI-GE-10S9/16U-B-W3         |
|        | .39                      | 9135            |                                   | .28  | .47  | 1.26 | 1.61            | .49  | .75  | .87  | 25.8                              | 8.20                              |                             |
|        | 10                       | 630             | 3/4-16 UNF                        | 7    | 11   | 33,5 | 42              | 15   | 24   | 22   | 70                                | 6,53                              | FI-GE-10S3/4U-B-W3          |
|        | .39                      | 9135            |                                   | .28  | .43  | 1.32 | 1.65            | .59  | .94  | .87  | 51.8                              | 14.40                             |                             |
|        | 12                       | 630             | 9/16-18 UNF                       | 7,5  | 12   | 36   | 45              | 16,5 | 24   | 24   | 35                                | 6,09                              | FI-GE-12S9/16U-B-W3         |
|        | .47                      | 9135            |                                   | .30  | .47  | 1.42 | 1.77            | .65  | .94  | .94  | 25.8                              | 13.40                             |                             |
|        | 12                       | 630             | 3/4-16 UNF                        | 8    | 14   | 36   | 45              | 14,5 | 24   | 24   | 70                                | 6,89                              | FI-GE-12S3/4U-B-W3          |
|        | .47                      | 9135            |                                   | .31  | .55  | 1.42 | 1.77            | .57  | .94  | .94  | 51.8                              | 15.15                             |                             |
|        | 12                       | 630             | 3/4-16 UNF                        | 7    | 16   | 33,5 | 42              | 15   | 24   | 22   | 70                                | 7,56                              | FI-GE-12S3/4U-B-W3          |
|        | .47                      | 9135            |                                   | .28  | .63  | 1.32 | 1.65            | .59  | .94  | .87  | 51.8                              | 16.67                             |                             |
|        | 16                       | 630             | 3/4-16 UNF                        | 10   | 14   | 36   | 45              | 13,5 | 24   | 30   | 70                                | 6,68                              | FI-GE-16S3/4U-B-W3          |
|        | .63                      | 9135            |                                   | .39  | .55  | 1.42 | 1.77            | .53  | .94  | 1.18 | 51.8                              | 14.70                             |                             |
|        | 16                       | 630             | 7/8-14 UNF                        | 12   | 16   | 39,7 | 49,7            | 15,2 | 27   | 30   | 100                               | 9,47                              | FI-GE-16S7/8U-B-W3          |
|        | .63                      | 9135            |                                   | .47  | .63  | 1.56 | 1.96            | .60  | 1.06 | 1.18 | 74.0                              | 20.84                             |                             |
|        | 16                       | 630             | 1 1/16-12 UNF                     | 15   | 18,5 | 47,5 | 59              | 20,5 | 32   | 30   | 170                               | 15,76                             | FI-GE-16S1-1/16U-B-W3       |
|        | .63                      | 9135            |                                   | .59  | .73  | 1.87 | 2.32            | .81  | 1.26 | 1.18 | 125.8                             | 34.74                             |                             |
|        | 20                       | 420             | 3/4-16 UNF                        | 10   | 14   | 42   | 53              | 17,5 | 32   | 36   | 70                                | 11,83                             | FI-GE-20S3/4U-B-W3          |
|        | .79                      | 6091            |                                   | .39  | .55  | 1.65 | 2.09            | .69  | 1.26 | 1.42 | 51.8                              | 26.02                             |                             |
|        | 20                       | 420             | 7/8-14 UNF                        | 12,5 | 16   | 44   | 55              | 17,5 | 32   | 36   | 100                               | 15,20                             | FI-GE-20S7/8U-B-W3          |
|        | .79                      | 6091            |                                   | .49  | .63  | 1.73 | 2.17            | .69  | 1.26 | 1.42 | 74.0                              | 33.44                             |                             |
|        | 20                       | 420             | 1 1/16-12 UN                      | 15   | 18,5 | 46   | 57              | 17   | 32   | 36   | 170                               | 19,70                             | FI-GE-20S1-1/16U-B-W3       |
|        | .79                      | 6091            |                                   | .59  | .73  | 1.81 | 2.24            | .67  | 1.26 | 1.42 | 125.8                             | 43.34                             |                             |
|        | 20                       | 420             | 1 5/16-12 UNF                     | 21,5 | 18,5 | 48   | 58              | 19   | 41   | 36   | 270                               | 22,65                             | FI-GE-20S1-5/16U-B-W3       |
|        | .79                      | 6091            |                                   | .85  | .73  | 1.89 | 2.28            | .75  | 1.61 | 1.42 | 199.8                             | 49.93                             |                             |
|        | 25                       | 420             | 1 1/16-12 UN                      | 15   | 18,5 | 50   | 62              | 19,5 | 36   | 46   | 170                               | 24,20                             | FI-GE-25S1-1/16U-B-W3       |
|        | .98                      | 6091            |                                   | .59  | .73  | 1.97 | 2.44            | .77  | 1.42 | 1.81 | 125.8                             | 53.24                             |                             |
|        | 25                       | 420             | 1 5/16-12 UN                      | 20   | 18,5 | 50   | 62              | 19,5 | 41   | 46   | 270                               | 28,90                             | FI-GE-25S1-5/16U-B-W3       |
|        | .98                      | 6091            |                                   | .79  | .73  | 1.97 | 2.44            | .77  | 1.61 | 1.81 | 199.8                             | 63.58                             |                             |
|        | 30                       | 420             | 1 1/16-12 UN                      | 15   | 18,5 | 52   | 66              | 20   | 50   | 50   | 170                               | 30,45                             | FI-GE-30S1-1/16U-B-W3       |
|        | 1.18                     | 6091            |                                   | .59  | .73  | 2.05 | 2.60            | .79  | 1.97 | 1.97 | 125.8                             | 67.13                             |                             |
|        | 30                       | 420             | 1 5/16-12 UN                      | 21,5 | 18,5 | 52   | 65              | 20   | 46   | 50   | 270                               | 30,70                             | FI-GE-30S1-5/16U-B-W3       |
|        | 1.18                     | 6091            |                                   | .85  | .73  | 2.05 | 2.56            | .79  | 1.81 | 1.97 | 199.8                             | 67.54                             |                             |
|        | 30                       | 420             | 1 5/8-12 UN                       | 25   | 18,5 | 52   | 65              | 20   | 50   | 50   | 285                               | 38,10                             | FI-GE-30S1-5/8U-B-W3        |
|        | 1.18                     | 6091            |                                   | .98  | .73  | 2.05 | 2.56            | .79  | 1.97 | 1.97 | 210.9                             | 83.82                             |                             |
|        | 38                       | 315             | 1 5/8-12 UN                       | 27,5 | 18,5 | 57   | 72              | 22,5 | 55   | 60   | 285                               | 47,6                              | FI-GE-38S1-5/8U-B-W3        |
|        | 1.50                     | 4568            |                                   | 1.08 | .73  | 2.24 | 2.83            | .89  | 2.17 | 2.36 | 210.9                             | 104.72                            |                             |
|        | 38                       | 315             | 1 7/8-12 UN                       | 32   | 18,5 | 57   | 72              | 22,5 | 55   | 60   | 415                               | 50,70                             | FI-GE-38S1-7/8U-B-W3        |
|        | 1.50                     | 4568            |                                   | 1.26 | .73  | 2.24 | 2.83            | .89  | 2.17 | 2.36 | 306.1                             | 111.54                            |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to ISO 11926-2/-3

Port acc. to ISO 11926-1

Torque recommendations for Steel mating material.

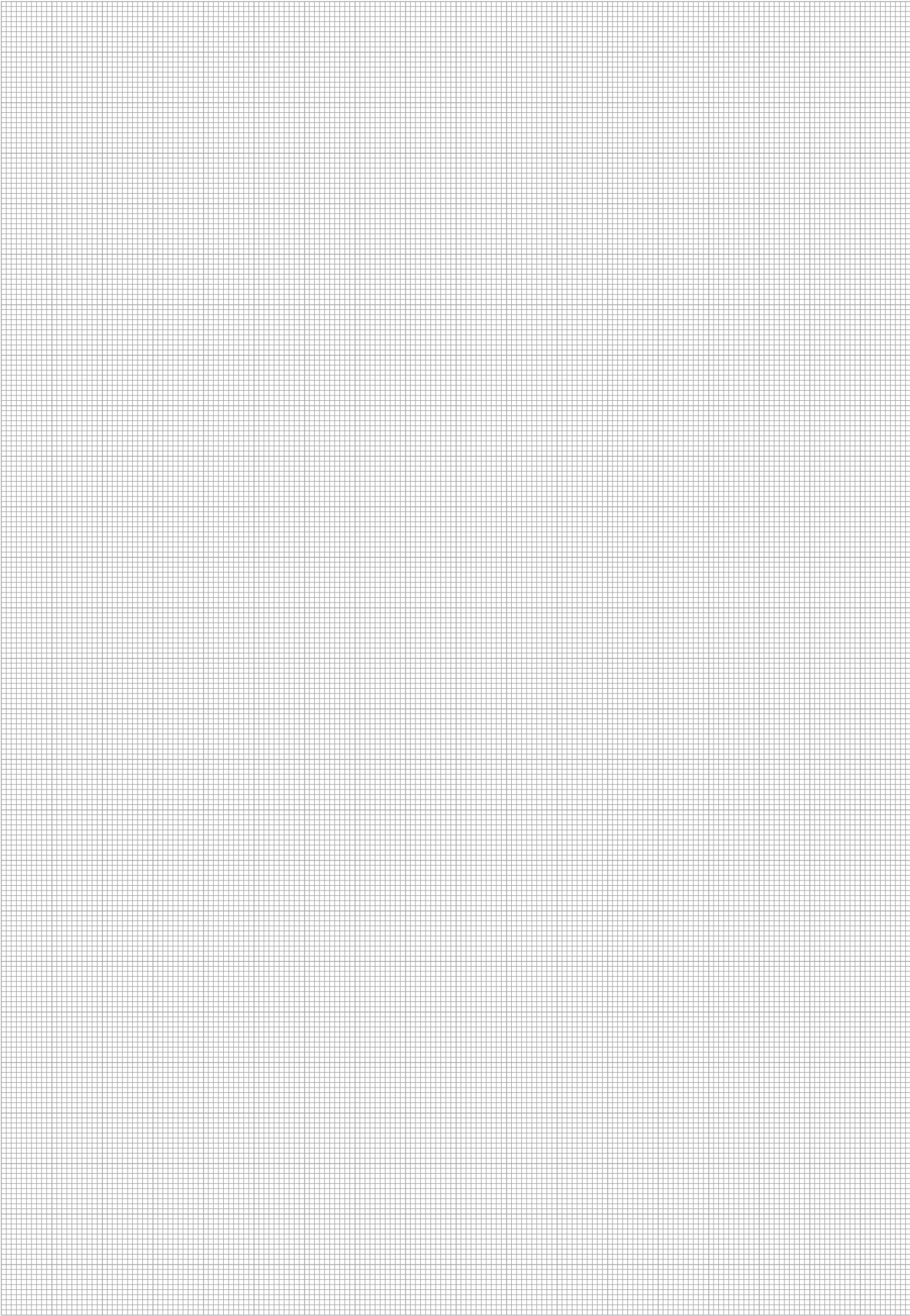
Standard seal material is NBR (Buna-N®).

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

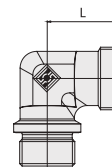
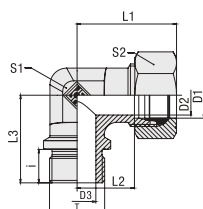






## Male Stud Elbow

### Type FI-WE-...-R • Series L / S



### Ordering Codes

#### \*FI-WE\*-25\*S\*R\*-W3\*-MS

|                                                                         |                                                                    |                      |
|-------------------------------------------------------------------------|--------------------------------------------------------------------|----------------------|
| * Male Stud Elbow                                                       |                                                                    | <b>FI-WE</b>         |
| * Outside Tube Diameter D1 (in mm)                                      |                                                                    | <b>-25</b>           |
| * Series                                                                | Light Series<br>Heavy Series                                       | <b>L</b><br><b>S</b> |
| * Thread Type                                                           | Whitworth Parallel<br>Pipe Thread (BSPP)                           | <b>R</b>             |
| If required, please indicate special sizes, e.g. R3/4!                  |                                                                    |                      |
| * Material Code                                                         | Steel, zinc/nickel-plated                                          | <b>-W3</b>           |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                    |                      |
| * Assembling / Kitting                                                  | Fitting body only                                                  | <b>—</b>             |
|                                                                         | Fitting body supplied with cutting ring and union nut              | <b>-MS</b>           |
|                                                                         | Fitting body supplied with soft-sealing cutting ring and union nut | <b>-MSV</b>          |

### Whitworth Parallel Pipe Thread (BSPP)

### Metallic Sealing Edge

| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in) | Thread | T    | D2  | D3   | i    | L    | L1 <sup>1</sup> | L2   | L3   | S1    | S2    | Torque<br>(N·m/ft·lb) | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|--------|------|-----|------|------|------|-----------------|------|------|-------|-------|-----------------------|-----------------------------------|-----------------------------|
| L      | 22                 | 160             | G 3/4                 | 19     | 18   | 16  | 35   | 44   | 27,5 | 42              | 27   | 36   | 180   | 1,78  |                       |                                   | FI-WE-22LR-W3               |
|        | .87                | 2320            |                       | .75    | .71  | .63 | 1.38 | 1.73 | 1.08 | 1.65            | 1.06 | 1.42 | 133,2 | 3.92  |                       |                                   |                             |
|        | 28                 | 160             | G 1                   | 24     | 23   | 18  | 38   | 47   | 30,5 | 48              | 36   | 41   | 330   | 3,12  |                       |                                   | FI-WE-28LR-W3               |
|        | 1.10               | 2320            |                       | .94    | .91  | .71 | 1.50 | 1.85 | 1.20 | 1.89            | 1.42 | 1.61 | 244,2 | 6.86  |                       |                                   |                             |
|        | 35                 | 160             | G 1 1/4               | 30     | 30   | 20  | 45   | 56   | 34,5 | 54              | 41   | 50   | 540   | 4,67  |                       |                                   | FI-WE-35LR-W3               |
|        | 1.38               | 2320            |                       | 1.18   | 1.18 | .79 | 1.77 | 2.20 | 1.36 | 2.13            | 1.61 | 1.97 | 399,6 | 10.27 |                       |                                   |                             |
|        | 42                 | 160             | G 1 1/2               | 36     | 36   | 22  | 51   | 63   | 40   | 61              | 50   | 60   | 630   | 6,90  |                       |                                   | FI-WE-42LR-W3               |
|        | 1.65               | 2320            |                       | 1.42   | 1.42 | .87 | 2.01 | 2.48 | 1.57 | 2.40            | 1.97 | 2.36 | 466,2 | 15.18 |                       |                                   |                             |
| S      | 20                 | 420             | G 3/4                 | 16     | 16   | 16  | 37   | 48   | 26,5 | 42              | 27   | 36   | 270   | 2,15  |                       |                                   | FI-WE-20SR-W3               |
|        | .79                | 6090            |                       | .63    | .63  | .63 | 1.46 | 1.89 | 1.04 | 1.65            | 1.06 | 1.42 | 199,8 | 4.73  |                       |                                   |                             |
|        | 25                 | 420             | G 3/4                 | 20     | 18   | 16  | 42   | 54   | 30   | 48              | 36   | 46   | 270   | 3,77  |                       |                                   | FI-WE-25SR3/4-W3            |
|        | .98                | 6090            |                       | .79    | .71  | .63 | 1.65 | 2.13 | 1.18 | 1.89            | 1.42 | 1.81 | 199,8 | 8.29  |                       |                                   |                             |
|        | 25                 | 420             | G 1                   | 20     | 20   | 18  | 42   | 54   | 30   | 48              | 36   | 46   | 340   | 4,06  |                       |                                   | FI-WE-25SR-W3               |
|        | .98                | 6090            |                       | .79    | .79  | .71 | 1.65 | 2.13 | 1.18 | 1.89            | 1.42 | 1.81 | 251,6 | 8.93  |                       |                                   |                             |
|        | 30                 | 250             | G 1 1/4               | 25     | 25   | 20  | 49   | 62   | 35,5 | 54              | 41   | 50   | 540   | 6,28  |                       |                                   | FI-WE-30SR-W3               |
|        | 1.18               | 3625            |                       | .98    | .98  | .79 | 1.93 | 2.44 | 1.40 | 2.13            | 1.61 | 1.97 | 399,6 | 13.82 |                       |                                   |                             |
|        | 38                 | 250             | G 1 1/2               | 32     | 32   | 22  | 57   | 72   | 41   | 61              | 50   | 60   | 700   | 9,15  |                       |                                   | FI-WE-38SR-W3               |
|        | 1.50               | 3625            |                       | 1.26   | 1.26 | .87 | 2.24 | 2.83 | 1.61 | 2.40            | 1.97 | 2.36 | 518,0 | 20.13 |                       |                                   |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-2 (Form B) / ISO 1179-4 (Type B)  
Port acc. to DIN 3852-2 (Form X) / ISO 1179-1

Torque recommendations for Steel mating material.

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33

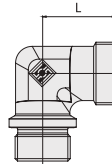
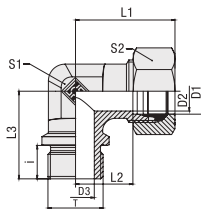


37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.





## Male Stud Elbow Type FI-WE-...-M • Series L / S



C

### Metallic Sealing Edge

### Metric Parallel Thread

| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in) | Torque<br>(Nm/ft-lb)                        | Weight<br>(kg/lbs) ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|---------------------------------------------|------------------------|-----------------------------|
| L      | 22                 | 250             | M 26 x 1.5            | 19                                          | 1.73                   | FI-WE-22LM-W3               |
|        | .87                | 3625            | 1.5                   | .75 .71 .63 1.38 1.73 1.08 1.65 1.06 1.42   | 140,6                  | 3,81                        |
|        | 28                 | 250             | M 33 x 2              | 24                                          | 3,04                   | FI-WE-28LM-W3               |
|        | 1.10               | 3625            | 2                     | .94 .91 .71 1.50 1.85 1.20 1.89 1.42 1.61   | 251,6                  | 6,69                        |
|        | 35                 | 250             | M 42 x 2              | 30                                          | 4,70                   | FI-WE-35LM-W3               |
|        | 1.38               | 3625            | 2                     | 1.18 1.18 .79 1.77 2.20 1.36 2.13 1.61 1.97 | 370,0                  | 10,35                       |
|        | 42                 | 250             | M 48 x 2              | 36                                          | 6,96                   | FI-WE-42LM-W3               |
|        | 1.65               | 3625            | 2                     | 1.42 1.42 .87 2.01 2.48 1.57 2.40 1.97 2.36 | 466,2                  | 15,31                       |
|        | 20                 | 420             | M 27 x 2              | 16                                          | 2,14                   | FI-WE-20SM-W3               |
|        | .79                | 6090            | 2                     | .63 .63 .63 1.46 1.89 1.04 1.65 1.06 1.42   | 199,8                  | 4,71                        |
| S      | 25                 | 250             | M 33 x 2              | 20                                          | 4,46                   | FI-WE-25SM-W3               |
|        | .98                | 3625            | 2                     | .79 .79 .71 1.65 2.13 1.18 1.89 1.42 1.81   | 303,4                  | 9,81                        |
|        | 30                 | 250             | M 42 x 2              | 25                                          | 6,33                   | FI-WE-30SM-W3               |
|        | 1.18               | 3625            | 2                     | .98 .98 .79 1.93 2.44 1.40 2.13 1.61 1.97   | 399,6                  | 13,93                       |
|        | 38                 | 250             | M 48 x 2              | 32                                          | 9,24                   | FI-WE-38SM-W3               |
|        | 1.50               | 3625            | 2                     | 1.26 1.26 .87 2.24 2.83 1.61 2.40 1.97 2.36 | 518,0                  | 20,33                       |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-1 (Form B) / ISO 9974-3 (Type B)  
Port acc. to DIN 3852-1 (Form X) / ISO 9974-1

Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

#### \*FI-WE\*-25\*S\*M\*-W3\*-MS

|                                                                         |                                                                         |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------|
| * Male Stud Elbow                                                       | FI-WE                                                                   |
| * Outside Tube Diameter D1 (in mm)                                      | -25                                                                     |
| * Series                                                                | Light Series L<br>Heavy Series S                                        |
| * Thread Type                                                           | Metric Parallel Thread M                                                |
| If required, please indicate special sizes, e.g. M27x2!                 |                                                                         |
| * Material Code                                                         | Steel, zinc/nickel-plated -W3                                           |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                         |
| * Assembling / Kitting                                                  | Fitting body only —                                                     |
|                                                                         | Fitting body supplied with cutting ring and union nut -MS               |
|                                                                         | Fitting body supplied with soft-sealing cutting ring and union nut -MSV |

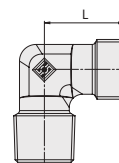
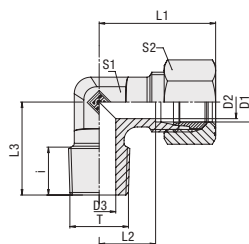
### Connecting Parts

|  |                                            |         |
|--|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |



## Male Stud Elbow

### Type FI-WE-...-Rk • Series LL / L



C



...-PR

### Ordering Codes

#### \*FI-WE\*-10\*L\*Rk\*-W3\*-MS

|                                                                         |                                                                                                                                                             |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * Male Stud Elbow                                                       | FI-WE                                                                                                                                                       |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                                                                                                                         |
| * Series                                                                | Extra-Light Series (page 76) LL<br>Light Series (page 76) L<br>Heavy Series (page 77) S                                                                     |
| * Thread Type                                                           | Whitworth Taper Pipe Thread (BSPT) Rk                                                                                                                       |
| If required, please indicate special sizes, e.g. R3/8k!                 |                                                                                                                                                             |
| * Material Code                                                         | Steel, zinc/nickel-plated -W3                                                                                                                               |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                                                             |
| * Design                                                                | Made from forging blanks —<br>Made from profile material PR                                                                                                 |
| * Assembling / Kitting                                                  | Fitting body only —<br>Fitting body supplied with cutting ring and union nut -MS<br>Fitting body supplied with soft-sealing cutting ring and union nut -MSV |

### Connecting Parts

|  |                                            |         |
|--|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Whitworth Taper Pipe Thread (BSPT)

| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in) |            |     |      |      |      |      |                 |      |        | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------------|-----|------|------|------|------|-----------------|------|--------|-----------------------------------|-----------------------------|
|        |                    |                 | D1                    | Thread     | T   | D2   | D3   | i    | L    | L1 <sup>1</sup> | L2   | L3     |                                   |                             |
| LL     | 4                  | 100             | R 1/8 keg.            | 3          | 3   | 8    | 15   | 21   | 11   | 17              | 11   | 10     | 1,46                              | FI-WE-04LLRk-W3-PR          |
|        | .16                | 1450            |                       | .12        | .12 | .31  | .59  | .83  | .43  | .67             | .43  | .39    | 3.12                              |                             |
|        | 6                  | 100             |                       | R 1/8 keg. | 4,5 | 4,5  | 8    | 15   | 21   | 9,5             | 17   | 11     | 12                                | 1,73                        |
|        | .24                | 1450            | .18                   |            | .18 | .31  | .59  | .83  | .37  | .67             | .43  | .47    | 3,81                              |                             |
|        | 8                  | 100             | R 1/8 keg.            | 6          | 6   | 8    | 17   | 23   | 11,5 | 20              | 12   | 14     | 2,63                              | FI-WE-08LLRk-W3-PR          |
|        | .31                | 1450            |                       | .24        | .24 | .31  | .67  | .91  | .45  | .79             | .47  | .55    | 5,79                              |                             |
|        | 10                 | 100             | R 1/4 keg.            | 8          | 7   | 12   | 21,5 | 27,5 | 16   | 26              | 14   | 14     | 9,10                              | FI-WE-10LLRk-W3             |
|        | .39                | 1450            |                       | .31        | .28 | .47  | .85  | 1,08 | .63  | 1,02            | .55  | .55    | 20,02                             |                             |
|        | 12                 | 100             | R 1/4 keg.            | 10         | 7   | 9,9  | 22   | 28   | 16   | 23              | 14   | 17     | 11,40                             | FI-WE-12LLRk-W3             |
| .47    | 1450               | .39             |                       | .28        | .39 | .87  | 1,10 | .63  | .91  | .55             | .67  | 25,08  |                                   |                             |
| L      | 6                  | 315             | R 1/8 keg.            | 4          | 4   | 8    | 19   | 27   | 12   | 20              | 12   | 14     | 1,96                              | FI-WE-06LRk-W3              |
|        | .24                | 4568            |                       | .16        | .16 | .31  | .75  | 1,06 | .47  | .79             | .47  | .55    | 4,32                              |                             |
|        | 6                  | 315             | R 1/4 keg.            | 4          | 6   | 12   | 21   | 29   | 14   | 25,5            | 12   | 14     | 2,93                              | FI-WE-06LR1/4k-W3           |
|        | .24                | 4568            |                       | .16        | .24 | .47  | .83  | 1,14 | .55  | 1,00            | .47  | .55    | 6,44                              |                             |
|        | 6                  | 315             | R 3/8 keg.            | 4          | 9   | 12   | 24   | 31   | 17   | 28              | 14   | 14     | 4,42                              | FI-WE-06LR3/8k-W3           |
|        | .24                | 4568            |                       | .16        | .35 | .47  | .94  | 1,22 | .67  | 1,1             | .55  | .55    | 9,74                              |                             |
|        | 8                  | 315             | R 1/8 keg.            | 6          | 4   | 8    | 21   | 29   | 14   | 26              | 12   | 17     | 2,64                              | FI-WE-08LR1/8k-W3           |
|        | .31                | 4568            |                       | .24        | .16 | .31  | .83  | 1,14 | .55  | 1,02            | .47  | .67    | 5,80                              |                             |
|        | 8                  | 315             | R 1/4 keg.            | 6          | 6   | 12   | 21   | 29   | 14   | 26              | 12   | 17     | 2,93                              | FI-WE-08LRk-W3              |
|        | .31                | 4568            |                       | .24        | .24 | .47  | .83  | 1,14 | .55  | 1,02            | .47  | .67    | 6,45                              |                             |
|        | 8                  | 315             | R 3/8 keg.            | 6          | 9   | 14   | 24   | 32   | 17   | 28              | 14   | 17     | 4,34                              | FI-WE-08LR3/8k-W3           |
|        | .31                | 4568            |                       | .24        | .35 | .55  | .94  | 1,26 | .67  | 1,10            | .55  | .67    | 9,54                              |                             |
|        | 10                 | 315             | R 1/8 keg.            | 8          | 6   | 7,3  | 22,5 | 29   | 15,5 | 20              | 14   | 19     | 2,96                              | FI-WE-10LR1/8k-W3           |
|        | .39                | 4568            |                       | .31        | .24 | .29  | .89  | 1,14 | .61  | .79             | .55  | .75    | 6,53                              |                             |
|        | 10                 | 315             | R 1/4 keg.            | 8          | 7   | 13   | 22   | 30   | 15   | 27              | 14   | 19     | 3,53                              | FI-WE-10LRk-W3              |
|        | .39                | 4568            |                       | .31        | .28 | .51  | .87  | 1,18 | .59  | 1,06            | .55  | .75    | 7,76                              |                             |
|        | 10                 | 315             | R 3/8 keg.            | 8          | 8   | 12,5 | 22   | 30   | 15   | 28              | 14   | 19     | 4,29                              | FI-WE-10LR3/8k-W3           |
|        | .39                | 4568            |                       | .31        | .31 | .49  | .87  | 1,18 | .59  | 1,10            | .55  | .75    | 9,43                              |                             |
|        | 10                 | 315             | R 1/2 keg.            | 8          | 11  | 14   | 28   | 35   | 21   | 34              | 19   | 19     | 9,56                              | FI-WE-10LR1/2k-W3           |
|        | .39                | 4568            |                       | .31        | .43 | .55  | 1,1  | 1,38 | .83  | 1,34            | .75  | .75    | 21,08                             |                             |
|        | 12                 | 315             | R 1/4 keg.            | 10         | 7   | 14,3 | 24   | 32   | 17   | 27              | 17   | 22     | 4,57                              | FI-WE-12LR1/4k-W3           |
|        | .47                | 4568            |                       | .39        | .28 | .56  | .94  | 1,26 | .67  | 1,06            | .67  | .87    | 10,06                             |                             |
|        | 12                 | 315             | R 3/8 keg.            | 10         | 9   | 13   | 24   | 32   | 17   | 28,5            | 17   | 22     | 5,33                              | FI-WE-12LRk-W3              |
|        | .47                | 4568            |                       | .39        | .35 | .51  | .94  | 1,26 | .67  | 1,12            | .67  | .87    | 11,72                             |                             |
|        | 12                 | 315             | R 1/2 keg.            | 10         | 10  | 14   | 28   | 36   | 21   | 34              | 19   | 22     | 9,94                              | FI-WE-12LR1/2k-W3           |
|        | .47                | 4568            |                       | .39        | .39 | .55  | 1,10 | 1,42 | .83  | 1,34            | .75  | .87    | 21,87                             |                             |
|        | 15                 | 315             | R 3/8 keg.            | 12         | 9   | 14   | 28   | 36   | 21   | 34              | 19   | 27     | 8,79                              | FI-WE-15LR3/8k-W3           |
|        | .59                | 4568            |                       | .47        | .35 | .55  | 1,10 | 1,42 | .83  | 1,34            | .75  | 1,06   | 19,33                             |                             |
|        | 15                 | 315             | R 1/2 keg.            | 12         | 12  | 16   | 28   | 36   | 21   | 34              | 19   | 27     | 9,12                              | FI-WE-15LRk-W3              |
|        | .59                | 4568            |                       | .47        | .47 | .63  | 1,10 | 1,42 | .83  | 1,34            | .75  | 1,06   | 20,06                             |                             |
|        | 15                 | 315             | R 3/4 keg.            | 12         | 12  | 17   | 33   | 40   | 26   | 36              | 24   | 27     | 4,05                              | FI-WE-15LR3/4K-W3           |
|        | .59                | 4568            |                       | .47        | .47 | .67  | 1,3  | 1,57 | 1,02 | 1,42            | .94  | 1,06   | 8,93                              |                             |
|        | 18                 | 315             | R 1/2 keg.            | 15         | 14  | 17,5 | 31   | 40   | 23,5 | 36              | 24   | 32     | 11,63                             | FI-WE-18LRk-W3              |
|        | .71                | 4568            |                       | .59        | .55 | .69  | 1,22 | 1,57 | .93  | 1,42            | .94  | 1,26   | 25,58                             |                             |
|        | 18                 | 315             | R 3/4 keg.            | 15         | 16  | 16   | 31   | 41,5 | 23,5 | 36              | 27   | 32     | 13,2                              | FI-WE-18LR3/4k-W3           |
|        | .71                | 4568            |                       | .59        | .63 | .63  | 1,22 | 1,63 | .93  | 1,42            | 1,06 | 1,26   | 29,10                             |                             |
|        | 22                 | 160             | R 3/4 keg.            | 19         | 18  | 17   | 35   | 44   | 28,5 | 42,5            | 27   | 36     | 16,80                             | FI-WE-22LRk-W3              |
|        | .87                | 2320            |                       | .75        | .71 | .67  | 1,38 | 1,73 | 1,12 | 1,67            | 1,06 | 1,42   | 36,96                             |                             |
|        | 28                 | 160             | R 1 keg.              | 24         | 23  | 20   | 38   | 47   | 30,5 | 48              | 36   | 41     | 30,7                              | FI-WE-28LRk-W3              |
|        | 1.1                | 2320            |                       | .94        | .91 | .79  | 1,5  | 1,85 | 1,20 | 1,89            | 1,42 | 1,61   | 67,68                             |                             |
| 35     | 160                | R 1 1/4         | 30                    | 30         | 20  | 48   | 59   | 37,5 | 51   | 41              | 50   | 46,7   | FI-WE-35LRk-W3                    |                             |
| 1.38   | 2320               | keg.            | 1.18                  | 1.18       | .79 | 1,89 | 2,32 | 1,48 | 2,01 | 1,61            | 1,97 | 102,96 |                                   |                             |
| 42     | 160                | R 1 1/2         | 36                    | 36         | 20  | 54   | 59   | 43   | 61   | 50              | 60   | 72,3   | FI-WE-42LRk-W3                    |                             |
| 1.65   | 2320               | keg.            | 1.42                  | 1.42       | .79 | 2,13 | 2,32 | 1,69 | 2,4  | 1,97            | 2,36 | 159,39 |                                   |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

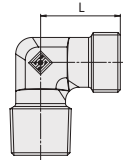
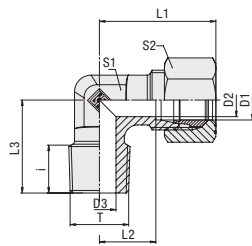
<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-2 (Form C)

Port acc. to DIN 3852-2 (Form Z)

Suitable liquid / plastic sealant required.





## Male Stud Elbow Type FI-WE-...-Rk ■ Series S



C

### Whitworth Taper Pipe Thread (BSPT)

| Series | Tube OD | PN        | Dimensions   |              |      |      |     |      |                 |      |      |      |      | Weight       | Ordering Codes <sup>3</sup> |
|--------|---------|-----------|--------------|--------------|------|------|-----|------|-----------------|------|------|------|------|--------------|-----------------------------|
|        | (mm/in) | (bar/psi) | (mm/in)      |              |      |      |     |      |                 |      |      |      |      | (kg/lbs) ca. |                             |
|        | D1      |           | Thread       | T            | D2   | D3   | i   | L    | L1 <sup>1</sup> | L2   | L3   | S1   | S2   | per 100      |                             |
| S      | 6       | 400       | R 1/4 keg.   |              | 4    | 4    | 12  | 23   | 31              | 16   | 26   | 12   | 17   | 5,73         | FI-WE-06SRk-W3              |
|        | .24     | 5800      |              |              | .16  | .16  | .47 | .91  | 1.22            | .63  | 1.02 | .47  | .67  | 12.60        |                             |
|        | 8       | 400       |              | R 1/4 keg.   | 5    | 5    | 13  | 24   | 32              | 17   | 27   | 14   | 19   | 4,70         |                             |
|        | .31     | 5800      |              |              | .20  | .20  | .51 | .94  | 1.26            | .67  | 1.06 | .55  | .75  | 10.34        |                             |
|        | 10      | 400       | R 1/4 keg.   |              | 7    | 5    | 13  | 25   | 34              | 17,5 | 28   | 17   | 22   | 5,94         |                             |
|        | .39     | 5800      |              |              | .28  | .20  | .51 | .98  | 1.34            | .69  | 1.10 | .67  | .87  | 13.06        |                             |
|        | 10      | 400       |              | R 3/8 keg.   | 7    | 7    | 13  | 25   | 34              | 17,5 | 28   | 17   | 22   | 6,71         |                             |
|        | .39     | 5800      |              |              | .28  | .28  | .51 | .98  | 1.34            | .69  | 1.10 | .67  | .87  | 14.77        |                             |
|        | 10      | 400       | R 1/2 keg.   |              | 7    | 7    | 13  | 30   | 38              | 22,5 | 32   | 19   | 22   | 11,67        |                             |
|        | .39     | 5800      |              |              | .28  | .28  | .51 | 1.18 | 1.50            | .89  | 1.26 | .75  | .87  | 25.73        |                             |
|        | 12      | 400       |              | R 3/8 keg.   | 8    | 7    | 12  | 29   | 38              | 21,5 | 28   | 17   | 24   | 7,78         |                             |
|        | .47     | 5800      |              |              | .31  | .28  | .47 | 1.14 | 1.50            | .85  | 1.10 | .67  | .94  | 17.12        |                             |
|        | 12      | 400       | R 1/2 keg.   |              | 8    | 10   | 14  | 30   | 39              | 22,5 | 32   | 19   | 24   | 4,67         |                             |
|        | .47     | 5800      |              |              | .31  | .39  | .55 | 1.18 | 1.54            | .89  | 1.26 | .75  | .94  | 10.27        |                             |
|        | 14      | 400       |              | R 3/8 keg.   | 10   | 8    | 14  | 30   | 40              | 22   | 32   | 19   | 27   | 9,62         |                             |
|        | .55     | 5800      |              |              | .39  | .31  | .55 | 1.18 | 1.57            | .87  | 1.26 | .75  | 1.06 | 14.59        |                             |
|        | 14      | 400       | R 1/2 keg.   |              | 10   | 10   | 14  | 30   | 40              | 22   | 32   | 19   | 27   | 10,53        |                             |
|        | .55     | 5800      |              |              | .39  | .39  | .55 | 1.18 | 1.57            | .87  | 1.26 | .75  | 1.06 | 23.17        |                             |
|        | 16      | 400       |              | R 1/2 keg.   | 12   | 12   | 14  | 34   | 44              | 25,5 | 32   | 24   | 30   | 13,60        |                             |
|        | .63     | 5800      |              |              | .47  | .47  | .55 | 1.34 | 1.73            | 1.00 | 1.26 | 17,8 | 66,0 | 29.92        |                             |
|        | 16      | 400       | R 3/4 keg.   |              | 12   | 12   | 14  | 34   | 44              | 25,5 | 32   | 24   | 30   | 22,00        |                             |
|        | .63     | 5800      |              |              | .47  | .47  | .55 | 1.34 | 1.73            | 1.00 | 1.26 | .94  | 1.18 | 48.40        |                             |
|        | 20      | 400       |              | R 1/2 keg.   | 16   | 10   | 14  | 37   | 48              | 26,5 | 42   | 27   | 36   | 21,00        |                             |
|        | .79     | 5800      |              |              | .63  | .39  | .55 | 1.46 | 1.89            | 1.04 | 1.65 | 1.06 | 1.42 | 46.20        |                             |
|        | 20      | 250       | R 3/4 keg.   |              | 16   | 16   | 17  | 39   | 48              | 26,5 | 42   | 27   | 36   | 21,19        |                             |
|        | .79     | 3625      |              |              | .63  | .63  | .67 | 1.54 | 1.89            | 1.04 | 1.65 | 1.06 | 1.42 | 46.72        |                             |
|        | 25      | 250       |              | R 3/4 keg.   | 20   | 16   | 17  | 42   | 53              | 30   | 48   | 36   | 46   | 37,27        |                             |
|        | .98     | 3625      |              |              | .79  | .63  | .67 | 1.65 | 2.09            | 1.18 | 1.89 | 1.42 | 1.81 | 82.17        |                             |
|        | 25      | 250       | R 1 keg.     |              | 20   | 20   | 20  | 42   | 53              | 30   | 48   | 36   | 46   | 39,3         |                             |
|        | .98     | 3625      |              |              | .79  | .79  | .79 | 1.65 | 2.09            | 1.18 | 1.89 | 1.42 | 1.81 | 86.64        |                             |
|        | 30      | 250       |              | R 1 1/4 keg. | 25   | 25   | 20  | 52   | 62              | 35,5 | 54   | 41   | 50   | 62,61        |                             |
|        | 1.18    | 3625      |              |              | .98  | .98  | .79 | 2.05 | 2.44            | 1.4  | 2.13 | 1.61 | 1.97 | 138.03       |                             |
|        | 38      | 250       | R 1 1/2 keg. |              | 32   | 32   | 20  | 52   | 71              | 41   | 61   | 50   | 60   | 93,8         |                             |
|        | 1.50    | 3625      |              |              | 1.26 | 1.26 | .79 | 2.05 | 2.80            | 1.61 | 2.40 | 1.97 | 2.36 | 206.80       |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-2 (Form C)

Port acc. to DIN 3852-2 (Form Z)

Suitable liquid / plastic sealant required.

### Ordering Codes

\*FI-WE\*-10\*S\*Rk\*-W3\*-MS

|                                    |                                                                                         |
|------------------------------------|-----------------------------------------------------------------------------------------|
| * Male Stud Elbow                  | FI-WE                                                                                   |
| * Outside Tube Diameter D1 (in mm) | -10                                                                                     |
| * Series                           | Extra-Light Series (page 76) LL<br>Light Series (page 76) L<br>Heavy Series (page 77) S |
| * Thread Type                      | Whitworth Taper Pipe Thread (BSPT) Rk                                                   |

If required, please indicate special sizes, e.g. R3/8k!

\* Material Code Steel, zinc/nickel-plated -W3

Please contact STAUFF for alternative materials and surface finishings.

|                        |                                                                    |      |
|------------------------|--------------------------------------------------------------------|------|
| * Assembling / Kitting | Fitting body only                                                  | —    |
|                        | Fitting body supplied with cutting ring and union nut              | -MS  |
|                        | Fitting body supplied with soft-sealing cutting ring and union nut | -MSV |

### Connecting Parts


Cutting Ring  
Type FI-DS Page 28

Soft-Sealing Cutting Ring  
Type FI-WDDS Page 29

Support Sleeve  
Type FI-VH Page 31

STAUFF Form EVO Sealing Ring  
Type FI-FD Page 32

Union Nut  
Type FI-M Page 33

37° Flared Tube Fitting Set  
Type FI-AB Page 37

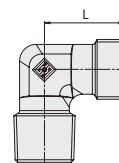
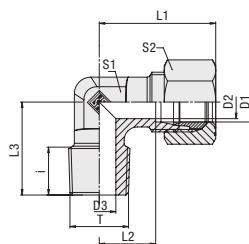
Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.



## Male Stud Elbow

Type FI-WE-...-Mk ■ Series LL / L / S



## Metric Taper Thread

## Ordering Codes

**\*FI-WE\*-10\*L\*Mk\*-W3\*-MS**

\* Male Stud Elbow

FI-WE

\* Outside Tube Diameter D1 (in mm)

-10

\* Series

Extra-Light Series

LL

Light Series

L

Heavy Series

S

\* Thread Type

Metric Taper Thread

Mk

If required, please indicate special sizes, e.g. M12x1.5k!

\* Material Code

Steel, zinc/nickel-plated

-W3

Please contact STAUFF for alternative materials and surface finishings.

\* Design

Made from forging blanks

—

Made from profile material

PR

\* Assembling / Kitting

Fitting body only

—

Fitting body supplied with

cutting ring and union nut

-MS

Fitting body supplied with

soft-sealing cutting ring

and union nut

-MSV

## Connecting Parts



Cutting Ring

Type FI-DS

Page 28



Soft-Sealing Cutting Ring

Type FI-WDDS

Page 29



Support Sleeve

Type FI-VH

Page 31



STAUFF Form EVO Sealing Ring

Type FI-FD

Page 32



Union Nut

Type FI-M

Page 33



37° Flared Tube Fitting Set

Type FI-AB

Page 37

| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in) | Weight<br>(kg/lbs) ca.                        | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|-----------------------------------------------|-----------------------------|
|        | D1                 |                 | Thread T              | D2 D3 i L L1 <sup>1</sup> L2 L3 S1 S2 per 100 |                             |
| LL     | 4                  | 100             | M 6 x 1 keg.          | 3 2 8,5 15 20 11 17 9 10 1,34                 | FI-WE-04LLM6x1k-W3-PR       |
|        | .16                | 1450            |                       | .12 .08 .33 .59 .79 .43 .67 .35 .39 2.95      |                             |
|        | 4                  | 100             | M 8 x 1 keg.          | 3 3,5 8 15 21 11 17 9 10 1,46                 | FI-WE-04LLMk-W3-PR          |
|        | .16                | 1450            |                       | .12 .14 .31 .59 .83 .43 .67 .35 .39 3.12      |                             |
|        | 6                  | 100             | M 6 x 1 keg.          | 4,5 2 8 15 21 9,5 15 11 12 1,44               | FI-WE-06LLM6x1k-W3-PR       |
|        | .24                | 1450            |                       | .18 .08 .31 .59 .83 .37 .59 .43 .47 3.17      |                             |
|        | 6                  | 100             | M 8 x 1 keg.          | 4,5 3,5 8,5 15 21 9,5 17 11 12 1,64           | FI-WE-06LLM8x1k-W3-PR       |
|        | .24                | 1450            |                       | .18 .14 .33 .59 .83 .37 .67 .43 .47 3.62      |                             |
|        | 6                  | 100             | M 10 x 1 keg.         | 4,5 4,5 8 15 21 9,5 17 11 12 1,74             | FI-WE-06LLMk-W3-PR          |
|        | .24                | 1450            |                       | .18 .18 .31 .59 .83 .37 .67 .43 .47 3.83      |                             |
|        | 8                  | 100             | M 10 x 1 keg.         | 6 6 8 17 23 11,5 20 12 14 2,82                | FI-WE-08LLMk-W3-PR          |
|        | .31                | 1450            |                       | .24 .24 .31 .67 .91 .45 .79 .47 .55 6.20      |                             |
| L      | 6                  | 315             | M 10 x 1 keg.         | 4 4 8 19 27 12 20 12 14 2,16                  | FI-WE-06LMk-W3              |
|        | .24                | 4568            |                       | .16 .16 .31 .75 1.06 .47 .79 .47 .55 4.75     |                             |
|        | 8                  | 315             | M 12 x 1,5 keg.       | 6 6 12 21 29 14 26 12 17 2,67                 | FI-WE-08LMk-W3              |
|        | .31                | 4568            |                       | .24 .24 .47 .83 1.14 .55 1.02 .47 .67 5.88    |                             |
|        | 10                 | 315             | M 14 x 1,5 keg.       | 8 7 11,5 22 30 15 27 14 19 4,19               | FI-WE-10LMk-W3              |
|        | .39                | 4568            |                       | .31 .28 .45 .87 1.18 .59 1.06 .55 .75 9.23    |                             |
|        | 12                 | 315             | M 16 x 1,5 keg.       | 10 9 11,5 24 32 17 28 17 22 5,05              | FI-WE-12LMk-W3              |
|        | .47                | 4568            |                       | .39 .35 .45 .94 1.26 .67 1.10 .67 .87 11.10   |                             |
|        | 12                 | 315             | M 18 x 1,5 keg.       | 10 10 11,5 29 36 22 28 17 22 5,79             | FI-WE-12LM18x1.5k-W3        |
|        | .47                | 4568            |                       | .39 .39 .45 1.14 1.42 .87 1.10 .67 .87 12.76  |                             |
|        | 15                 | 315             | M 18 x 1,5 keg.       | 12 11 12 28 36 21 32 19 27 8,82               | FI-WE-15LMk-W3              |
|        | .59                | 4568            |                       | .47 .43 .47 1.10 1.42 .83 1.26 .75 1.06 19.41 |                             |
|        | 18                 | 315             | M 22 x 1,5 keg.       | 15 14 14 31 40 23,5 36 24 32 12,56            | FI-WE-18LMk-W3              |
|        | .71                | 4568            |                       | .59 .55 .55 1.22 1.57 .93 1.42 .94 1.26 27.64 |                             |
| S      | 6                  | 400             | M 12 x 1,5 keg.       | 4 4 12 23 31 16 26 12 17 3,44                 | FI-WE-06SMk-W3              |
|        | .24                | 5800            |                       | .16 .16 .47 .91 1.22 .63 1.02 .47 .67 7.56    |                             |
|        | 8                  | 400             | M 14 x 1,5 keg.       | 5 5 11,5 24 32 17 27 14 19 5,33               | FI-WE-08SMk-W3              |
|        | .31                | 5800            |                       | .20 .20 .45 .94 1.26 .67 1.06 .55 .75 11.73   |                             |
|        | 10                 | 400             | M 16 x 1,5 keg.       | 7 7 11,5 25 34 17,5 28 17 22 6,35             | FI-WE-10SMk-W3              |
|        | .39                | 5800            |                       | .28 .28 .45 .98 1.34 .69 1.10 .67 .87 13.97   |                             |
|        | 12                 | 400             | M 18 x 1,5 keg.       | 8 8 12 29 38 21,5 28 17 24 8,19               | FI-WE-12SMk-W3              |
|        | .47                | 5800            |                       | .31 .31 .47 1.14 1.50 .85 1.10 .67 .94 18.02  |                             |
|        | 14                 | 400             | M 20 x 1,5 keg.       | 10 10 14 30 40 22 32 19 27 11,45              | FI-WE-14SMk-W3              |
|        | .55                | 5800            |                       | .39 .39 .55 1.18 1.57 .87 1.26 .75 1.06 25.19 |                             |
|        | 16                 | 400             | M 22 x 1,5 keg.       | 12 12 14 33 43 24,5 32 24 30 9,62             | FI-WE-16SMk-W3              |
|        | .63                | 5800            |                       | .47 .47 .55 1.30 1.69 .96 1.26 .94 1.18 21.17 |                             |

<sup>1</sup> Approximate dimension in assembled condition.<sup>2</sup> Weight excluding cutting ring and union nut.<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-1 (Form C)

Port acc. to DIN 3852-1 (Form Z)

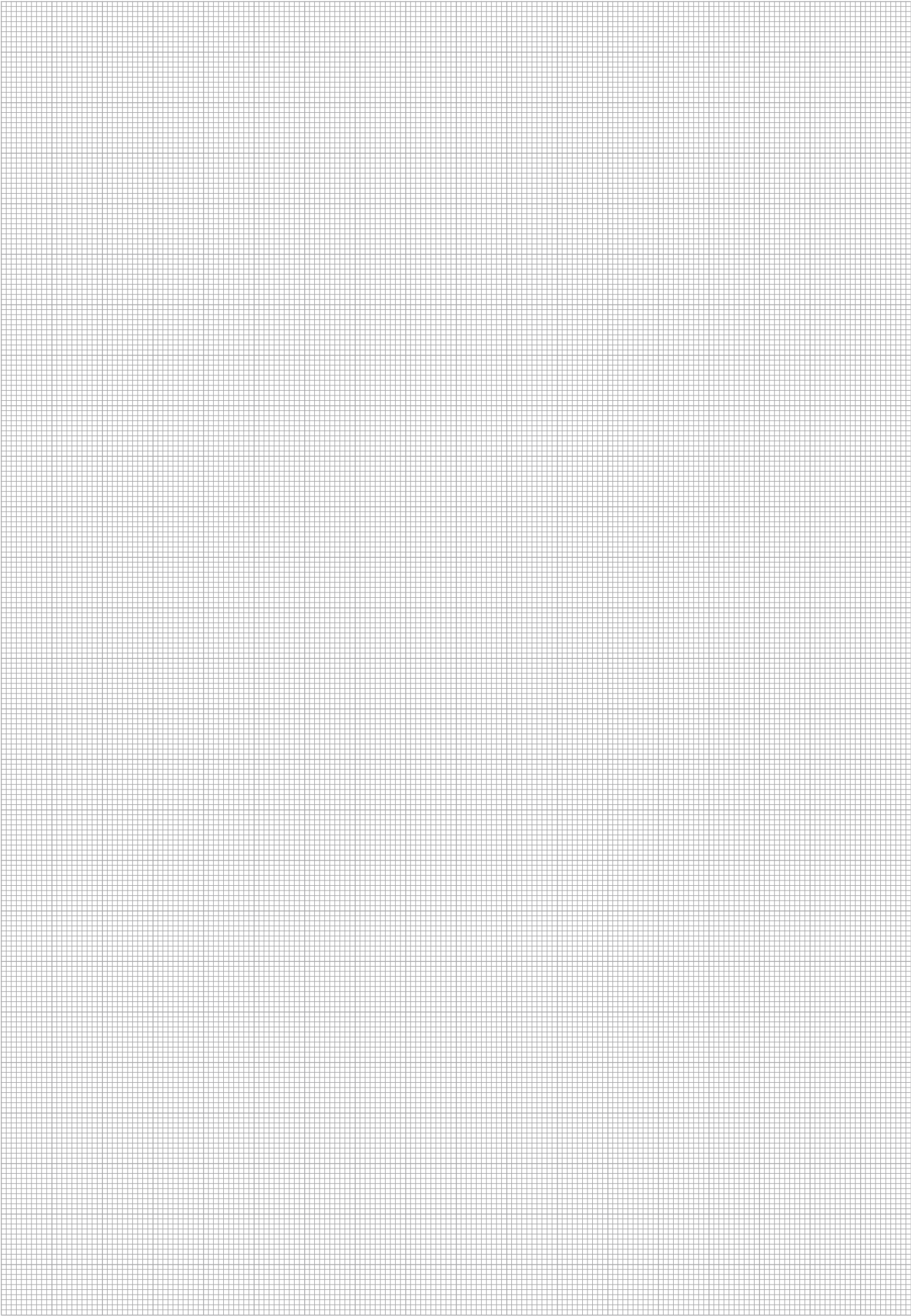
Suitable liquid / plastic sealant required.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

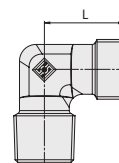
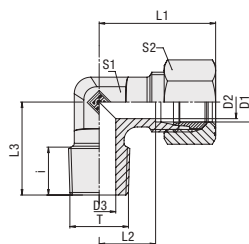






## Male Stud Elbow

### Type FI-WE-...-N • Series LL / L



C



...-PR

### Ordering Codes

#### \*FI-WE\*-10\*L\*1/4\*N\*-W3\*-MS

|                                                                         |                                                                                                                                                             |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * Male Stud Elbow                                                       | FI-WE                                                                                                                                                       |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                                                                                                                         |
| * Series                                                                | Extra-Light Series (page 80) LL<br>Light Series (page 80) L<br>Heavy Series (page 81) S                                                                     |
| * Thread Size                                                           | acc. to dimension table 1/4                                                                                                                                 |
| Please always indicate thread sizes, e.g. 1/4!                          |                                                                                                                                                             |
| * Thread Type                                                           | NPT Thread N                                                                                                                                                |
| * Material Code                                                         | Steel, zinc/nickel-plated -W3                                                                                                                               |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                                                             |
| * Design                                                                | Made from forging blanks —<br>Made from profile material PR                                                                                                 |
| * Assembling / Kitting                                                  | Fitting body only —<br>Fitting body supplied with cutting ring and union nut -MS<br>Fitting body supplied with soft-sealing cutting ring and union nut -MSV |

### Connecting Parts



Cutting Ring  
Type FI-DS Page 28



Soft-Sealing Cutting Ring  
Type FI-WDDS Page 29



Support Sleeve  
Type FI-VH Page 31



STAUFF Form EVO Sealing Ring  
Type FI-FD Page 32



Union Nut  
Type FI-M Page 33



37° Flared Tube Fitting Set  
Type FI-AB Page 37

### NPT Thread

| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in)                          | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|------------------------------------------------|-----------------------------------|-----------------------------|
|        | D1                 |                 | Thread T D2 D3 i L L1 <sup>1</sup> L2 L3 S1 S2 |                                   |                             |
| LL     | 4                  | 100             | 1/8 NPT 3 4 8 15 21 11 15,6 11 10              | 1,81                              | FI-WE-04LL1/8N-W3-PR        |
|        | .16                | 1450            | .12 .16 .31 .59 .83 .43 .61 .43 .39            | 3.98                              |                             |
|        | 6                  | 100             | 1/8 NPT 4,5 4,5 8 15 21 9,5 17 11 12           | 1,57                              | FI-WE-06LL1/8N-W3-PR        |
|        | .24                | 1450            | .18 .18 .31 .59 .83 .37 .67 .43 .47            | 3.45                              |                             |
| L      | 8                  | 100             | 1/8 NPT 6 6 10 17 23 11,5 20 12 14             | 2,64                              | FI-WE-08LL1/8N-W3-PR        |
|        | .31                | 1450            | .24 .24 .39 .67 .91 .45 .79 .47 .55            | 5.80                              |                             |
|        | 6                  | 315             | 1/8 NPT 4 5 8 19 27 11,5 20 12 14              | 1,91                              | FI-WE-06L1/8N-W3            |
|        | .24                | 4568            | .16 .20 .31 .75 1.06 .45 .79 .47 .55           | 4.20                              |                             |
|        | 6                  | 315             | 1/4 NPT 4 7 10 21 29 14 26 14 14               | 2,80                              | FI-WE-06L1/4N-W3            |
|        | .24                | 4568            | .16 .28 .39 .83 1.14 .55 1.02 .55 .55          | 6.15                              |                             |
|        | 6                  | 315             | 3/8 NPT 4 8 10,5 25 33 18 28 17 14             | 5,63                              | FI-WE-06L3/8N-W3            |
|        | .24                | 4568            | .16 .31 .41 .98 1.30 .71 1.10 .67 .55          | 12.38                             |                             |
|        | 8                  | 315             | 1/8 NPT 6 4 7 21 29 14 26 12 17                | 2,36                              | FI-WE-08L1/8N-W3            |
|        | .31                | 4568            | .24 .16 .28 .83 1.14 .55 1.02 .47 .67          | 5.20                              |                             |
|        | 8                  | 315             | 1/4 NPT 6 6 11,4 21 29 14 26 12 17             | 2,92                              | FI-WE-08L1/4N-W3            |
|        | .31                | 4568            | .24 .24 .45 .83 1.14 .55 1.02 .47 .67          | 6.42                              |                             |
|        | 10                 | 315             | 1/4 NPT 8 7 11,4 22 30 15 27 14 19             | 3,56                              | FI-WE-10L1/4N-W3            |
|        | .39                | 4568            | .31 .28 .45 .87 1.18 .59 1.06 .55 .75          | 7.82                              |                             |
|        | 10                 | 315             | 3/8 NPT 8 8 10,5 24 32 17 28 17 19             | 5,67                              | FI-WE-10L3/8N-W3            |
|        | .39                | 4568            | .31 .31 .41 .94 1.26 .67 1.10 .67 .75          | 12.47                             |                             |
|        | 12                 | 315             | 1/4 NPT 10 7 11,4 24 32 17 28 17 22            | 4,81                              | FI-WE-12L1/4N-W3            |
|        | .47                | 4568            | .39 .28 .45 .94 1.26 .67 1.10 .67 .87          | 10.58                             |                             |
|        | 12                 | 315             | 3/8 NPT 10 8 10,5 24 32 17 28 17 22            | 4,87                              | FI-WE-12L3/8N-W3            |
|        | .47                | 4568            | .39 .31 .41 .94 1.26 .67 1.10 .67 .87          | 10.71                             |                             |
|        | 12                 | 315             | 1/2 NPT 10 11 14 28 36 21 34 19 22             | 7,99                              | FI-WE-12L1/2N-W3            |
|        | .47                | 4568            | .39 .43 .55 1.10 1.42 .83 1.34 .75 .87         | 17.57                             |                             |
|        | 15                 | 315             | 1/2 NPT 12 14 14 28 39 21 34 19 27             | 8,05                              | FI-WE-15L1/2N-W3            |
|        | .59                | 4568            | .47 .55 .55 1.10 1.54 .83 1.34 .75 1.06        | 17.70                             |                             |
|        | 18                 | 315             | 1/2 NPT 15 12 14 31 40 23,5 36 24 32           | 12,79                             | FI-WE-18L1/2N-W3            |
|        | .71                | 4568            | .59 .47 .55 1.22 1.57 .93 1.42 .94 1.26        | 28.14                             |                             |
|        | 22                 | 160             | 3/4 NPT 19 16 14 35 44 27,5 42 27 36           | 17,07                             | FI-WE-22L3/4N-W3            |
|        | .87                | 2320            | .75 .63 .55 1.38 1.73 1.08 1.65 1.06 1.42      | 37.56                             |                             |
|        | 28                 | 160             | 1 NPT 24 21 17,5 38 47 30,5 48 36 41           | 32,40                             | FI-WE-28L1N-W3              |
|        | 1.10               | 2320            | .94 .83 .69 1.50 1.85 1.20 1.89 1.42 1.61      | 71.28                             |                             |
|        | 35                 | 160             | 1 1/4 NPT 30 28 18 48 59 34,5 54 41 50         | 51,70                             | FI-WE-35L1-1/4N-W3          |
|        | 1.38               | 2320            | 1.18 1.10 .71 1.89 2.32 1.36 2.13 1.61 1.97    | 113.74                            |                             |
|        | 42                 | 160             | 1 1/2 NPT 36 34 18,5 54 66 43 61 50 60         | 74,60                             | FI-WE-42L1-1/2N-W3          |
|        | 1.65               | 2320            | 1.42 1.34 .73 2.13 2.60 1.69 2.40 1.97 2.36    | 164.12                            |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to ANSI/ASME B1.20.1-1983

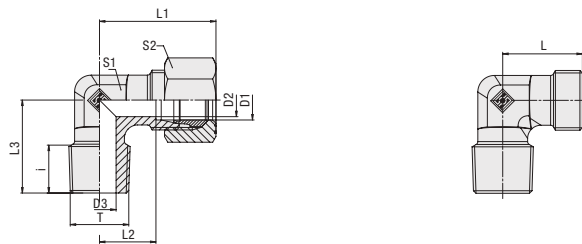
Port acc. to ANSI/ASME B1.20.1-1983

Suitable liquid / plastic sealant required.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.





## Male Stud Elbow Type FI-WE-...-N • Series S



C

### NPT Thread

| Series | Tube OD                           | PN                                  | Dimensions                        |      |     |      |      |      |                 |      |      |        |        |                                        | Weight | Ordering Codes <sup>3</sup> |
|--------|-----------------------------------|-------------------------------------|-----------------------------------|------|-----|------|------|------|-----------------|------|------|--------|--------|----------------------------------------|--------|-----------------------------|
|        | ( <sup>mm</sup> / <sub>in</sub> ) | ( <sup>bar</sup> / <sub>psi</sub> ) | ( <sup>mm</sup> / <sub>in</sub> ) |      |     |      |      |      |                 |      |      |        |        | ( <sup>kg</sup> / <sub>lbs</sub> ) ca. |        |                             |
| S      | D1                                |                                     | Thread                            | T    | D2  | D3   | i    | L    | L1 <sup>1</sup> | L2   | L3   | S1     | S2     | per 100                                |        |                             |
|        | 6                                 | 630                                 | 1/4 NPT                           | 4    | 4   | 10   | 23   | 31   | 16              | 26   | 12   | 17     | 3,19   | FI-WE-06S1/4N-W3                       |        |                             |
|        | .24                               | 9135                                |                                   | .16  | .16 | .39  | .91  | 1.22 | .63             | 1.02 | .47  | .67    | 7.02   |                                        |        |                             |
|        | 8                                 | 630                                 | 1/4 NPT                           | 5    | 5   | 10   | 24   | 32   | 17              | 27   | 14   | 19     | 4,41   | FI-WE-08S1/4N-W3                       |        |                             |
|        | .31                               | 9135                                |                                   | .20  | .20 | .39  | .94  | 1.26 | .67             | 1.06 | .55  | .75    | 9.69   |                                        |        |                             |
|        | 8                                 | 630                                 | 3/8 NPT                           | 5    | 8   | 10,5 | 25   | 33   | 18              | 28   | 17   | 19     | 7,80   | FI-WE-08S3/8N-W3                       |        |                             |
|        | .31                               | 9135                                |                                   | .20  | .31 | .41  | .98  | 1.30 | .71             | 1.10 | .67  | .75    | 17.16  |                                        |        |                             |
|        | 8                                 | 630                                 | 1/2 NPT                           | 5    | 10  | 14   | 30   | 38   | 23              | 34   | 19   | 19     | 8,30   | FI-WE-08S1/2N-W3                       |        |                             |
|        | .31                               | 9135                                |                                   | .20  | .39 | .55  | 1.18 | 1.50 | .91             | 1.34 | .75  | .75    | 18.26  |                                        |        |                             |
|        | 10                                | 630                                 | 1/4 NPT                           | 7    | 5   | 10   | 25   | 34   | 17,5            | 28   | 17   | 22     | 6,17   | FI-WE-10S1/4N-W3                       |        |                             |
|        | .39                               | 9135                                |                                   | .28  | .20 | .39  | .98  | 1.34 | .69             | 1.10 | .67  | .87    | 13.57  |                                        |        |                             |
|        | 10                                | 630                                 | 3/8 NPT                           | 7    | 7   | 10,5 | 25   | 34   | 17,5            | 28   | 17   | 22     | 6,64   | FI-WE-10S3/8N-W3                       |        |                             |
|        | .39                               | 9135                                |                                   | .28  | .28 | .41  | .98  | 1.34 | .69             | 1.10 | .67  | .87    | 14.62  |                                        |        |                             |
|        | 12                                | 630                                 | 1/4 NPT                           | 8    | 5   | 11,4 | 29   | 38   | 21,5            | 29   | 17   | 24     | 7,87   | FI-WE-12S1/4N-W3                       |        |                             |
|        | .47                               | 9135                                |                                   | .31  | .20 | .45  | 1.14 | 1.50 | .85             | 1.14 | .67  | .94    | 17.31  |                                        |        |                             |
|        | 12                                | 630                                 | 3/8 NPT                           | 8    | 8   | 10,5 | 29   | 38   | 21,5            | 28   | 17   | 24     | 7,76   | FI-WE-12S3/8N-W3                       |        |                             |
|        | .47                               | 9135                                |                                   | .31  | .31 | .41  | 1.14 | 1.50 | .85             | 1.10 | .67  | .94    | 17.07  |                                        |        |                             |
|        | 12                                | 630                                 | 1/2 NPT                           | 8    | 10  | 14   | 30   | 39   | 22,5            | 34   | 19   | 24     | 11,23  | FI-WE-12S1/2N-W3                       |        |                             |
|        | .47                               | 9135                                |                                   | .31  | .39 | .55  | 1.18 | 1.54 | .89             | 1.34 | .75  | .94    | 24.70  |                                        |        |                             |
|        | 14                                | 630                                 | 1/2 NPT                           | 10   | 10  | 14   | 30   | 40   | 22              | 34   | 19   | 27     | 8,88   | FI-WE-14S1/2N-W3                       |        |                             |
|        | .55                               | 9135                                |                                   | .39  | .39 | .55  | 1.18 | 1.57 | .87             | 1.34 | .75  | 1.06   | 19.53  |                                        |        |                             |
|        | 16                                | 630                                 | 1/2 NPT                           | 12   | 12  | 14   | 33   | 43   | 24,5            | 36   | 24   | 30     | 14,05  | FI-WE-16S1/2N-W3                       |        |                             |
|        | .63                               | 9135                                |                                   | .47  | .47 | .55  | 1.30 | 1.69 | .96             | 1.42 | .94  | 1.18   | 30.90  |                                        |        |                             |
|        | 20                                | 400                                 | 3/4 NPT                           | 16   | 16  | 14   | 37   | 48   | 26,5            | 42   | 27   | 36     | 19,28  | FI-WE-20S3/4N-W3                       |        |                             |
|        | .79                               | 5800                                |                                   | .63  | .63 | .55  | 1.46 | 1.89 | 1.04            | 1.65 | 1.06 | 1.42   | 42.42  |                                        |        |                             |
|        | 25                                | 400                                 | 1 NPT                             | 20   | 20  | 17,5 | 42   | 54   | 30              | 48   | 36   | 46     | 33,76  | FI-WE-25S1N-W3                         |        |                             |
|        | .98                               | 5800                                |                                   | .79  | .79 | .69  | 1.65 | 2.13 | 1.18            | 1.89 | 1.42 | 1.81   | 74.26  |                                        |        |                             |
|        | 30                                | 400                                 | 1 1/4 NPT                         | 25   | 25  | 18   | 49   | 62   | 35,5            | 54   | 41   | 50     | 60,30  | FI-WE-30S1-1/4N-W3                     |        |                             |
|        | 1.18                              | 5800                                |                                   | .98  | .98 | .71  | 1.93 | 2.44 | 1.40            | 2.13 | 1.61 | 1.97   | 132.66 |                                        |        |                             |
|        | 38                                | 315                                 | 1 1/2 NPT                         | 32   | 32  | 18,5 | 58   | 73   | 40              | 61   | 50   | 60     | 91,80  | FI-WE-38S1-1/2N-W3                     |        |                             |
| 1.50   | 4568                              | 1.26                                |                                   | 1.26 | .73 | 2.28 | 2.87 | 1.57 | 2.40            | 1.97 | 2.36 | 201.96 |        |                                        |        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to ANSI/ASME B1.20.1-1983

Port acc. to ANSI/ASME B1.20.1-1983

Suitable liquid / plastic sealant required.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

#### \*FI-WE\*-10\*S\*1/4\*N\*-W3\*-MS

|                                                                         |                                                                                         |
|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| * Male Stud Elbow                                                       | FI-WE                                                                                   |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                                                     |
| * Series                                                                | Extra-Light Series (page 80) LL<br>Light Series (page 80) L<br>Heavy Series (page 81) S |
| * Thread Size                                                           | acc. to dimension table 1/4                                                             |
| Please always indicate thread sizes, e.g. 1/4!                          |                                                                                         |
| * Thread Type                                                           | NPT Thread N                                                                            |
| * Material Code                                                         | Steel, zinc/nickel-plated -W3                                                           |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                         |
| * Assembling / Kitting                                                  | Fitting body only —                                                                     |
|                                                                         | Fitting body supplied with cutting ring and union nut -MS                               |
|                                                                         | Fitting body supplied with soft-sealing cutting ring and union nut -MSV                 |

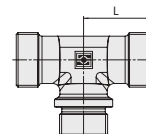
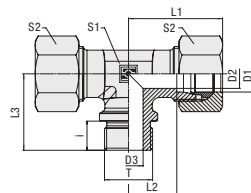
### Connecting Parts

|  |                                            |         |
|--|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |



## Male Stud Branch Tee

### Type FI-TE-...-R ▪ Series L / S



#### Ordering Codes

**\*FI-TE\*-22\*L\*R\*-W3\*-MS**

|                                                                         |                                                                                                                                                                                      |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * Male Stud Branch Tee                                                  | <b>FI-TE</b>                                                                                                                                                                         |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-22</b>                                                                                                                                                                           |
| * Series                                                                | Light Series <b>L</b><br>Heavy Series <b>S</b>                                                                                                                                       |
| * Thread Type                                                           | Whitworth Parallel Pipe Thread (BSPP) <b>R</b>                                                                                                                                       |
| If required, please indicate special sizes, e.g. R1/2!                  |                                                                                                                                                                                      |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                                                                                                                                 |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                                                                                      |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b><br>Fitting body supplied with cutting rings and union nuts <b>-MS</b><br>Fitting body supplied with soft-sealing cutting rings and union nuts <b>-MSV</b> |

#### Whitworth Parallel Pipe Thread (BSPP)

#### Metallic Sealing Edge

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in)<br>Thread T | D2   | D3   | i   | L    | L1 <sup>1</sup> | L2   | L3   | S1   | S2   | Torque<br>(N·m/ft·lb)<br>Thread T | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------------------|------|------|-----|------|-----------------|------|------|------|------|-----------------------------------|-----------------------------------|-----------------------------|
| L      | 22                       | 160             | G 3/4                             | 19   | 18   | 16  | 35   | 44              | 27,5 | 42   | 27   | 36   | 180                               | 23,90                             | FI-TE-22LR-W3               |
|        | .87                      | 2320            |                                   | .75  | .71  | .63 | 1.38 | 1.73            | 1.08 | 1.65 | 1.06 | 1.42 | 133.2                             | 52.58                             |                             |
|        | 28                       | 160             | G 1                               | 24   | 23   | 18  | 38   | 47              | 30,5 | 48   | 36   | 41   | 330                               | 37,50                             | FI-TE-28LR-W3               |
|        | 1.10                     | 2320            |                                   | .94  | .91  | .71 | 1.50 | 1.85            | 1.20 | 1.89 | 1.42 | 1.61 | 244.2                             | 82.50                             |                             |
|        | 35                       | 160             | G 1 1/4                           | 30   | 30   | 20  | 45   | 56              | 34,5 | 54   | 41   | 50   | 540                               | 56,50                             | FI-TE-35LR-W3               |
|        | 1.38                     | 2320            |                                   | 1.18 | 1.18 | .79 | 1.77 | 2.20            | 1.36 | 2.13 | 1.61 | 1.97 | 399.6                             | 124.30                            |                             |
|        | 42                       | 160             | G 1 1/2                           | 36   | 36   | 22  | 51   | 63              | 40   | 61   | 50   | 60   | 630                               | 80,50                             | FI-TE-42LR-W3               |
| S      | 1.65                     | 2320            |                                   | 1.42 | 1.42 | .87 | 2.01 | 2.48            | 1.57 | 2.40 | 1.97 | 2.36 | 466.2                             | 177.10                            |                             |
|        | 20                       | 400             | G 3/4                             | 16   | 16   | 16  | 37   | 48              | 26,5 | 42   | 27   | 36   | 270                               | 28,80                             | FI-TE-20SR-W3               |
|        | .79                      | 5800            |                                   | .63  | .63  | .63 | 1.46 | 1.89            | 1.04 | 1.65 | 1.06 | 1.42 | 199.8                             | 63.36                             |                             |
|        | 25                       | 250             | G 1                               | 20   | 20   | 18  | 42   | 54              | 30   | 48   | 36   | 46   | 340                               | 51,40                             | FI-TE-25SR-W3               |
|        | .98                      | 3625            |                                   | .79  | .79  | .71 | 1.65 | 2.13            | 1.18 | 1.89 | 1.42 | 1.81 | 251.6                             | 113.08                            |                             |
|        | 30                       | 160             | G 1 1/4                           | 25   | 25   | 20  | 49   | 62              | 35,5 | 54   | 41   | 50   | 540                               | 79,20                             | FI-TE-30SR-W3               |
|        | 1.18                     | 2320            |                                   | .98  | .98  | .79 | 1.93 | 2.44            | 1.40 | 2.13 | 1.61 | 1.97 | 399.6                             | 174.24                            |                             |
|        | 38                       | 160             | G 1 1/2                           | 32   | 32   | 22  | 57   | 72              | 41   | 61   | 50   | 60   | 700                               | 114,50                            | FI-TE-38SR-W3               |
|        | 1.50                     | 2320            |                                   | 1.26 | 1.26 | .87 | 2.24 | 2.83            | 1.61 | 2.40 | 1.97 | 2.36 | 518.0                             | 251.90                            |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-2 (Form B) / ISO 1179-4 (Type B)  
Port acc. to DIN 3852-2 (Form X) / ISO 1179-1

Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

#### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



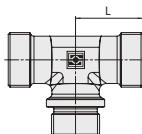
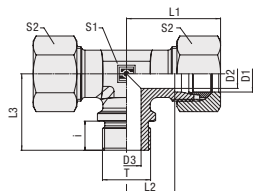
Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37



## Male Stud Branch Tee Type FI-TE-...-M • Series L / S



C

### Metallic Sealing Edge

### Metric Parallel Thread

| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in)                                   | Torque<br>(Nm/ft-lb)                              | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|---------------------------------------------------------|---------------------------------------------------|-----------------------------------|-----------------------------|
|        | D1                 |                 | Thread T D2 D3 i L L1 <sup>1</sup> L2 L3 S1 S2 Thread T |                                                   |                                   |                             |
| L      | 22                 | 160             | M 26 x 1,5                                              | 19 18 16 35 44 27,5 42 27 36 190                  | 22,20                             | FI-TE-22LM-W3               |
|        | .87                | 2320            |                                                         | .75 .71 .63 1.38 1.73 1.08 1.65 1.06 1.42 140.6   | 48.84                             |                             |
|        | 28                 | 160             | M 33 x 2                                                | 24 23 18 38 47 30,5 48 36 41 340                  | 37,60                             | FI-TE-28LM-W3               |
|        | 1.10               | 2320            |                                                         | .94 .91 .71 1.50 1.85 1.20 1.89 1.42 1.61 251.6   | 82.72                             |                             |
|        | 35                 | 160             | M 42 x 2                                                | 30 30 20 45 56 34,5 54 41 50 500                  | 56,90                             | FI-TE-35LM-W3               |
|        | 1.38               | 2320            |                                                         | 1.18 1.18 .79 1.77 2.20 1.36 2.13 1.61 1.97 370.0 | 125.18                            |                             |
| S      | 42                 | 160             | M 48 x 2                                                | 36 36 22 51 63 40 61 50 60 630                    | 81,10                             | FI-TE-42LM-W3               |
|        | 1.65               | 2320            |                                                         | 1.42 1.42 .87 2.01 2.48 1.57 2.40 1.97 2.36 466.2 | 178.42                            |                             |
|        | 20                 | 400             | M 27 x 2                                                | 16 16 16 37 48 26,5 42 27 36 270                  | 29,10                             | FI-TE-20SM-W3               |
|        | .79                | 5800            |                                                         | .63 .63 .63 1.46 1.89 1.04 1.65 1.06 1.42 199.8   | 64.02                             |                             |
|        | 25                 | 250             | M 33 x 2                                                | 20 20 18 42 54 30 48 36 46 410                    | 51,10                             | FI-TE-25SM-W3               |
|        | .98                | 3625            |                                                         | .79 .79 .71 1.65 2.13 1.18 1.89 1.42 1.81 303.4   | 112.42                            |                             |
|        | 30                 | 160             | M 42 x 2                                                | 25 25 20 49 62 35,5 54 41 50 540                  | 79,60                             | FI-TE-30SM-W3               |
|        | 1.18               | 2320            |                                                         | .98 .98 .79 1.93 2.44 1.40 2.13 1.61 1.97 399.6   | 175.12                            |                             |
|        | 38                 | 160             | M 48 x 2                                                | 32 32 22 57 72 41 61 50 60 700                    | 115,10                            | FI-TE-38SM-W3               |
|        | 1.50               | 2320            |                                                         | 1.26 1.26 .87 2.24 2.83 1.61 2.40 1.97 2.36 518.0 | 253.22                            |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-1 (Form B) / ISO 9974-3 (Type B)  
Port acc. to DIN 3852-1 (Form X) / ISO 9974-1

Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

**\*FI-TE\*-22\*L\*M\*-W3\*-MS**

\* Male Stud Branch Tee FI-TE

\* Outside Tube Diameter D1 (in mm) -22

\* Series Light Series L  
Heavy Series S

\* Thread Type Metric Parallel Thread M

If required, please indicate special sizes, e.g. M27x2!

\* Material Code Steel, zinc/nickel-plated -W3

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only —

Fitting body supplied with cutting rings and union nuts -MS

Fitting body supplied with soft-sealing cutting rings and union nuts -MSV

### Connecting Parts


Cutting Ring  
Type FI-DS Page 28

Soft-Sealing Cutting Ring  
Type FI-WDDS Page 29

Support Sleeve  
Type FI-VH Page 31

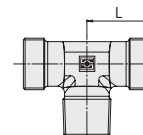
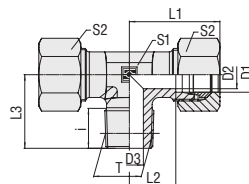
STAUFF Form EVO Sealing Ring  
Type FI-FD Page 32

Union Nut  
Type FI-M Page 33

37° Flared Tube Fitting Set  
Type FI-AB Page 37


## Male Stud Branch Tee

### Type FI-TE-...-Rk ▪ Series LL / L / S



#### Whitworth Taper Pipe Thread (BSPT)

#### Ordering Codes

##### \*FI-TE\*-10\*L\*Rk\*-W3\*-MS

|                                                                         |                                                                      |
|-------------------------------------------------------------------------|----------------------------------------------------------------------|
| * Male Stud Branch Tee                                                  | <b>FI-TE</b>                                                         |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                           |
| * Series                                                                | Extra-Light Series<br>Light Series<br>Heavy Series                   |
|                                                                         | <b>LL</b><br><b>L</b><br><b>S</b>                                    |
| * Thread Type                                                           | Whitworth Taper<br>Pipe Thread (BSPT)                                |
|                                                                         | <b>Rk</b>                                                            |
| If required, please indicate special sizes, e.g. R1/8k!                 |                                                                      |
| * Material Code                                                         | Steel, zinc/nickel-plated                                            |
|                                                                         | <b>-W3</b>                                                           |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                      |
| * Assembling / Kitting                                                  | Fitting body only                                                    |
|                                                                         | <b>—</b>                                                             |
|                                                                         | Fitting body supplied with cutting rings and union nuts              |
|                                                                         | <b>-MS</b>                                                           |
|                                                                         | Fitting body supplied with soft-sealing cutting rings and union nuts |
|                                                                         | <b>-MSV</b>                                                          |

#### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/PSI) | Dimensions<br>(mm/in)<br>Thread T | D2  | D3  | i   | L    | L1 <sup>1</sup> | L2   | L3   | S1  | S2   | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------------------|-----|-----|-----|------|-----------------|------|------|-----|------|-----------------------------------|-----------------------------|
| LL     | 4                        | 100             | R 1/8 keg.                        | 3   | 4   | 8   | 15   | 21              | 11   | 17   | 9   | 10   | 1,59                              | FI-TE-04LLRk-W3             |
|        | .16                      | 1450            |                                   | .12 | .16 | .31 | .59  | .83             | .43  | .67  | .35 | .39  | 3,50                              | FI-TE-06LLRk-W3             |
|        | 6                        | 100             | R 1/8 keg.                        | 4,5 | 4,5 | 8   | 15   | 21              | 9,5  | 17   | 9   | 12   | 1,34                              | FI-TE-08LLRk-W3             |
|        | .24                      | 1450            |                                   | .18 | .18 | .31 | .59  | .83             | .37  | .67  | .35 | .47  | 2,94                              | FI-TE-10LLRk-W3             |
|        | 8                        | 100             | R 1/8 keg.                        | 6   | 6   | 8   | 17   | 23              | 11,5 | 20   | 12  | 14   | 1,88                              | FI-TE-12LLRk-W3             |
| L      | .31                      | 1450            |                                   | .24 | .24 | .31 | .67  | .91             | .45  | .79  | .47 | .55  | 4,14                              | FI-TE-14LLRk-W3             |
|        | 6                        | 315             | R 1/8 keg.                        | 4   | 4   | 8   | 19   | 27              | 12   | 20   | 12  | 14   | 2,73                              | FI-TE-16LLRk-W3             |
|        | .24                      | 4568            |                                   | .16 | .16 | .31 | .75  | 1.06            | .47  | .79  | .47 | .55  | 6,00                              | FI-TE-18LLRk-W3             |
|        | 8                        | 315             | R 1/4 keg.                        | 6   | 6   | 12  | 21   | 29              | 14   | 26   | 12  | 17   | 3,80                              | FI-TE-20LLRk-W3             |
|        | .31                      | 4568            |                                   | .24 | .24 | .47 | .83  | 1.14            | .55  | 1.02 | .47 | .67  | 8,36                              | FI-TE-22LLRk-W3             |
|        | 10                       | 315             | R 1/4 keg.                        | 8   | 7   | 12  | 22   | 30              | 15   | 27   | 14  | 19   | 4,70                              | FI-TE-24LLRk-W3             |
|        | .39                      | 4568            |                                   | .31 | .28 | .47 | .87  | 1.18            | .59  | 1.06 | .55 | .75  | 10,34                             | FI-TE-26LLRk-W3             |
|        | 12                       | 315             | R 1/4 keg.                        | 10  | 8   | 15  | 24   | 33,5            | 17   | 28   | 17  | 22   | 6,02                              | FI-TE-28LLRk-W3             |
|        | .47                      | 4568            |                                   | .39 | .31 | .59 | .94  | 1.32            | .67  | 1.10 | .67 | .87  | 13,27                             | FI-TE-30LLRk-W3             |
|        | 12                       | 315             | R 3/8 keg.                        | 10  | 9   | 12  | 24   | 32              | 17   | 28   | 17  | 22   | 6,28                              | FI-TE-32LLRk-W3             |
|        | .47                      | 4568            |                                   | .39 | .35 | .47 | .94  | 1.26            | .67  | 1.10 | .67 | .87  | 13,82                             | FI-TE-34LLRk-W3             |
|        | 15                       | 315             | R 1/2 keg.                        | 12  | 11  | 14  | 28   | 36              | 21   | 34   | 19  | 27   | 11,80                             | FI-TE-36LLRk-W3             |
|        | .59                      | 4568            |                                   | .47 | .43 | .55 | 1.10 | 1.42            | .83  | 1.34 | .75 | 1.06 | 25,96                             | FI-TE-38LLRk-W3             |
|        | 18                       | 315             | R 1/2 keg.                        | 15  | 14  | 14  | 31   | 40              | 23,5 | 36   | 24  | 32   | 16,30                             | FI-TE-40LLRk-W3             |
|        | .71                      | 4568            |                                   | .59 | .55 | .55 | 1.22 | 1.57            | .93  | 1.42 | .94 | 1.26 | 35,86                             | FI-TE-42LLRk-W3             |
| S      | 6                        | 400             | R 1/4 keg.                        | 4   | 4   | 12  | 23   | 31              | 16   | 26   | 12  | 17   | 5,00                              | FI-TE-06SRk-W3              |
|        | .24                      | 5800            |                                   | .16 | .16 | .47 | .91  | 1.22            | .63  | 1.02 | .47 | .67  | 11,00                             | FI-TE-08SRk-W3              |
|        | 8                        | 400             | R 1/4 keg.                        | 5   | 5   | 12  | 24   | 32              | 17   | 27   | 14  | 19   | 6,27                              | FI-TE-10SRk-W3              |
|        | .31                      | 5800            |                                   | .20 | .20 | .47 | .94  | 1.26            | .67  | 1.06 | .55 | .75  | 13,80                             | FI-TE-12SRk-W3              |
|        | 10                       | 400             | R 3/8 keg.                        | 7   | 7   | 12  | 25   | 34              | 17,5 | 28   | 17  | 22   | 8,50                              | FI-TE-14SRk-W3              |
|        | .39                      | 5800            |                                   | .28 | .28 | .47 | .98  | 1.34            | .69  | 1.10 | .67 | .87  | 18,70                             | FI-TE-16SRk-W3              |
|        | 12                       | 400             | R 3/8 keg.                        | 8   | 8   | 12  | 29   | 38              | 21,5 | 28   | 17  | 24   | 11,60                             | FI-TE-18SRk-W3              |
|        | .47                      | 5800            |                                   | .31 | .31 | .47 | 1.14 | 1.50            | .85  | 1.10 | .67 | .94  | 25,52                             | FI-TE-20SRk-W3              |
|        | 14                       | 400             | R 1/2 keg.                        | 10  | 10  | 14  | 30   | 40              | 22   | 32   | 19  | 27   | 15,47                             | FI-TE-22SRk-W3              |
|        | .55                      | 5800            |                                   | .39 | .39 | .55 | 1.18 | 1.57            | .87  | 1.26 | .75 | 1.06 | 34,03                             | FI-TE-24SRk-W3              |
|        | 16                       | 400             | R 1/2 keg.                        | 12  | 12  | 14  | 33   | 43              | 24,5 | 32   | 24  | 30   | 18,90                             | FI-TE-26SRk-W3              |
|        | .63                      | 5800            |                                   | .47 | .47 | .55 | 1.30 | 1.69            | .96  | 1.26 | .94 | 1.18 | 41,58                             | FI-TE-28SRk-W3              |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-2 (Form C)

Port acc. to DIN 3852-2 (Form Z)

Suitable liquid / plastic sealant required.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

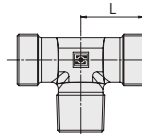
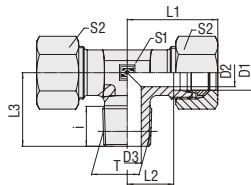
Please contact STAUFF prior to the assembly for further information.





## Male Stud Branch Tee

### Type FI-TE-...-Mk ▪ Series LL / L / S



C

#### Metric Taper Thread

| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in) |     |     |     |      |                 |      |      |     |      |       |  | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|-----|-----|-----|------|-----------------|------|------|-----|------|-------|--|-----------------------------------|-----------------------------|
|        | D1                 |                 | Thread T              | D2  | D3  | i   | L    | L1 <sup>1</sup> | L2   | L3   | S1  | S2   |       |  |                                   |                             |
| LL     | 4                  | 100             | M 8 x 1 keg.          | 3   | 3,5 | 8   | 15   | 21              | 11   | 17   | 9   | 10   | 1,27  |  |                                   | FI-TE-04LLMk-W3             |
|        | .16                | 1450            |                       | .12 | .14 | .31 | .59  | .83             | .43  | .67  | .35 | .39  | 2,79  |  |                                   | FI-TE-06LLMk-W3             |
|        | 6                  | 100             | M 10 x 1 keg.         | 4,5 | 4,5 | 8   | 15   | 21              | 9,5  | 17   | 9   | 12   | 1,62  |  |                                   | FI-TE-08LLMk-W3             |
|        | .24                | 1450            |                       | .18 | .18 | .31 | .59  | .83             | .37  | .67  | .35 | .47  | 3,56  |  |                                   | FI-TE-10LLMk-W3             |
|        | .31                | 1450            |                       | .24 | .24 | .31 | .67  | .91             | .45  | .79  | .47 | .55  | 5,31  |  |                                   | FI-TE-12LLMk-W3             |
| L      | 6                  | 315             | M 10 x 1 keg.         | 4   | 4   | 8   | 19   | 27              | 12   | 20   | 12  | 14   | 2,76  |  |                                   | FI-TE-06LMk-W3              |
|        | .24                | 4568            |                       | .16 | .16 | .31 | .75  | 1,06            | .47  | .79  | .47 | .55  | 6,08  |  |                                   | FI-TE-08LMk-W3              |
|        | 8                  | 315             | M 12 x 1,5 keg.       | 6   | 6   | 12  | 21   | 29              | 14   | 26   | 12  | 17   | 3,45  |  |                                   | FI-TE-10LMk-W3              |
|        | .31                | 4568            |                       | .24 | .24 | .47 | .83  | 1,14            | .55  | 1,02 | .47 | .67  | 7,59  |  |                                   | FI-TE-12LMk-W3              |
|        | 10                 | 315             | M 14 x 1,5 keg.       | 8   | 7   | 12  | 22   | 30              | 15   | 27   | 14  | 19   | 4,72  |  |                                   | FI-TE-14LMk-W3              |
|        | .39                | 4568            |                       | .31 | .28 | .47 | .87  | 1,18            | .59  | 1,06 | .55 | .75  | 10,38 |  |                                   | FI-TE-16LMk-W3              |
|        | 12                 | 315             | M 16 x 1,5 keg.       | 10  | 9   | 12  | 24   | 32              | 17   | 28   | 17  | 22   | 7,19  |  |                                   | FI-TE-18LMk-W3              |
|        | .47                | 4568            |                       | .39 | .35 | .47 | .94  | 1,26            | .67  | 1,10 | .67 | .87  | 15,81 |  |                                   | FI-TE-20LMk-W3              |
|        | 15                 | 315             | M 18 x 1,5 keg.       | 12  | 11  | 12  | 28   | 36              | 21   | 32   | 19  | 27   | 11,86 |  |                                   | FI-TE-22LMk-W3              |
|        | .59                | 4568            |                       | .47 | .43 | .47 | 1,10 | 1,42            | .83  | 1,26 | .75 | 1,06 | 26,10 |  |                                   | FI-TE-24LMk-W3              |
|        | 18                 | 315             | M 22 x 1,5 keg.       | 15  | 14  | 14  | 31   | 40              | 23,5 | 36   | 24  | 32   | 17,50 |  |                                   | FI-TE-26LMk-W3              |
|        | .71                | 4568            |                       | .59 | .55 | .55 | 1,22 | 1,57            | .93  | 1,42 | .94 | 1,26 | 38,49 |  |                                   | FI-TE-28LMk-W3              |
|        | 6                  | 400             | M 12 x 1,5 keg.       | 4   | 4   | 12  | 23   | 31              | 16   | 26   | 12  | 17   | 5,57  |  |                                   | FI-TE-06SMk-W3              |
|        | .24                | 5800            |                       | .16 | .16 | .47 | .91  | 1,22            | .63  | 1,02 | .47 | .67  | 12,26 |  |                                   | FI-TE-08SMk-W3              |
|        | 8                  | 400             | M 14 x 1,5 keg.       | 5   | 5   | 12  | 24   | 32              | 17   | 27   | 14  | 19   | 7,54  |  |                                   | FI-TE-10SMk-W3              |
|        | .31                | 5800            |                       | .20 | .20 | .47 | .94  | 1,26            | .67  | 1,06 | .55 | .75  | 16,58 |  |                                   | FI-TE-12SMk-W3              |
|        | 10                 | 400             | M 16 x 1,5 keg.       | 7   | 7   | 12  | 25   | 34              | 17,5 | 28   | 17  | 22   | 9,38  |  |                                   | FI-TE-14SMk-W3              |
|        | .39                | 5800            |                       | .28 | .28 | .47 | .98  | 1,34            | .69  | 1,10 | .67 | .87  | 20,64 |  |                                   | FI-TE-16SMk-W3              |
|        | 12                 | 400             | M 18 x 1,5 keg.       | 8   | 8   | 12  | 29   | 38              | 21,5 | 28   | 17  | 24   | 10,71 |  |                                   | FI-TE-20SMk-W3              |
|        | .47                | 5800            |                       | .31 | .31 | .47 | 1,14 | 1,50            | .85  | 1,10 | .67 | .94  | 23,56 |  |                                   | FI-TE-22SMk-W3              |
|        | 14                 | 400             | M 20 x 1,5 keg.       | 10  | 10  | 14  | 30   | 40              | 22   | 32   | 19  | 27   | 15,11 |  |                                   | FI-TE-24SMk-W3              |
|        | .55                | 5800            |                       | .39 | .39 | .55 | 1,18 | 1,57            | .87  | 1,26 | .75 | 1,06 | 33,25 |  |                                   | FI-TE-26SMk-W3              |
|        | 16                 | 400             | M 22 x 1,5 keg.       | 12  | 12  | 14  | 33   | 43              | 24,5 | 32   | 24  | 30   | 20,16 |  |                                   | FI-TE-28SMk-W3              |
|        | .63                | 5800            |                       | .47 | .47 | .55 | 1,30 | 1,69            | .96  | 1,26 | .94 | 1,18 | 44,35 |  |                                   | FI-TE-30SMk-W3              |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-1 (Form C)  
Port acc. to DIN 3852-1 (Form Z)

Suitable liquid / plastic sealant required.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

#### Ordering Codes

**\*FI-TE\*-10\*L\*Mk\*-W3\*-MS**

\* Male Stud Branch Tee **FI-TE**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series **LL**  
Extra-Light Series  
**L**  
Light Series  
**S**  
Heavy Series

\* Thread Type **Mk**  
Metric Taper Thread

If required, please indicate special sizes, e.g. M12x1.5 !

\* Material Code **-W3**  
Steel, zinc/nickel-plated

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting **—**  
Fitting body only

Fitting body supplied with cutting rings and union nuts **-MS**

Fitting body supplied with soft-sealing cutting rings and union nuts **-MSV**

#### Connecting Parts


Cutting Ring  
Type **FI-DS** **Page 28**

Soft-Sealing Cutting Ring  
Type **FI-WDDS** **Page 29**

Support Sleeve  
Type **FI-VH** **Page 31**

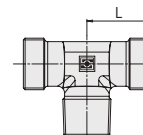
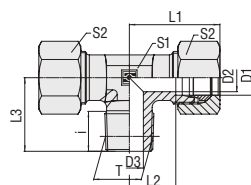
STAUFF Form EVO Sealing Ring  
Type **FI-FD** **Page 32**

Union Nut  
Type **FI-M** **Page 33**

37° Flared Tube Fitting Set  
Type **FI-AB** **Page 37**


## Male Stud Branch Tee

### Type FI-TE-...-N ▪ Series LL / L



### Ordering Codes

#### \*FI-TE\*-10\*L\*1/4N\*-W3\*-MS

|                                                                         |                                                                                  |                                   |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------|
| * Male Stud Branch Tee                                                  |                                                                                  | <b>FI-TE</b>                      |
| * Outside Tube Diameter D1 (in mm)                                      |                                                                                  | <b>-10</b>                        |
| * Series                                                                | Extra-Light Series (page 86)<br>Light Series (page 86)<br>Heavy Series (page 87) | <b>LL</b><br><b>L</b><br><b>S</b> |
| * Thread Size                                                           | acc. to dimension table                                                          | <b>1/4</b>                        |
| Please always indicate thread sizes, e.g. 1/4!                          |                                                                                  |                                   |
| * Thread Type                                                           | NPT Thread                                                                       | <b>N</b>                          |
| * Material Code                                                         | Steel, zinc/nickel-plated                                                        | <b>-W3</b>                        |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                  |                                   |
| * Assembling / Kitting                                                  | Fitting body only                                                                | <b>—</b>                          |
|                                                                         | Fitting body supplied with cutting rings and union nuts                          | <b>-MS</b>                        |
|                                                                         | Fitting body supplied with soft-sealing cutting rings and union nuts             | <b>-MSV</b>                       |

### Connecting Parts

|                                                                                     |                                                   |         |
|-------------------------------------------------------------------------------------|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

### NPT-Thread

| Series | Tube OD                           | PN                                  | Dimensions                        |   |      |      |      |      |                 |      |      |      | Weight<br>( <sup>kg</sup> / <sub>lbs</sub> ) ca.<br>per 100 | Ordering Codes <sup>3</sup> |                    |
|--------|-----------------------------------|-------------------------------------|-----------------------------------|---|------|------|------|------|-----------------|------|------|------|-------------------------------------------------------------|-----------------------------|--------------------|
|        | ( <sup>mm</sup> / <sub>in</sub> ) | ( <sup>bar</sup> / <sub>PSI</sub> ) | ( <sup>mm</sup> / <sub>in</sub> ) |   |      |      |      |      |                 |      |      |      |                                                             |                             |                    |
|        | D1                                |                                     | Thread                            | T | D2   | D3   | i    | L    | L1 <sup>1</sup> | L2   | L3   | S1   | S2                                                          |                             |                    |
| LL     | 4                                 | 100                                 | 1/8 NPT                           |   | 3    | 3    | 7    | 15   | 21              | 11   | 17   | 9    | 10                                                          | 1,60                        | FI-TE-04LL1/8N-W3  |
|        | .16                               | 1450                                |                                   |   | .12  | .12  | .28  | .59  | .83             | .43  | .67  | .35  | .39                                                         | 3.52                        |                    |
|        | 6                                 | 100                                 | 1/8 NPT                           |   | 4,5  | 4,5  | 7    | 15   | 21              | 9,5  | 17   | 9    | 12                                                          | 1,50                        | FI-TE-06LL1/8N-W3  |
|        | .24                               | 1450                                |                                   |   | .18  | .18  | .28  | .59  | .83             | .37  | .67  | .35  | .47                                                         | 3.30                        |                    |
|        | 8                                 | 100                                 | 1/8 NPT                           |   | 5    | 5    | 7    | 17   | 23              | 11,5 | 20   | 12   | 14                                                          | 2,50                        | FI-TE-08LL1/8N-W3  |
|        | .31                               | 1450                                |                                   |   | .20  | .20  | .28  | .67  | .91             | .45  | .79  | .47  | .55                                                         | 5.50                        |                    |
| L      | 6                                 | 315                                 | 1/8 NPT                           |   | 4    | 4    | 7    | 19   | 27              | 12   | 20   | 12   | 14                                                          | 3,00                        | FI-TE-06L1/8N-W3   |
|        | .24                               | 4568                                |                                   |   | .16  | .16  | .28  | .75  | 1.06            | .47  | .79  | .47  | .55                                                         | 6.60                        |                    |
|        | 6                                 | 315                                 | 1/4 NPT                           |   | 4    | 4    | 10   | 21   | 29              | 14   | 26   | 12   | 14                                                          | 4,40                        | FI-TE-06L1/4N-W3   |
|        | .24                               | 4568                                |                                   |   | .16  | .16  | .39  | .83  | 1.14            | .55  | 1.02 | .47  | .55                                                         | 9.68                        |                    |
|        | 8                                 | 315                                 | 1/4 NPT                           |   | 6    | 6    | 10   | 21   | 29              | 14   | 26   | 12   | 17                                                          | 4,20                        | FI-TE-08L1/4N-W3   |
|        | .31                               | 4568                                |                                   |   | .24  | .24  | .39  | .83  | 1.14            | .55  | 1.02 | .47  | .67                                                         | 9.24                        |                    |
|        | 10                                | 315                                 | 1/4 NPT                           |   | 7    | 7    | 10   | 22   | 30              | 15   | 27   | 14   | 19                                                          | 5,00                        | FI-TE-10L1/4N-W3   |
|        | .39                               | 4568                                |                                   |   | .28  | .28  | .39  | .87  | 1.18            | .59  | 1.06 | .55  | .75                                                         | 11.00                       |                    |
|        | 12                                | 315                                 | 3/8 NPT                           |   | 10   | 10   | 10,5 | 24   | 32              | 17   | 28   | 17   | 22                                                          | 6,50                        | FI-TE-12L3/8N-W3   |
|        | .47                               | 4568                                |                                   |   | .39  | .39  | .41  | .94  | 1.26            | .67  | 1.10 | .67  | .87                                                         | 14.30                       |                    |
|        | 15                                | 315                                 | 1/2 NPT                           |   | 12   | 12   | 14   | 28   | 36              | 21   | 36   | 19   | 27                                                          | 12,10                       | FI-TE-15L1/2N-W3   |
|        | .59                               | 4568                                |                                   |   | .47  | .47  | .55  | 1.10 | 1.42            | .83  | 1.42 | .75  | 1.06                                                        | 26.62                       |                    |
|        | 18                                | 315                                 | 1/2 NPT                           |   | 15   | 12   | 14   | 31   | 40              | 23,5 | 36   | 24   | 32                                                          | 16,30                       | FI-TE-18L1/2N-W3   |
|        | .71                               | 4568                                |                                   |   | .59  | .47  | .55  | 1.22 | 1.57            | .93  | 1.42 | .94  | 1.26                                                        | 35.86                       |                    |
|        | 22                                | 160                                 | 3/4 NPT                           |   | 19   | 18   | 14   | 35   | 44              | 27,5 | 42   | 27   | 36                                                          | 21,80                       | FI-TE-22L3/4N-W3   |
|        | .87                               | 2320                                |                                   |   | .75  | .71  | .55  | 1.38 | 1.73            | 1.08 | 1.65 | 1.06 | 1.42                                                        | 47.96                       |                    |
|        | 28                                | 160                                 | 1 NPT                             |   | 24   | 21   | 17,5 | 38   | 47              | 30,5 | 48   | 36   | 41                                                          | 39,00                       | FI-TE-28L1N-W3     |
|        | 1.10                              | 2320                                |                                   |   | .94  | .83  | .69  | 1.50 | 1.85            | 1.20 | 1.89 | 1.42 | 1.61                                                        | 85.80                       |                    |
|        | 35                                | 160                                 | 1 1/4 NPT                         |   | 30   | 28   | 18   | 46   | 57              | 35,5 | 54   | 41   | 50                                                          | 59,40                       | FI-TE-35L1-1/4N-W3 |
|        | 1.38                              | 2320                                |                                   |   | 1.18 | 1.10 | .71  | 1.81 | 2.24            | 1.40 | 2.13 | 1.61 | 1.97                                                        | 130.68                      |                    |
|        | 42                                | 160                                 | 1 1/2 NPT                         |   | 36   | 34   | 18,5 | 51   | 63              | 40   | 61   | 50   | 60                                                          | 84,10                       | FI-TE-42L1-1/2N-W3 |
|        | 1.65                              | 2320                                |                                   |   | 1.42 | 1.34 | .73  | 2.01 | 2.48            | 1.57 | 2.40 | 1.97 | 2.36                                                        | 185.02                      |                    |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to ANSI/ASME B1.20.1-1983

Port acc. to ANSI/ASME B1.20.1-1983

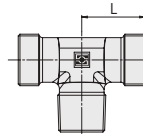
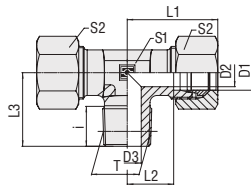
Suitable liquid / plastic sealant required.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.



## Male Stud Branch Tee Type FI-TE-...-N • Series S



C

### NPT Thread

| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |      |      |      |                |      |      |      |      |        |                    | Weight<br>(kg/lbs) Ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------|------|------|------|----------------|------|------|------|------|--------|--------------------|-----------------------------------|-----------------------------|
|        |                    |                 | D1                    | D2   | D3   | i    | L    | L <sup>1</sup> | L2   | L3   | S1   | S2   |        |                    |                                   |                             |
| S      | 6                  | 630             | 1/4 NPT               | 4    | 4    | 10   | 23   | 31             | 16   | 26   | 12   | 17   | 5,50   | FI-TE-06S1/4N-W3   |                                   |                             |
|        | .24                | 9135            |                       | .16  | .16  | .39  | .91  | 1.22           | .63  | 1.02 | .47  | .67  | 12.10  |                    |                                   |                             |
|        | 8                  | 630             | 1/4 NPT               | 5    | 5    | 10   | 24   | 32             | 17   | 27   | 14   | 19   | 6,80   | FI-TE-08S1/4N-W3   |                                   |                             |
|        | .31                | 9135            |                       | .20  | .20  | .39  | .94  | 1.26           | .67  | 1.06 | .55  | .75  | 14.96  |                    |                                   |                             |
|        | 10                 | 630             | 3/8 NPT               | 7    | 7    | 10,5 | 25   | 34             | 17,5 | 28   | 17   | 22   | 8,80   | FI-TE-10S3/8N-W3   |                                   |                             |
|        | .39                | 9135            |                       | .28  | .28  | .41  | .98  | 1.34           | .69  | 1.10 | .67  | .87  | 19.36  |                    |                                   |                             |
|        | 12                 | 630             | 3/8 NPT               | 8    | 8    | 10,5 | 29   | 38             | 21,5 | 28   | 22   | 24   | 11,10  | FI-TE-12S3/8N-W3   |                                   |                             |
|        | .47                | 9135            |                       | .31  | .31  | .41  | 1.14 | 1.50           | .85  | 1.10 | .87  | .94  | 24.42  |                    |                                   |                             |
|        | 14                 | 630             | 1/2 NPT               | 10   | 10   | 14   | 30   | 40             | 22   | 34   | 19   | 27   | 15,10  | FI-TE-14S1/2N-W3   |                                   |                             |
|        | .55                | 9135            |                       | .39  | .39  | .55  | 1.18 | 1.57           | .87  | 1.34 | .75  | 1.06 | 33.22  |                    |                                   |                             |
|        | 16                 | 630             | 1/2 NPT               | 12   | 12   | 14   | 33   | 43             | 24,5 | 36   | 24   | 30   | 19,00  | FI-TE-16S1/2N-W3   |                                   |                             |
|        | .63                | 9135            |                       | .47  | .47  | .55  | 1.30 | 1.69           | .96  | 1.42 | .94  | 1.18 | 41.80  |                    |                                   |                             |
|        | 20                 | 400             | 3/4 NPT               | 16   | 16   | 14   | 37   | 48             | 26,5 | 42   | 27   | 36   | 28,20  | FI-TE-20S3/4N-W3   |                                   |                             |
|        | .79                | 5800            |                       | .63  | .63  | .55  | 1.46 | 1.89           | 1.04 | 1.65 | 1.06 | 1.42 | 62.04  |                    |                                   |                             |
|        | 25                 | 400             | 1 NPT                 | 20   | 20   | 17,5 | 42   | 54             | 30   | 48   | 36   | 46   | 50,40  | FI-TE-25S1N-W3     |                                   |                             |
|        | .98                | 5800            |                       | .79  | .79  | .69  | 1.65 | 2.13           | 1.18 | 1.89 | 1.42 | 1.81 | 110.88 |                    |                                   |                             |
|        | 30                 | 400             | 1 1/4 NPT             | 25   | 25   | 18   | 49   | 62             | 35,5 | 54   | 41   | 50   | 78,20  | FI-TE-30S1-1/4N-W3 |                                   |                             |
|        | 1.18               | 5800            |                       | .98  | .98  | .71  | 1.93 | 2.44           | 1.40 | 2.13 | 1.61 | 1.97 | 172.04 |                    |                                   |                             |
|        | 38                 | 400             | 1 1/2 NPT             | 32   | 32   | 18,5 | 57   | 72             | 41   | 61   | 50   | 60   | 113,30 | FI-TE-38S1-1/2N-W3 |                                   |                             |
|        | 1.50               | 5800            |                       | 1.26 | 1.26 | .73  | 2.24 | 2.83           | 1.61 | 2.40 | 1.97 | 2.36 | 249.26 |                    |                                   |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to ANSI/ASME B1.20.1-1983

Port acc. to ANSI/ASME B1.20.1-1983

Suitable liquid / plastic sealant required.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

**\*FI-TE\*-10\*S\*3/8N\*-W3\*-MS**

|                                                                         |                                                                                                              |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| * Male Stud Branch Tee                                                  | FI-TE                                                                                                        |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                                                                          |
| * Series                                                                | Extra-Light Series (page 86) <b>LL</b><br>Light Series (page 86) <b>L</b><br>Heavy Series (page 87) <b>S</b> |
| * Thread Size                                                           | acc. to dimension table <b>3/8</b>                                                                           |
| Please always indicate thread sizes, e.g. 1/4!                          |                                                                                                              |
| * Thread Type                                                           | NPT Thread <b>N</b>                                                                                          |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                                                         |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                              |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b>                                                                                   |
|                                                                         | Fitting body supplied with cutting rings and union nuts <b>-MS</b>                                           |
|                                                                         | Fitting body supplied with soft-sealing cutting rings and union nuts <b>-MSV</b>                             |

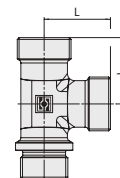
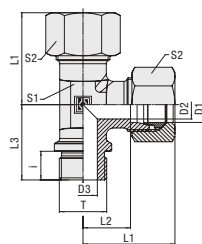
### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |



## Male Stud Barrel Tee

### Type FI-LE-...-R ▪ Series L / S



### Ordering Codes

#### \*FI-LE\*-22\*L\*R\*-W3\*-MS

|                                                                         |                                                                                                                                                                                      |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * Male Stud Barrel Tee                                                  | <b>FI-LE</b>                                                                                                                                                                         |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-22</b>                                                                                                                                                                           |
| * Series                                                                | Light Series <b>L</b><br>Heavy Series <b>S</b>                                                                                                                                       |
| * Thread Type                                                           | Whitworth Parallel Pipe Thread (BSPP) <b>R</b>                                                                                                                                       |
| If required, please indicate special sizes, e.g. R1/2!                  |                                                                                                                                                                                      |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                                                                                                                                 |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                                                                                      |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b><br>Fitting body supplied with cutting rings and union nuts <b>-MS</b><br>Fitting body supplied with soft-sealing cutting rings and union nuts <b>-MSV</b> |

### Whitworth Parallel Pipe Thread (BSPP)

### Metallic Sealing Edge

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in)<br>Thread T | D2   | D3   | i   | L    | L1 <sup>1</sup> | L2   | L3   | S1   | S2   | Torque<br>(N·m/ft·lb)<br>Thread T | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------------------|------|------|-----|------|-----------------|------|------|------|------|-----------------------------------|-----------------------------------|-----------------------------|
| L      | 22                       | 160             | G 3/4                             | 18   | 18   | 16  | 35   | 44              | 27,5 | 42   | 27   | 36   | 180                               | 25,01                             | FI-LE-22LR-W3               |
|        | .87                      | 2320            |                                   | .71  | .71  | .63 | 1.38 | 1.73            | 1.08 | 1.65 | 1.06 | 1.42 | 133.2                             | 55.01                             |                             |
|        | 28                       | 160             | G 1                               | 23   | 23   | 18  | 38   | 47              | 30,5 | 48   | 36   | 41   | 330                               | 40,60                             | FI-LE-28LR-W3               |
|        | 1.10                     | 2320            |                                   | .91  | .91  | .71 | 1.50 | 1.85            | 1.20 | 1.89 | 1.42 | 1.61 | 244.2                             | 89.32                             |                             |
|        | 35                       | 160             | G 1 1/4                           | 30   | 30   | 20  | 45   | 56              | 34,5 | 54   | 41   | 50   | 540                               | 61,96                             | FI-LE-35LR-W3               |
|        | 1.38                     | 2320            |                                   | 1.18 | 1.18 | .79 | 1.77 | 2.20            | 1.36 | 2.13 | 1.61 | 1.97 | 399.6                             | 136.32                            |                             |
|        | 42                       | 160             | G 1 1/2                           | 36   | 36   | 22  | 51   | 63              | 40   | 61   | 50   | 60   | 630                               | 100,41                            | FI-LE-42LR-W3               |
| S      | 1.65                     | 2320            |                                   | 1.42 | 1.42 | .87 | 2.01 | 2.48            | 1.57 | 2.40 | 1.97 | 2.36 | 466.2                             | 220.90                            |                             |
|        | 20                       | 400             | G 3/4                             | 16   | 16   | 16  | 37   | 48              | 26,5 | 42   | 27   | 36   | 270                               | 31,72                             | FI-LE-20SR-W3               |
|        | .79                      | 5800            |                                   | .63  | .63  | .63 | 1.46 | 1.89            | 1.04 | 1.65 | 1.06 | 1.42 | 199.8                             | 69.78                             |                             |
|        | 25                       | 250             | G 1                               | 20   | 20   | 18  | 42   | 54              | 30   | 48   | 36   | 46   | 340                               | 54,62                             | FI-LE-25SR-W3               |
|        | .98                      | 3625            |                                   | .79  | .79  | .71 | 1.65 | 2.13            | 1.18 | 1.89 | 1.42 | 1.81 | 251.6                             | 120.16                            |                             |
|        | 30                       | 160             | G 1 1/4                           | 25   | 25   | 20  | 49   | 62              | 35,5 | 54   | 41   | 50   | 540                               | 52,00                             | FI-LE-30SR-W3               |
|        | 1.18                     | 2320            |                                   | .98  | .98  | .79 | 1.93 | 2.44            | 1.40 | 2.13 | 1.61 | 1.97 | 399.6                             | 114.40                            |                             |
|        | 38                       | 160             | G 1 1/2                           | 32   | 32   | 22  | 57   | 72              | 41   | 61   | 50   | 60   | 700                               | 134,44                            | FI-LE-38SR-W3               |
|        | 1.50                     | 2320            |                                   | 1.26 | 1.26 | .87 | 2.24 | 2.83            | 1.61 | 2.40 | 1.97 | 2.36 | 518.0                             | 295.76                            |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-2 (Form B) / ISO 1179-4 (Type B)  
Port acc. to DIN 3852-2 (Form X) / ISO 1179-1

Torque recommendations for Steel mating material.

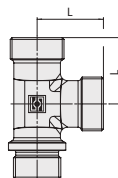
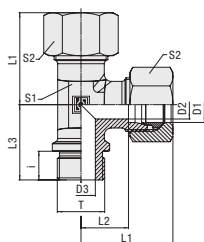
Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Connecting Parts

|                                                                                     |                                                   |         |
|-------------------------------------------------------------------------------------|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |





## Male Stud Barrel Tee Type FI-LE-...-M • Series L / S



C

### Metallic Sealing Edge

### Metric Parallel Thread

| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in)                                   | Torque<br>(N·m/ft·lb)                             | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|---------------------------------------------------------|---------------------------------------------------|-----------------------------------|-----------------------------|
|        | D1                 |                 | Thread T D2 D3 i L L1 <sup>1</sup> L2 L3 S1 S2 Thread T |                                                   |                                   |                             |
| L      | 22                 | 160             | M 26 x 1,5                                              | 18 18 16 35 44 27,5 42 27 36 190                  | 25,01                             | FI-LE-22LM-W3               |
|        | .87                | 2320            |                                                         | .71 .71 .63 1.38 1.73 1.08 1.65 1.06 1.42 140.6   | 55.01                             |                             |
|        | 28                 | 160             | M 33 x 2                                                | 23 23 18 38 47 30,5 48 27 41 340                  | 40,60                             | FI-LE-28LM-W3               |
|        | 1.10               | 2320            |                                                         | .91 .91 .71 1.50 1.85 1.20 1.89 1.06 1.61 251.6   | 89.32                             |                             |
|        | 35                 | 160             | M 42 x 2                                                | 30 30 20 45 56 34,5 54 41 50 500                  | 61,96                             | FI-LE-35LM-W3               |
|        | 1.38               | 2320            |                                                         | 1.18 1.18 .79 1.77 2.20 1.36 2.13 1.61 1.97 370.0 | 136.32                            |                             |
| S      | 42                 | 160             | M 48 x 2                                                | 36 36 22 51 63 40 61 50 60 630                    | 100,41                            | FI-LE-42LM-W3               |
|        | 1.65               | 2320            |                                                         | 1.42 1.42 .87 2.01 2.48 1.57 2.40 1.97 2.36 466.2 | 220.90                            |                             |
|        | 20                 | 400             | M 27 x 2                                                | 16 16 16 37 48 26,5 42 27 36 270                  | 31,72                             | FI-LE-20SM-W3               |
|        | .79                | 5800            |                                                         | .63 .63 .63 1.46 1.89 1.04 1.65 1.06 1.42 199.8   | 69.78                             |                             |
|        | 25                 | 250             | M 33 x 2                                                | 20 20 18 42 54 30 48 36 46 410                    | 54,62                             | FI-LE-25SM-W3               |
|        | .98                | 3625            |                                                         | .79 .79 .71 1.65 2.13 1.18 1.89 1.42 1.81 303.4   | 120.16                            |                             |
|        | 30                 | 160             | M 42 x 2                                                | 25 25 20 49 62 35,5 54 41 50 540                  | 52,00                             | FI-LE-30SM-W3               |
|        | 1.18               | 2320            |                                                         | .98 .98 .79 1.93 2.44 1.40 2.13 1.61 1.97 399.6   | 114.40                            |                             |
|        | 38                 | 160             | M 48 x 2                                                | 32 32 22 57 72 41 61 50 60 700                    | 134,44                            | FI-LE-38SM-W3               |
|        | 1.50               | 2320            |                                                         | 1.26 1.26 .87 2.24 2.83 1.61 2.40 1.97 2.36 518.0 | 295.76                            |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-1 (Form B) / ISO 9974-3 (Type B)  
Port acc. to DIN 3852-1 (Form X) / ISO 9974-1

Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

**\*FI-LE\*-22\*L\*M\*-W3\*-MS**

\* Male Stud Barrel Tee **FI-LE**

\* Outside Tube Diameter D1 (in mm) **-22**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Metric Parallel Thread **M**

If required, please indicate special sizes, e.g. M27x2!

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only **—**

Fitting body supplied with cutting rings and union nuts **-MS**

Fitting body supplied with soft-sealing cutting rings and union nuts **-MSV**

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33

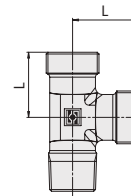
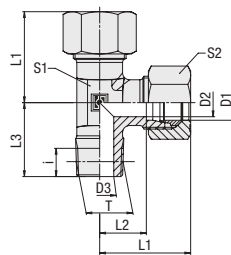


37° Flared Tube Fitting Set  
Type **FI-AB** Page 37



## Male Stud Barrel Tee

### Type FI-LE-...-Rk ■ Series LL / L / S



#### Whitworth Taper Pipe Thread (BSPT)

#### Ordering Codes

**\*FI-LE\*-10\*L\*Rk\*-W3\*-MS**

|                                                                         |                                                                      |
|-------------------------------------------------------------------------|----------------------------------------------------------------------|
| * Male Stud Barrel Tee                                                  | <b>FI-LE</b>                                                         |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                           |
| * Series                                                                | Extra-Light Series<br>Light Series<br>Heavy Series                   |
|                                                                         | <b>LL</b><br><b>L</b><br><b>S</b>                                    |
| * Thread Type                                                           | Whitworth Taper<br>Pipe Thread (BSPT)                                |
|                                                                         | <b>Rk</b>                                                            |
| If required, please indicate special sizes, e.g. R1/8k!                 |                                                                      |
| * Material Code                                                         | Steel, zinc/nickel-plated                                            |
|                                                                         | <b>-W3</b>                                                           |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                      |
| * Assembling / Kitting                                                  | Fitting body only                                                    |
|                                                                         | <b>—</b>                                                             |
|                                                                         | Fitting body supplied with cutting rings and union nuts              |
|                                                                         | <b>-MS</b>                                                           |
|                                                                         | Fitting body supplied with soft-sealing cutting rings and union nuts |
|                                                                         | <b>-MSV</b>                                                          |

#### Connecting Parts

|                                                                                     |                                                   |         |
|-------------------------------------------------------------------------------------|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in)<br>Thread T | D2  | D3  | i   | L    | L1 <sup>1</sup> | L2   | L3   | S1  | S2   | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------------------|-----|-----|-----|------|-----------------|------|------|-----|------|-----------------------------------|-----------------------------|
| LL     | 4                        | 100             | R 1/8 keg.                        | 3   | 4   | 8   | 15   | 21              | 11   | 17   | 9   | 10   | 1,50                              | FI-LE-04LLRk-W3             |
|        | .16                      | 1450            |                                   | .12 | .16 | .31 | .59  | .83             | .43  | .67  | .35 | .39  | 3,30                              |                             |
|        | 6                        | 100             | R 1/8 keg.                        | 4,5 | 5   | 8   | 16   | 21              | 9,5  | 17   | 9   | 12   | 1,60                              | FI-LE-06LLRk-W3             |
|        | .24                      | 1450            |                                   | .18 | .20 | .31 | .63  | .83             | .37  | .67  | .35 | .47  | 3,52                              |                             |
|        | 8                        | 100             | R 1/8 keg.                        | 6   | 6   | 8   | 17   | 23              | 11,5 | 20   | 12  | 14   | 2,42                              | FI-LE-08LLRk-W3             |
|        | .31                      | 1450            |                                   | .24 | .24 | .31 | .67  | .91             | .45  | .79  | .47 | .55  | 5,31                              |                             |
| L      | 6                        | 315             | R 1/8 keg.                        | 4   | 4   | 8   | 19   | 27              | 12   | 20   | 12  | 14   | 3,43                              | FI-LE-06LRk-W3              |
|        | .24                      | 4568            |                                   | .16 | .16 | .31 | .75  | 1.06            | .47  | .79  | .47 | .55  | 94,60                             |                             |
|        | 8                        | 315             | R 1/4 keg.                        | 6   | 6   | 12  | 21   | 29              | 14   | 26   | 12  | 17   | 3,79                              | FI-LE-08LRk-W3              |
|        | .31                      | 4568            |                                   | .24 | .24 | .47 | .83  | 1.14            | .55  | 1.02 | .47 | .67  | 8,34                              |                             |
|        | 10                       | 315             | R 1/4 keg.                        | 8   | 7   | 12  | 22   | 30              | 15   | 27   | 14  | 19   | 5,20                              | FI-LE-10LRk-W3              |
|        | .39                      | 4568            |                                   | .31 | .28 | .47 | .87  | 1.18            | .59  | 1.06 | .55 | .75  | 11,44                             |                             |
|        | 12                       | 315             | R 3/8 keg.                        | 10  | 9   | 12  | 24   | 32              | 17   | 28   | 17  | 22   | 6,34                              | FI-LE-12LRk-W3              |
|        | .47                      | 4568            |                                   | .39 | .35 | .47 | .94  | 1.26            | .67  | 1.10 | .67 | .87  | 13,95                             |                             |
|        | 15                       | 315             | R 1/2 keg.                        | 12  | 11  | 14  | 28   | 36              | 21   | 34   | 19  | 27   | 11,50                             | FI-LE-15LRk-W3              |
|        | .59                      | 4568            |                                   | .47 | .43 | .55 | 1.10 | 1.42            | .83  | 1.34 | .75 | 1.06 | 25,30                             |                             |
|        | 18                       | 315             | R 1/2 keg.                        | 15  | 14  | 14  | 31   | 40              | 23,5 | 36   | 24  | 32   | 14,48                             | FI-LE-18LRk-W3              |
|        | .71                      | 4568            |                                   | .59 | .55 | .55 | 1.22 | 1.57            | .93  | 1.42 | .94 | 1.26 | 31,86                             |                             |
| S      | 6                        | 400             | R 1/4 keg.                        | 4   | 4   | 12  | 23   | 31              | 16   | 26   | 12  | 17   | 5,03                              | FI-LE-06SRk-W3              |
|        | .24                      | 5800            |                                   | .16 | .16 | .47 | .91  | 1.22            | .63  | 1.02 | .47 | .67  | 11,07                             |                             |
|        | 8                        | 400             | R 1/4 keg.                        | 5   | 5   | 12  | 24   | 32              | 17   | 27   | 14  | 19   | 6,41                              | FI-LE-08SRk-W3              |
|        | .31                      | 5800            |                                   | .20 | .20 | .47 | .94  | 1.26            | .67  | 1.06 | .55 | .75  | 14,10                             |                             |
|        | 10                       | 400             | R 3/8 keg.                        | 7   | 7   | 12  | 25   | 34              | 17,5 | 28   | 17  | 22   | 8,33                              | FI-LE-10SRk-W3              |
|        | .39                      | 5800            |                                   | .28 | .28 | .47 | .98  | 1.34            | .69  | 1.10 | .67 | .87  | 18,33                             |                             |
|        | 12                       | 400             | R 3/8 keg.                        | 8   | 8   | 12  | 29   | 38              | 21,5 | 28   | 17  | 24   | 10,46                             | FI-LE-12SRk-W3              |
|        | .47                      | 5800            |                                   | .31 | .31 | .47 | 1.14 | 1.50            | .85  | 1.10 | .67 | .94  | 23,00                             |                             |
|        | 14                       | 400             | R 1/2 keg.                        | 10  | 10  | 14  | 30   | 40              | 22   | 32   | 19  | 27   | 13,91                             | FI-LE-14SRk-W3              |
|        | .55                      | 5800            |                                   | .39 | .39 | .55 | 1.18 | 1.57            | .87  | 1.26 | .75 | 1.06 | 30,60                             |                             |
|        | 16                       | 400             | R 1/2 keg.                        | 12  | 12  | 14  | 33   | 43              | 24,5 | 32   | 24  | 30   | 17,66                             | FI-LE-16SRk-W3              |
|        | .63                      | 5800            |                                   | .47 | .47 | .55 | 1.30 | 1.69            | .96  | 1.26 | .94 | 1.18 | 38,85                             |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-2 (Form C)

Port acc. to DIN 3852-2 (Form Z)

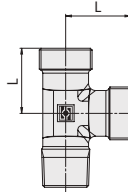
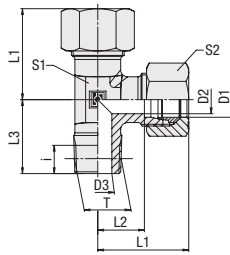
Suitable liquid / plastic sealant required.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.







## Male Stud Barrel Tee Type FI-LE-...-Mk ■ Series LL / L / S



C

### Metric Taper Thread

| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in) | Weight<br>(kg/lbs) ca.<br>per 100             | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|-----------------------------------------------|-----------------------------|
|        | D1                 |                 | Thread T              | D2 D3 i L L1 <sup>1</sup> L2 L3 S1 S2         |                             |
| LL     | 4                  | 100             | M 8 x 1 keg.          | 3 3,5 8 15 21 11 17 9 10 1,50                 | FI-LE-04LLMk-W3             |
|        | .16                | 1450            |                       | .12 .14 .31 .59 .83 .43 .67 .35 .39 3,30      |                             |
|        | 6                  | 100             | M 10 x 1 keg.         | 4,5 4,5 8 15 21 9,5 17 9 12 1,62              | FI-LE-06LLMk-W3             |
|        | .24                | 1450            |                       | .18 .18 .31 .59 .83 .37 .67 .35 .47 3,56      |                             |
|        | 8                  | 100             | M 10 x 1 keg.         | 6 6 8 17 23 11,5 20 12 14 2,42                | FI-LE-08LLMk-W3             |
| L      | .31                | 1450            |                       | .24 .24 .31 .67 .91 .45 .79 .47 .55 5,31      |                             |
|        | 6                  | 315             | M 10 x 1 keg.         | 4 4 8 19 27 12 20 12 14 3,43                  | FI-LE-06LMk-W3              |
|        | .24                | 4568            |                       | .16 .16 .31 .75 1,06 .47 .79 .47 .55 7,54     |                             |
|        | 8                  | 315             | M 12 x 1,5 keg.       | 6 6 12 21 29 14 26 12 17 4,24                 | FI-LE-08LMk-W3              |
|        | .31                | 4568            |                       | .24 .24 .47 .83 1,14 .55 1,02 .47 .67 9,34    |                             |
|        | 10                 | 315             | M 14 x 1,5 keg.       | 8 7 12 22 30 15 27 14 19 5,57                 | FI-LE-10LMk-W3              |
|        | .39                | 4568            |                       | .31 .28 .47 .87 1,18 .59 1,06 .55 .75 12,25   |                             |
|        | 12                 | 315             | M 16 x 1,5 keg.       | 10 9 12 24 32 17 28 17 22 7,19                | FI-LE-12LMk-W3              |
|        | .47                | 4568            |                       | .39 .35 .47 .94 1,26 .67 1,10 .67 .87 15,81   |                             |
|        | 15                 | 315             | M 18 x 1,5 keg.       | 12 11 12 28 36 21 32 19 27 11,86              | FI-LE-15LMk-W3              |
|        | .59                | 4568            |                       | .47 .43 .47 1,10 1,42 .83 1,26 .75 1,06 26,10 |                             |
|        | 18                 | 315             | M 22 x 1,5 keg.       | 15 14 14 31 40 23,5 36 24 32 17,50            | FI-LE-18LMk-W3              |
|        | .71                | 4568            |                       | .59 .55 .55 1,22 1,57 .93 1,42 .94 1,26 38,49 |                             |
|        | 6                  | 400             | M 12 x 1,5 keg.       | 4 4 12 23 31 16 26 12 17 5,57                 | FI-LE-06SMk-W3              |
|        | .24                | 5800            |                       | .16 .16 .47 .91 1,22 .63 1,02 .47 .67 12,26   |                             |
| S      | 8                  | 400             | M 14 x 1,5 keg.       | 5 5 12 24 32 17 27 14 19 7,54                 | FI-LE-08SMk-W3              |
|        | .31                | 5800            |                       | .20 .20 .47 .94 1,26 .67 1,06 .55 .75 16,58   |                             |
|        | 10                 | 400             | M 16 x 1,5 keg.       | 7 7 12 25 34 17,5 28 17 22 8,37               | FI-LE-10SMk-W3              |
|        | .39                | 5800            |                       | .28 .28 .47 .98 1,34 .69 1,10 .67 .87 18,42   |                             |
|        | 12                 | 400             | M 18 x 1,5 keg.       | 8 8 12 29 38 21,5 28 17 24 12,07              | FI-LE-12SMk-W3              |
|        | .47                | 5800            |                       | .31 .31 .47 1,14 1,50 .85 1,10 .67 .94 26,55  |                             |
|        | 14                 | 400             | M 20 x 1,5 keg.       | 10 10 14 30 40 22 32 19 27 15,11              | FI-LE-14SMk-W3              |
|        | .55                | 5800            |                       | .39 .39 .55 1,18 1,57 .87 1,26 .75 1,06 33,25 |                             |
|        | 16                 | 400             | M 22 x 1,5 keg.       | 12 12 14 33 43 24,5 32 24 30 20,16            | FI-LE-16SMk-W3              |
|        | .63                | 5800            |                       | .47 .47 .55 1,30 1,69 .96 1,26 .94 1,18 44,35 |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to DIN 3852-1 (Form C)  
Port acc. to DIN 3852-1 (Form Z)

Suitable liquid / plastic sealant required.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

#### \*FI-LE\*-10\*L\*Mk\*-W3\*-MS

|                                                                         |                                                                           |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------|
| * Male Stud Barrel Tee                                                  | FI-LE                                                                     |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                                       |
| * Series                                                                | Extra-Light Series LL<br>Light Series L<br>Heavy Series S                 |
| * Thread Type                                                           | Metric Taper Thread Mk                                                    |
| If required, please indicate special sizes, e.g. M12x1.5 !              |                                                                           |
| * Material Code                                                         | Steel, zinc/nickel-plated -W3                                             |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                           |
| * Assembling / Kitting                                                  | Fitting body only —                                                       |
|                                                                         | Fitting body supplied with cutting rings and union nuts -MS               |
|                                                                         | Fitting body supplied with soft-sealing cutting rings and union nuts -MSV |

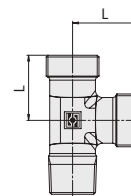
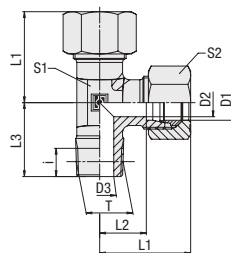
### Connecting Parts

|  |                                            |         |
|--|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |



## Male Stud Barrel Tee

### Type FI-LE-...-N • Series LL / L



#### NPT-Thread

#### Ordering Codes

#### \*FI-LE\*-10\*L\*1/4N\*-W3\*-MS

|                                                                         |                                                                                                              |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| * Male Stud Barrel Tee                                                  | <b>FI-LE</b>                                                                                                 |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                                                   |
| * Series                                                                | Extra-Light Series (page 92) <b>LL</b><br>Light Series (page 92) <b>L</b><br>Heavy Series (page 93) <b>S</b> |
| * Thread Size                                                           | acc. to dimension table <b>1/4</b>                                                                           |
| Please always indicate thread sizes, e.g. 1/4!                          |                                                                                                              |
| * Thread Type                                                           | NPT Thread <b>N</b>                                                                                          |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                                                         |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                              |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b>                                                                                   |
|                                                                         | Fitting body supplied with cutting rings and union nuts <b>-MS</b>                                           |
|                                                                         | Fitting body supplied with soft-sealing cutting rings and union nuts <b>-MSV</b>                             |

| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in)                              | Weight<br>(kg/lbs) Ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|----------------------------------------------------|-----------------------------------|-----------------------------|
|        | D1                 |                 | Thread T D2 D3 i L L1 <sup>1</sup> L2 L3 S1 S2     |                                   |                             |
| LL     | 4                  | 100             | 1/8 NPT 3 3 7 15 21 11 15 9 10 1,51                | 1,51                              | FI-LE-04LL1/8N-W3           |
|        | .16                | 1450            | .12 .12 .28 .59 .83 .43 .59 .35 .39 3.32           | 3.32                              |                             |
|        | 6                  | 100             | 1/8 NPT 4,5 4,5 7 15 21 9,5 15 10 12 1,62          | 1,62                              | FI-LE-06LL1/8N-W3           |
|        | .24                | 1450            | .18 .18 .28 .59 .83 .37 .59 .39 .47 3.56           | 3.56                              |                             |
|        | 8                  | 100             | 1/8 NPT 5 5 7 17 23 11,5 20 12 14 3,30             | 3,30                              | FI-LE-08LL1/8N-W3           |
| L      | .31                | 1450            | .20 .20 .28 .67 .91 .45 .79 .47 .55 7.26           | 7.26                              |                             |
|        | 6                  | 315             | 1/8 NPT 4 4 7 19 27 12 20 12 14 1,30               | 1,30                              | FI-LE-06L1/8N-W3            |
|        | .24                | 4568            | .16 .16 .28 .75 1.06 .47 .79 .47 .55 2.86          | 2.86                              |                             |
|        | 8                  | 315             | 1/4 NPT 6 6 10 21 29 14 26 12 17 4,24              | 4,24                              | FI-LE-08L1/4N-W3            |
|        | .31                | 4568            | .24 .24 .39 .83 1.14 .55 1.02 .47 .67 9.33         | 9.33                              |                             |
|        | 10                 | 315             | 1/4 NPT 7 7 10 22 30 15 27 14 19 5,57              | 5,57                              | FI-LE-10L1/4N-W3            |
|        | .39                | 4568            | .28 .28 .39 .87 1.18 .59 1.06 .55 .75 12.25        | 12.25                             |                             |
|        | 12                 | 315             | 3/8 NPT 10 10 10,5 24 32 17 28 17 22 7,19          | 7,19                              | FI-LE-12L3/8N-W3            |
|        | .47                | 4568            | .39 .39 .41 .94 1.26 .67 1.10 .67 .87 15.81        | 15.81                             |                             |
|        | 15                 | 315             | 1/2 NPT 12 12 14 28 36 21 34 19 27 11,86           | 11,86                             | FI-LE-15L1/2N-W3            |
|        | .59                | 4568            | .47 .47 .55 1.10 1.42 .83 1.34 .75 1.06 26.10      | 26.10                             |                             |
|        | 18                 | 315             | 1/2 NPT 14 14 14 31 40 23,5 36 24 32 17,50         | 17,50                             | FI-LE-18L1/2N-W3            |
|        | .71                | 4568            | .55 .55 .55 1.22 1.57 .93 1.42 .94 1.26 38.49      | 38.49                             |                             |
|        | 22                 | 160             | 3/4 NPT 18 18 14 35 44 27,5 42 27 36 27,60         | 27,60                             | FI-LE-22L3/4N-W3            |
|        | .87                | 2320            | .71 .71 .55 1.38 1.73 1.08 1.65 1.06 1.42 60.72    | 60.72                             |                             |
|        | 28                 | 160             | 1 NPT 24 24 17,5 38 47 30,5 48 36 41 43,00         | 43,00                             | FI-LE-28L1N-W3              |
|        | 1.10               | 2320            | .94 .94 .69 1.50 1.85 1.20 1.89 1.42 1.61 94.60    | 94.60                             |                             |
|        | 35                 | 160             | 1 1/4 NPT 30 30 18 46 57 35,5 54 41 50 63,50       | 63,50                             | FI-LE-35L1-1/4N-W3          |
|        | 1.38               | 2320            | 1.18 1.18 .71 1.81 2.24 1.40 2.13 1.61 1.97 139.70 | 139.70                            |                             |
|        | 42                 | 160             | 1 1/2 NPT 36 36 18 51 63 40 61 50 60 110,00        | 110,00                            | FI-LE-42L1-1/2N-W3          |
|        | 1.65               | 2320            | 1.42 1.42 .71 2.01 2.48 1.57 2.40 1.97 2.36 242.00 | 242.00                            |                             |

#### Connecting Parts

|                                                                                     |                                                   |         |
|-------------------------------------------------------------------------------------|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to ANSI/ASME B1.20.1-1983

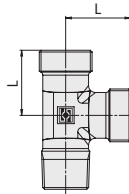
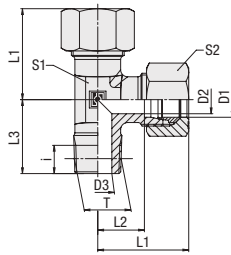
Port acc. to ANSI/ASME B1.20.1-1983

Suitable liquid / plastic sealant required.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.





## Male Stud Barrel Tee Type FI-LE-...-N • Series S



C

### NPT Thread

| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |      |      |      |                |      |      |      |      |        |                    | Weight<br>(kg/lbs) Ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------|------|------|------|----------------|------|------|------|------|--------|--------------------|-----------------------------------|-----------------------------|
|        |                    |                 | D1                    | D2   | D3   | i    | L    | L <sup>1</sup> | L2   | L3   | S1   | S2   |        |                    |                                   |                             |
| S      | 6                  | 630             | 1/4 NPT               | 4    | 4    | 10   | 23   | 31             | 16   | 26   | 12   | 17   | 5,57   | FI-LE-06S1/4N-W3   |                                   |                             |
|        | .24                | 9135            |                       | 0.16 | 0.16 | 0.39 | 0.91 | 1.22           | 0.63 | 1.02 | 0.47 | 0.67 | 12.26  |                    |                                   |                             |
|        | 8                  | 630             | 1/4 NPT               | 5    | 5    | 10   | 24   | 32             | 17   | 27   | 14   | 19   | 7,54   | FI-LE-08S1/4N-W3   |                                   |                             |
|        | .31                | 9135            |                       | 0.20 | 0.20 | 0.39 | 0.94 | 1.26           | 0.67 | 1.06 | 0.55 | 0.75 | 16.58  |                    |                                   |                             |
|        | 10                 | 630             | 3/8 NPT               | 7    | 7    | 10,5 | 25   | 34             | 17,5 | 28   | 17   | 22   | 10,50  | FI-LE-10S3/8N-W3   |                                   |                             |
|        | .39                | 9135            |                       | 0.28 | 0.28 | 0.41 | 0.98 | 1.34           | 0.69 | 1.10 | 0.67 | 0.87 | 23.10  |                    |                                   |                             |
|        | 12                 | 630             | 3/8 NPT               | 8    | 8    | 10,5 | 29   | 38             | 21,5 | 28   | 17   | 24   | 12,07  | FI-LE-12S3/8N-W3   |                                   |                             |
|        | .47                | 9135            |                       | 0.31 | 0.31 | 0.41 | 1.14 | 1.50           | 0.85 | 1.10 | 0.67 | 0.94 | 26.55  |                    |                                   |                             |
|        | 14                 | 630             | 1/2 NPT               | 10   | 10   | 14   | 30   | 40             | 22   | 34   | 19   | 27   | 15,11  | FI-LE-14S1/2N-W3   |                                   |                             |
|        | .55                | 9135            |                       | 0.39 | 0.39 | 0.55 | 1.18 | 1.57           | 0.87 | 1.34 | 0.75 | 1.06 | 33.25  |                    |                                   |                             |
|        | 16                 | 630             | 1/2 NPT               | 12   | 12   | 14   | 33   | 43             | 24,5 | 36   | 24   | 30   | 20,16  | FI-LE-16S1/2N-W3   |                                   |                             |
|        | .63                | 9135            |                       | 0.47 | 0.47 | 0.55 | 1.30 | 1.69           | 0.96 | 1.42 | 0.94 | 1.18 | 44.35  |                    |                                   |                             |
|        | 20                 | 400             | 3/4 NPT               | 16   | 16   | 14   | 37   | 48             | 26,5 | 42   | 27   | 36   | 35,00  | FI-LE-20S3/4N-W3   |                                   |                             |
|        | .79                | 5800            |                       | 0.63 | 0.63 | 0.55 | 1.46 | 1.89           | 1.04 | 1.65 | 1.06 | 1.42 | 77.00  |                    |                                   |                             |
|        | 25                 | 400             | 1 NPT                 | 20   | 20   | 17,5 | 42   | 54             | 30   | 48   | 36   | 46   | 56,00  | FI-LE-25S1N-W3     |                                   |                             |
|        | .98                | 5800            |                       | 0.79 | 0.79 | 0.69 | 1.65 | 2.13           | 1.18 | 1.89 | 1.42 | 1.81 | 123.20 |                    |                                   |                             |
|        | 30                 | 400             | 1 1/4 NPT             | 25   | 32   | 18   | 49   | 62             | 35,5 | 54   | 41   | 50   | 74,20  | FI-LE-30S1-1/4N-W3 |                                   |                             |
|        | 1.18               | 5800            |                       | 0.98 | 1.26 | 0.71 | 1.93 | 2.44           | 1.40 | 2.13 | 1.61 | 1.97 | 163.24 |                    |                                   |                             |
|        | 38                 | 400             | 1 1/2 NPT             | 32   | 32   | 18   | 57   | 72             | 41   | 61   | 50   | 60   | 145,00 | FI-LE-38S1-1/2N-W3 |                                   |                             |
|        | 1.50               | 5800            |                       | 1.26 | 1.26 | 0.71 | 2.24 | 2.83           | 1.61 | 2.40 | 1.97 | 2.36 | 319.00 |                    |                                   |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Male stud acc. to ANSI/ASME B1.20.1-1983

Port acc. to ANSI/ASME B1.20.1-1983

Suitable liquid / plastic sealant required.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

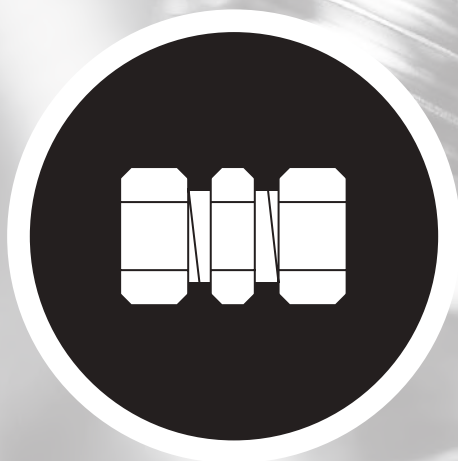
#### \*FI-LE\*-10\*S\*3/8N\*-W3\*-MS

|                                                                         |                                                                                         |
|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| * Male Stud Barrel Tee                                                  | FI-LE                                                                                   |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                                                     |
| * Series                                                                | Extra-Light Series (page 92) LL<br>Light Series (page 92) L<br>Heavy Series (page 93) S |
| * Thread Size                                                           | acc. to dimension table 3/8                                                             |
| Please always indicate thread sizes, e.g. 1/4!                          |                                                                                         |
| * Thread Type                                                           | NPT Thread N                                                                            |
| * Material Code                                                         | Steel, zinc/nickel-plated -W3                                                           |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                         |
| * Assembling / Kitting                                                  | Fitting body only —                                                                     |
|                                                                         | Fitting body supplied with cutting rings and union nuts -MS                             |
|                                                                         | Fitting body supplied with soft-sealing cutting rings and union nuts -MSV               |

### Connecting Parts

|  |                                            |         |
|--|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |







**Straight Union**

FI-G

96



**Straight Reducer**

FI-G

97



**Equal Elbow**

FI-W

99



**Equal Tee**

FI-T

100



**Tee Reducer**

FI-T

101



**Equal Cross**

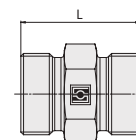
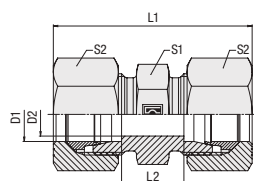
FI-K

104

D



## Straight Union Type FI-G ▪ Series LL / L / S



### Ordering Codes

#### \*FI-G\*-10\*L\*-W3\*-MS

|                                                                         |                                                                                                                                                                                      |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * Straight Union                                                        | <b>FI-G</b>                                                                                                                                                                          |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                                                                                                                           |
| * Series                                                                | Extra-Light Series <b>LL</b><br>Light Series <b>L</b><br>Heavy Series <b>S</b>                                                                                                       |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                                                                                                                                 |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                                                                                      |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b><br>Fitting body supplied with cutting rings and union nuts <b>-MS</b><br>Fitting body supplied with soft-sealing cutting rings and union nuts <b>-MSV</b> |

### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

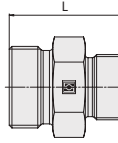
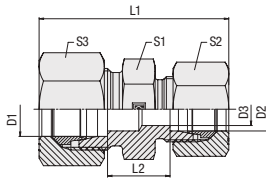
<sup>3</sup> Standard scope of delivery: Fitting body only.

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |                 |      |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------|------|-----------------|------|------|------|-----------------------------------|-----------------------------|
|        |                          |                 | D2                    | L    | L1 <sup>1</sup> | L2   | S1   | S2   |                                   |                             |
| LL     | 4                        | 100             | 3                     | 20   | 31              | 12   | 9    | 10   | 0,53                              | FI-G-04LL-W3                |
|        | .16                      | 1450            | .12                   | .79  | 1.22            | .47  | .35  | .39  | 1.16                              |                             |
|        | 6                        | 100             | 4,5                   | 20   | 32              | 9    | 11   | 12   | 0,79                              | FI-G-06LL-W3                |
|        | .24                      | 1450            | .18                   | .79  | 1.26            | .35  | .43  | .47  | 1.74                              |                             |
|        | 8                        | 100             | 6                     | 23   | 35              | 12   | 12   | 14   | 1,05                              | FI-G-08LL-W3                |
|        | .31                      | 1450            | .24                   | .91  | 1.38            | .47  | .47  | .55  | 2.30                              |                             |
|        | 10                       | 100             | 8                     | 23   | 35              | 12   | 14   | 17   | 1,29                              | FI-G-10LL-W3                |
|        | .39                      | 1450            | .31                   | .91  | 1.38            | .47  | .55  | .67  | 2.83                              |                             |
|        | 12                       | 100             | 10                    | 23   | 35              | 11   | 17   | 19   | 1,83                              | FI-G-12LL-W3                |
|        | .47                      | 1450            | .39                   | .91  | 1.38            | .43  | .67  | .75  | 4.03                              |                             |
| L      | 6                        | 500             | 4                     | 24   | 39              | 10   | 12   | 14   | 1,44                              | FI-G-06L-W3                 |
|        | .24                      | 7250            | .16                   | .94  | 1.54            | .39  | .47  | .55  | 3.17                              |                             |
|        | 8                        | 500             | 6                     | 25   | 40              | 11   | 14   | 17   | 1,90                              | FI-G-08L-W3                 |
|        | .31                      | 7250            | .24                   | .98  | 1.57            | .43  | .55  | .67  | 4.18                              |                             |
|        | 10                       | 500             | 8                     | 27   | 42              | 13   | 17   | 19   | 2,60                              | FI-G-10L-W3                 |
|        | .39                      | 7250            | .31                   | 1.06 | 1.65            | .51  | .67  | .75  | 5.72                              |                             |
|        | 12                       | 400             | 10                    | 28   | 43              | 14   | 19   | 22   | 2,67                              | FI-G-12L-W3                 |
|        | .47                      | 5800            | .39                   | 1.10 | 1.69            | .55  | .75  | .87  | 5.87                              |                             |
|        | 15                       | 400             | 12                    | 30   | 46              | 16   | 24   | 27   | 4,81                              | FI-G-15L-W3                 |
|        | .59                      | 5800            | .47                   | 1.18 | 1.81            | .63  | .94  | 1.06 | 10.57                             |                             |
|        | 18                       | 400             | 15                    | 31   | 48              | 16   | 27   | 32   | 6,65                              | FI-G-18L-W3                 |
|        | .71                      | 5800            | .59                   | 1.22 | 1.89            | .63  | 1.06 | 1.26 | 14.63                             |                             |
|        | 22                       | 250             | 19                    | 35   | 52              | 20   | 32   | 36   | 8,94                              | FI-G-22L-W3                 |
|        | .87                      | 3625            | .75                   | 1.38 | 2.05            | .79  | 1.26 | 1.42 | 19.66                             |                             |
|        | 28                       | 250             | 24                    | 36   | 54              | 21   | 41   | 41   | 13,90                             | FI-G-28L-W3                 |
|        | 1.10                     | 3625            | .94                   | 1.42 | 2.13            | .83  | 1.61 | 1.61 | 30.57                             |                             |
|        | 35                       | 250             | 30                    | 41   | 63              | 20   | 46   | 50   | 21,11                             | FI-G-35L-W3                 |
|        | 1.38                     | 3625            | 1.18                  | 1.61 | 2.48            | .79  | 1.81 | 1.97 | 46.43                             |                             |
|        | 42                       | 250             | 36                    | 43   | 66              | 21   | 55   | 60   | 29,26                             | FI-G-42L-W3                 |
|        | 1.65                     | 3625            | 1.42                  | 1.69 | 2.60            | .83  | 2.17 | 2.36 | 64.38                             |                             |
| S      | 6                        | 800             | 4                     | 30   | 45              | 16   | 14   | 17   | 2,52                              | FI-G-06S-W3                 |
|        | .24                      | 11600           | .16                   | 1.18 | 1.77            | .63  | .55  | .67  | 5.54                              |                             |
|        | 8                        | 800             | 5                     | 32   | 47              | 18   | 17   | 19   | 3,67                              | FI-G-08S-W3                 |
|        | .31                      | 11600           | .20                   | 1.26 | 1.85            | .71  | .67  | .75  | 8.08                              |                             |
|        | 10                       | 800             | 7                     | 32   | 49              | 17   | 19   | 22   | 4,23                              | FI-G-10S-W3                 |
|        | .39                      | 11600           | .28                   | 1.26 | 1.93            | .67  | .75  | .87  | 9.30                              |                             |
|        | 12                       | 630             | 8                     | 34   | 51              | 19   | 22   | 24   | 5,88                              | FI-G-12S-W3                 |
|        | .47                      | 9135            | .31                   | 1.34 | 2.01            | .75  | .87  | .94  | 12.94                             |                             |
|        | 14                       | 630             | 10                    | 38   | 57              | 22   | 24   | 27   | 7,52                              | FI-G-14S-W3                 |
|        | .55                      | 9135            | .39                   | 1.50 | 2.24            | .87  | .94  | 1.06 | 16.54                             |                             |
|        | 16                       | 630             | 12                    | 38   | 57              | 21   | 27   | 30   | 9,20                              | FI-G-16S-W3                 |
|        | .63                      | 9135            | .47                   | 1.50 | 2.24            | .83  | 1.06 | 1.18 | 20.25                             |                             |
|        | 20                       | 420             | 16                    | 44   | 66              | 23   | 32   | 36   | 14,27                             | FI-G-20S-W3                 |
|        | .79                      | 6091            | .63                   | 1.73 | 2.60            | .91  | 1.26 | 1.42 | 31.40                             |                             |
|        | 25                       | 420             | 20                    | 50   | 74              | 26   | 41   | 46   | 24,99                             | FI-G-25S-W3                 |
|        | .98                      | 6091            | .79                   | 1.97 | 2.91            | 1.02 | 1.61 | 1.81 | 54.97                             |                             |
|        | 30                       | 420             | 25                    | 54   | 80              | 27   | 46   | 50   | 33,08                             | FI-G-30S-W3                 |
|        | 1.18                     | 6091            | .98                   | 2.13 | 3.15            | 1.06 | 1.81 | 1.97 | 72.77                             |                             |
|        | 38                       | 420             | 32                    | 61   | 90              | 29   | 55   | 60   | 53,80                             | FI-G-38S-W3                 |
|        | 1.50                     | 6091            | 1.26                  | 2.40 | 3.54            | 1.14 | 2.17 | 2.36 | 118.36                            |                             |





## Straight Reducer Type FI-G ▪ Series LL / L



D

| Series | Tube OD<br>(mm/in) |      | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |                 |      |      |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|------|-----------------|-----------------------|------|-----------------|------|------|------|------|-----------------------------------|-----------------------------|
|        | D1                 | D2   |                 | D3                    | L    | L1 <sup>1</sup> | L2   | S1   | S2   | S3   |                                   |                             |
| LL     | 6                  | 4    | 100             | 3                     | 20   | 32              | 10,5 | 11   | 10   | 12   | 0,70                              | FI-G-06/04LL-W3             |
|        | .24                | .16  | 1450            | .12                   | .79  | 1.26            | .41  | .43  | .39  | .47  | 1.54                              | FI-G-08/04LL-W3             |
|        | 8                  | 4    | 100             | 3                     | 22   | 34              | 12,5 | 12   | 10   | 14   | 1,00                              | FI-G-08/06LL-W3             |
|        | .31                | .16  | 1450            | .12                   | .87  | 1.34            | .49  | .47  | .39  | .55  | 2.20                              | FI-G-10/06LL-W3             |
| L      | 8                  | 6    | 500             | 4                     | 25   | 40              | 11   | 14   | 14   | 17   | 1,61                              | FI-G-08/06L-W3              |
|        | .31                | .24  | 7250            | .16                   | .98  | 1.57            | .43  | .55  | .55  | .67  | 3.54                              | FI-G-10/06L-W3              |
|        | 10                 | 6    | 500             | 4                     | 26   | 41              | 12   | 17   | 14   | 19   | 1,99                              | FI-G-10/08L-W3              |
|        | .39                | .24  | 7250            | .16                   | 1.02 | 1.61            | .47  | .67  | .55  | .75  | 4.37                              | FI-G-12/08L-W3              |
|        | 10                 | 8    | 500             | 6                     | 26   | 41              | 12   | 17   | 17   | 19   | 2,21                              | FI-G-12/10L-W3              |
|        | .39                | .31  | 7250            | .24                   | 1.02 | 1.61            | .47  | .67  | .67  | .75  | 4.86                              | FI-G-15/06L-W3              |
|        | 12                 | 6    | 400             | 4                     | 27   | 42              | 13   | 19   | 14   | 22   | 2,47                              | FI-G-15/08L-W3              |
|        | .47                | .24  | 5800            | .16                   | 1.06 | 1.65            | .51  | .75  | .55  | .87  | 5.43                              | FI-G-15/10L-W3              |
|        | 12                 | 8    | 400             | 6                     | 27   | 42              | 13   | 19   | 17   | 22   | 2,63                              | FI-G-15/12L-W3              |
|        | .47                | .31  | 5800            | .24                   | 1.06 | 1.65            | .51  | .75  | .67  | .87  | 5.78                              | FI-G-18/08L-W3              |
|        | 12                 | 10   | 400             | 8                     | 28   | 43              | 14   | 19   | 19   | 22   | 2,81                              | FI-G-18/10L-W3              |
|        | .47                | .39  | 5800            | .31                   | 1.10 | 1.69            | .55  | .75  | .75  | .87  | 6.19                              | FI-G-18/12L-W3              |
|        | 15                 | 6    | 400             | 4                     | 29   | 47              | 15   | 24   | 14   | 27   | 4,55                              | FI-G-18/15L-W3              |
|        | .59                | .24  | 5800            | .16                   | 1.14 | 1.85            | .59  | .94  | .55  | 1.06 | 10.03                             | FI-G-22/08L-W3              |
|        | 15                 | 8    | 400             | 6                     | 29   | 47              | 15   | 24   | 17   | 27   | 4,56                              | FI-G-22/10L-W3              |
|        | .59                | .31  | 5800            | .24                   | 1.14 | 1.85            | .59  | .94  | .67  | 1.06 | 10.05                             | FI-G-22/12L-W3              |
|        | 15                 | 10   | 400             | 8                     | 29   | 45              | 15   | 24   | 19   | 27   | 4,36                              | FI-G-22/15L-W3              |
|        | .59                | .39  | 5800            | .31                   | 1.14 | 1.77            | .59  | .94  | .75  | 1.06 | 9.59                              | FI-G-22/18L-W3              |
|        | 15                 | 12   | 400             | 10                    | 29   | 45              | 15   | 24   | 22   | 27   | 4,42                              | FI-G-28/10L-W3              |
|        | .59                | .47  | 5800            | .39                   | 1.14 | 1.77            | .59  | .94  | .87  | 1.06 | 9.73                              | FI-G-28/12L-W3              |
|        | 18                 | 8    | 400             | 6                     | 30   | 48              | 15,5 | 27   | 17   | 32   | 6,25                              | FI-G-28/15L-W3              |
|        | .71                | .31  | 5800            | .24                   | 1.18 | 1.89            | .61  | 1.06 | .67  | 1.26 | 13.78                             | FI-G-28/22L-W3              |
|        | 18                 | 10   | 400             | 8                     | 30   | 46              | 15,5 | 27   | 19   | 32   | 6,01                              | FI-G-35/18L-W3              |
|        | .71                | .39  | 5800            | .31                   | 1.18 | 1.81            | .61  | 1.06 | .75  | 1.26 | 13.22                             | FI-G-35/22L-W3              |
|        | 18                 | 12   | 400             | 10                    | 30   | 46              | 15,5 | 27   | 22   | 32   | 5,56                              | FI-G-35/28L-W3              |
|        | .71                | .47  | 5800            | .39                   | 1.18 | 1.81            | .61  | 1.06 | .87  | 1.26 | 12.22                             | FI-G-35/35L-W3              |
|        | 22                 | 8    | 250             | 6                     | 31   | 50              | 16,5 | 32   | 17   | 36   | 7,56                              | FI-G-35/42L-W3              |
|        | .87                | .31  | 3625            | .24                   | 1.22 | 1.97            | .65  | 1.26 | .67  | 1.42 | 16.67                             | FI-G-35/50L-W3              |
|        | 22                 | 10   | 250             | 8                     | 32   | 51              | 17,5 | 32   | 19   | 36   | 1,36                              | FI-G-35/58L-W3              |
|        | .87                | .39  | 3625            | .31                   | 1.26 | 2.01            | .69  | 1.26 | .75  | 1.42 | 3.00                              | FI-G-35/65L-W3              |
|        | 22                 | 12   | 250             | 10                    | 32   | 48              | 17,5 | 32   | 22   | 36   | 7,99                              | FI-G-35/72L-W3              |
|        | .87                | .47  | 3625            | .39                   | 1.26 | 1.89            | .69  | 1.26 | .87  | 1.42 | 17.57                             | FI-G-35/80L-W3              |
|        | 22                 | 15   | 250             | 12                    | 33   | 50              | 18,5 | 32   | 27   | 36   | 8,37                              | FI-G-35/90L-W3              |
|        | .87                | .59  | 3625            | .47                   | 1.30 | 1.97            | .73  | 1.26 | 1.06 | 1.42 | 18.41                             | FI-G-35/100L-W3             |
|        | 22                 | 18   | 250             | 15                    | 33   | 50              | 18   | 32   | 32   | 36   | 8,76                              | FI-G-35/112L-W3             |
|        | .87                | .71  | 3625            | .59                   | 1.30 | 1.97            | .71  | 1.26 | 1.26 | 1.42 | 19.26                             | FI-G-35/125L-W3             |
|        | 28                 | 10   | 250             | 8                     | 33   | 53              | 18,5 | 41   | 19   | 41   | 12,12                             | FI-G-35/140L-W3             |
|        | 1,1                | .39  | 3625            | .31                   | 1.3  | 2.09            | .73  | 1.61 | .75  | 1.61 | 26.72                             | FI-G-35/160L-W3             |
|        | 28                 | 12   | 250             | 10                    | 33,5 | 54              | 19   | 41   | 22   | 41   | 13,02                             | FI-G-35/180L-W3             |
|        | 1,1                | .47  | 3625            | .39                   | 1.32 | 2.13            | .75  | 1.61 | .87  | 1.61 | 28.70                             | FI-G-35/200L-W3             |
|        | 28                 | 15   | 250             | 12                    | 34   | 55              | 19,5 | 41   | 27   | 41   | 13,12                             | FI-G-35/225L-W3             |
|        | 1,1                | .59  | 3625            | .47                   | 1.34 | 2.17            | .77  | 1.61 | 1.06 | 1.61 | 28.92                             | FI-G-35/250L-W3             |
|        | 28                 | 18   | 250             | 15                    | 34   | 52              | 19   | 41   | 32   | 41   | 13,29                             | FI-G-35/280L-W3             |
|        | 1.10               | .71  | 3625            | .59                   | 1.34 | 2.05            | .75  | 1.61 | 1.26 | 1.61 | 29.24                             | FI-G-35/315L-W3             |
|        | 28                 | 22   | 250             | 19                    | 36   | 54              | 21   | 41   | 36   | 41   | 13,61                             | FI-G-35/350L-W3             |
|        | 1.10               | .87  | 3625            | .75                   | 1.42 | 2.13            | .83  | 1.61 | 1.42 | 1.61 | 29.94                             | FI-G-35/390L-W3             |
|        | 35                 | 18   | 250             | 15                    | 37   | 60              | 19   | 46   | 32   | 50   | 19,74                             | FI-G-35/420L-W3             |
|        | 1.38               | .71  | 3625            | .59                   | 1.46 | 2.36            | .75  | 1.81 | 1.26 | 1.97 | 43.52                             | FI-G-35/450L-W3             |
|        | 35                 | 22   | 250             | 19                    | 39   | 59              | 21   | 46   | 36   | 50   | 19,99                             | FI-G-35/480L-W3             |
|        | 1.38               | .87  | 3625            | .75                   | 1.54 | 2.32            | .83  | 1.81 | 1.42 | 1.97 | 43.99                             | FI-G-35/500L-W3             |
|        | 35                 | 28   | 250             | 24                    | 39   | 59              | 21   | 46   | 41   | 50   | 19,71                             | FI-G-35/560L-W3             |
|        | 1.38               | 1.10 | 3625            | .94                   | 1.54 | 2.32            | .83  | 1.81 | 1.61 | 1.97 | 43.35                             | FI-G-35/600L-W3             |

### Ordering Codes

**\*FI-G\*-10/\*08\*L\*-W3\*-MS**

|                                                                         |                                                                                             |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| * Straight Reducer                                                      | FI-G                                                                                        |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                                                         |
| * Outside Tube Diameter D2 (in mm)                                      | 08                                                                                          |
| * Series                                                                | Extra-Light Series (page 97) LL<br>Light Series (pages 97/98) L<br>Heavy Series (page 98) S |
| * Material Code                                                         | Steel, zinc/nickel-plated -W3                                                               |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                             |
| * Assembling / Kitting                                                  | Fitting body only —                                                                         |
|                                                                         | Fitting body supplied with cutting rings and union nuts -MS                                 |
|                                                                         | Fitting body supplied with soft-sealing cutting rings and union nuts -MSV                   |

### Connecting Parts

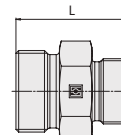
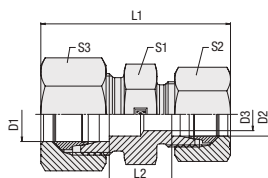
|  |                                            |         |
|--|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.


## Straight Reducer Type FI-G ▪ Series L / S



### Ordering Codes

**\*FI-G\*-10/\*08\*L\*-W3\*-MS**

|                                                                         |                                                                                                                  |
|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| * Straight Reducer                                                      | <b>FI-G</b>                                                                                                      |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                                                       |
| * Outside Tube Diameter D2 (in mm)                                      | <b>08</b>                                                                                                        |
| * Series                                                                | Extra-Light Series (page 97) <b>LL</b><br>Light Series (pages 97/98) <b>L</b><br>Heavy Series (page 98) <b>S</b> |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                                                             |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                  |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b>                                                                                       |
|                                                                         | Fitting body supplied with cutting rings and union nuts <b>-MS</b>                                               |
|                                                                         | Fitting body supplied with soft-sealing cutting rings and union nuts <b>-MSV</b>                                 |

### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

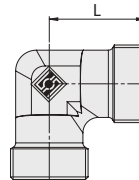
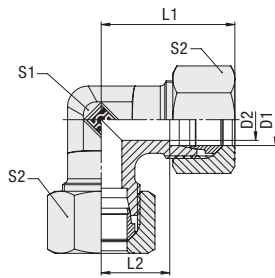
<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.

| Series | Tube OD<br>(mm/in) |      | PN<br>(bar/PSI) | Dimensions<br>(mm/in) |      |                |      |      |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|------|-----------------|-----------------------|------|----------------|------|------|------|------|-----------------------------------|-----------------------------|
|        | D1                 | D2   |                 | D3                    | L    | L <sup>1</sup> | L2   | S1   | S2   | S3   |                                   |                             |
| L      | 42                 | 18   | 250             | 15                    | 37,5 | 60             | 19   | 55   | 32   | 60   | 29,95                             | FI-G-42/18L-W3              |
|        | 1,65               | .71  | 3625            | .59                   | 1.48 | 2.36           | .75  | 2.17 | 1.26 | 2.36 | 66.03                             | FI-G-42/22L-W3              |
|        | 42                 | 22   | 250             | 19                    | 39,5 | 63             | 21   | 55   | 36   | 60   | 22,68                             | FI-G-42/28L-W3              |
|        | 1,65               | .87  | 3625            | .75                   | 1.56 | 2.48           | .83  | 2.17 | 1.42 | 2.36 | 55.00                             | FI-G-42/35L-W3              |
|        | 42                 | 28   | 250             | 24                    | 39,5 | 66             | 21   | 55   | 41   | 60   | 27,03                             | FI-G-42/35L-W3              |
|        | 1,65               | 1.1  | 3625            | .94                   | 1.56 | 2.6            | .83  | 2.17 | 1.61 | 2.36 | 59.59                             | FI-G-42/35L-W3              |
|        | 42                 | 35   | 250             | 30                    | 42,5 | 66             | 21   | 55   | 50   | 60   | 29,78                             | FI-G-42/35L-W3              |
|        | 1,65               | 1.38 | 3625            | 1.18                  | 1.67 | 2.60           | .83  | 2.17 | 1.97 | 2.36 | 65.52                             | FI-G-42/35L-W3              |
|        | 8                  | 6    | 800             | 4                     | 32   | 47             | 18   | 17   | 17   | 19   | 3,46                              | FI-G-08/06S-W3              |
|        | .31                | .24  | 11600           | .16                   | 1.26 | 1.85           | .71  | .67  | .67  | .75  | 7.60                              | FI-G-08/06S-W3              |
| S      | 10                 | 6    | 800             | 4                     | 32   | 48             | 17,5 | 19   | 17   | 22   | 4,40                              | FI-G-10/06S-W3              |
|        | .39                | .24  | 11600           | .16                   | 1.26 | 1.89           | .69  | .75  | .67  | .87  | 9.68                              | FI-G-10/06S-W3              |
|        | 10                 | 8    | 800             | 5                     | 32   | 48             | 17,5 | 19   | 19   | 22   | 4,26                              | FI-G-10/08S-W3              |
|        | .39                | .31  | 11600           | .20                   | 1.26 | 1.89           | .69  | .75  | .75  | .87  | 9.37                              | FI-G-10/08S-W3              |
|        | 12                 | 6    | 630             | 4                     | 34   | 50             | 19,5 | 22   | 17   | 24   | 5,56                              | FI-G-12/06S-W3              |
|        | .47                | .24  | 9135            | .16                   | 1.34 | 1.97           | .77  | .87  | .67  | .94  | 12.24                             | FI-G-12/06S-W3              |
|        | 12                 | 8    | 630             | 5                     | 34   | 50             | 19,5 | 22   | 19   | 24   | 4,03                              | FI-G-12/08S-W3              |
|        | .47                | .31  | 9135            | .20                   | 1.34 | 1.97           | .77  | .87  | .75  | .94  | 8.87                              | FI-G-12/08S-W3              |
|        | 12                 | 10   | 630             | 7                     | 34   | 51             | 19   | 22   | 22   | 24   | 5,86                              | FI-G-12/10S-W3              |
|        | .47                | .39  | 9135            | .28                   | 1.34 | 2.01           | .75  | .87  | .87  | .94  | 12.90                             | FI-G-12/10S-W3              |
|        | 14                 | 10   | 630             | 7                     | 36   | 54             | 20,5 | 24   | 22   | 27   | 7,16                              | FI-G-14/10S-W3              |
|        | .55                | .39  | 9135            | .28                   | 1.42 | 2.13           | .81  | .94  | .87  | 1.06 | 15.76                             | FI-G-14/10S-W3              |
|        | 14                 | 12   | 630             | 8                     | 36   | 54             | 20,5 | 24   | 24   | 27   | 7,34                              | FI-G-14/12S-W3              |
|        | .55                | .47  | 9135            | .31                   | 1.42 | 2.13           | .81  | .94  | .94  | 1.06 | 16.15                             | FI-G-14/12S-W3              |
|        | 16                 | 6    | 630             | 35,5                  | 35,5 | 55             | 20   | 27   | 17   | 30   | 7,78                              | FI-G-16/06S-W3              |
|        | .63                | .24  | 9135            | 1.4                   | 1.4  | 2.17           | .79  | 1.06 | .67  | 1.18 | 17.15                             | FI-G-16/06S-W3              |
|        | 16                 | 8    | 630             | 5                     | 35,5 | 55             | 20   | 27   | 19   | 30   | 7,86                              | FI-G-16/08S-W3              |
|        | .63                | .31  | 9135            | .2                    | 1.4  | 2.17           | .79  | 1.06 | .75  | 1.18 | 17.33                             | FI-G-16/08S-W3              |
|        | 16                 | 10   | 630             | 7                     | 36   | 54             | 20   | 27   | 22   | 30   | 7,95                              | FI-G-16/10S-W3              |
|        | .63                | .39  | 9135            | .28                   | 1.42 | 2.13           | .79  | 1.06 | .87  | 1.18 | 17.49                             | FI-G-16/10S-W3              |
|        | 16                 | 12   | 630             | 8                     | 36   | 54             | 20   | 27   | 24   | 30   | 9,32                              | FI-G-16/12S-W3              |
|        | .63                | .47  | 9135            | .31                   | 1.42 | 2.13           | .79  | 1.06 | .94  | 1.18 | 20.50                             | FI-G-16/12S-W3              |
|        | 16                 | 14   | 630             | 10                    | 38   | 57             | 21,5 | 27   | 27   | 30   | 8,95                              | FI-G-16/14S-W3              |
|        | .63                | .55  | 9135            | .39                   | 1.50 | 2.24           | .85  | 1.06 | 1.06 | 1.18 | 19.69                             | FI-G-16/14S-W3              |
|        | 20                 | 10   | 420             | 7                     | 40   | 60             | 22   | 32   | 22   | 36   | 12,93                             | FI-G-20/10S-W3              |
|        | .79                | .39  | 6091            | .28                   | 1.57 | 2.36           | .87  | 1.26 | .87  | 1.42 | 28.44                             | FI-G-20/10S-W3              |
|        | 20                 | 12   | 420             | 8                     | 40   | 60             | 22   | 32   | 24   | 36   | 13,19                             | FI-G-20/12S-W3              |
|        | .79                | .47  | 6091            | .31                   | 1.57 | 2.36           | .87  | 1.26 | .94  | 1.42 | 29.02                             | FI-G-20/12S-W3              |
|        | 20                 | 16   | 420             | 12                    | 42   | 63             | 23   | 32   | 30   | 36   | 13,38                             | FI-G-20/16S-W3              |
|        | .79                | .63  | 6091            | .47                   | 1.65 | 2.48           | .91  | 1.26 | 1.18 | 1.42 | 29.44                             | FI-G-20/16S-W3              |
|        | 25                 | 12   | 420             | 8                     | 45   | 68             | 25,5 | 41   | 24   | 46   | 23,92                             | FI-G-25/12S-W3              |
|        | .98                | .47  | 6091            | .31                   | 1.77 | 2.68           | 1.00 | 1.61 | .94  | 1.81 | 52.73                             | FI-G-25/12S-W3              |
|        | 25                 | 16   | 420             | 12                    | 46   | 68             | 25,5 | 41   | 30   | 46   | 22,87                             | FI-G-25/16S-W3              |
|        | .98                | .63  | 6091            | .47                   | 1.81 | 2.68           | 1.00 | 1.61 | 1.18 | 1.81 | 50.31                             | FI-G-25/16S-W3              |
|        | 25                 | 20   | 420             | 16                    | 48   | 71             | 25,5 | 41   | 36   | 46   | 23,66                             | FI-G-25/20S-W3              |
|        | .98                | .79  | 6091            | .63                   | 1.89 | 2.80           | 1.00 | 1.61 | 1.42 | 1.81 | 52.05                             | FI-G-25/20S-W3              |
|        | 30                 | 12   | 420             | 8                     | 46   | 71             | 25   | 46   | 24   | 50   | 29,2                              | FI-G-30/12S-W3              |
|        | 1,18               | .47  | 6091            | .31                   | 1.81 | 2.8            | .98  | 1.81 | .94  | 1.97 | 64.37                             | FI-G-30/12S-W3              |
|        | 30                 | 16   | 420             | 12                    | 48   | 74             | 26   | 46   | 30   | 50   | 29,61                             | FI-G-30/16S-W3              |
|        | 1,18               | .63  | 6091            | .47                   | 1.89 | 2.91           | 1.02 | 1.81 | 1.18 | 1.97 | 65.28                             | FI-G-30/16S-W3              |
|        | 30                 | 20   | 420             | 16                    | 50   | 74             | 26   | 46   | 36   | 50   | 30,33                             | FI-G-30/20S-W3              |
|        | 1,18               | .79  | 6091            | .63                   | 1.97 | 2.91           | 1.02 | 1.81 | 1.42 | 1.97 | 66.73                             | FI-G-30/20S-W3              |
|        | 30                 | 25   | 420             | 20                    | 52   | 77             | 26,5 | 46   | 46   | 50   | 31,79                             | FI-G-30/25S-W3              |
|        | 1,18               | .98  | 6091            | .79                   | 2.05 | 3.03           | 1.04 | 1.81 | 1.81 | 1.97 | 69.95                             | FI-G-30/25S-W3              |
|        | 38                 | 16   | 420             | 12                    | 53   | 80             | 28,5 | 55   | 30   | 60   | 46,99                             | FI-G-38/16S-W3              |
|        | 1,5                | .63  | 6091            | .47                   | 2.09 | 3.15           | 1.12 | 2.17 | 1.18 | 2.36 | 103.60                            | FI-G-38/16S-W3              |
|        | 38                 | 20   | 420             | 16                    | 55   | 84             | 28,5 | 55   | 36   | 60   | 49,57                             | FI-G-38/20S-W3              |
|        | 1,5                | .79  | 6091            | .63                   | 2.17 | 3.31           | 1.12 | 2.17 | 1.42 | 2.36 | 109.28                            | FI-G-38/20S-W3              |
|        | 38                 | 25   | 420             | 20                    | 57   | 87             | 29   | 55   | 46   | 60   | 51,3                              | FI-G-38/25S-W3              |
|        | 1,5                | .98  | 6091            | .79                   | 2.24 | 3.43           | 1.14 | 2.17 | 1.81 | 2.36 | 113.10                            | FI-G-38/25S-W3              |
|        | 38                 | 30   | 420             | 25                    | 59   | 87             | 29,5 | 55   | 50   | 60   | 50,90                             | FI-G-38/30S-W3              |
|        | 1,50               | 1.18 | 6091            | .98                   | 2.32 | 3.43           | 1.16 | 2.17 | 1.97 | 2.36 | 111.98                            | FI-G-38/30S-W3              |





## Equal Elbow Type FI-W • Series LL / L / S



| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |                 |      |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------|-----------------|------|------|------|-----------------------------------|-----------------------------|
|        | D1                 |                 | D2                    | L    | L1 <sup>1</sup> | L2   | S1   | S2   |                                   |                             |
| LL     | 4                  | 100             | 3                     | 15   | 21              | 11   | 9    | 10   | 1,29                              | FI-W-04LL-W3-PR             |
|        | .16                | 1450            | .12                   | .59  | .83             | .43  | .35  | .39  | 2.83                              |                             |
|        | 6                  | 100             | 4,5                   | 15   | 21              | 9,5  | 11   | 12   | 1,57                              | FI-W-06LL-W3-PR             |
|        | .24                | 1450            | .18                   | .59  | .83             | .37  | .43  | .47  | 3.45                              |                             |
|        | 8                  | 100             | 6                     | 17   | 23              | 11,5 | 12   | 14   | 2,22                              | FI-W-08LL-W3-PR             |
|        | .31                | 1450            | .24                   | .67  | .91             | .45  | .47  | .55  | 4.88                              |                             |
|        | 10                 | 100             | 8                     | 18   | 23              | 12,5 | 12   | 17   | 2,70                              | FI-W-10LL-W3-PR             |
|        | .39                | 1450            | .31                   | .71  | .91             | .49  | .47  | .67  | 5.95                              |                             |
|        | 12                 | 100             | 10                    | 21   | 27              | 15   | 14   | 19   | 2,20                              | FI-W-12LL-W3-PR             |
|        | .47                | 1450            | .39                   | .83  | 1.06            | .59  | .55  | .75  | 4.85                              |                             |
| L      | 6                  | 500             | 4                     | 19   | 27              | 12   | 12   | 14   | 1,94                              | FI-W-06L-W3                 |
|        | .24                | 7250            | .16                   | .75  | 1.06            | .47  | .47  | .55  | 4.27                              |                             |
|        | 8                  | 500             | 6                     | 21   | 29              | 14   | 12   | 17   | 2,35                              | FI-W-08L-W3                 |
|        | .31                | 7250            | .24                   | .83  | 1.14            | .55  | .47  | .67  | 5.17                              |                             |
|        | 10                 | 500             | 8                     | 22   | 30              | 15   | 14   | 19   | 3,06                              | FI-W-10L-W3                 |
|        | .39                | 7250            | .31                   | .87  | 1.18            | .59  | .55  | .75  | 6.72                              |                             |
|        | 12                 | 400             | 10                    | 24   | 32              | 17   | 17   | 22   | 4,34                              | FI-W-12L-W3                 |
|        | .47                | 5800            | .39                   | .94  | 1.26            | .67  | .67  | .87  | 9.55                              |                             |
|        | 15                 | 400             | 12                    | 28   | 36              | 21   | 19   | 27   | 5,13                              | FI-W-15L-W3                 |
|        | .59                | 5800            | .47                   | 1.10 | 1.42            | .83  | .75  | 1.06 | 11.29                             |                             |
|        | 18                 | 400             | 15                    | 31   | 40              | 23,5 | 24   | 32   | 11,63                             | FI-W-18L-W3                 |
|        | .71                | 5800            | .59                   | 1.22 | 1.57            | .93  | .94  | 1.26 | 25.59                             |                             |
|        | 22                 | 250             | 19                    | 35   | 44              | 27,5 | 27   | 36   | 15,35                             | FI-W-22L-W3                 |
|        | .87                | 3625            | .75                   | 1.38 | 1.73            | 1.08 | 1.06 | 1.42 | 33.77                             |                             |
|        | 28                 | 250             | 24                    | 38   | 47              | 30,5 | 36   | 41   | 25,45                             | FI-W-28L-W3                 |
|        | 1.10               | 3625            | .94                   | 1.50 | 1.85            | 1.20 | 1.42 | 1.61 | 56.00                             |                             |
|        | 35                 | 250             | 30                    | 45   | 56              | 34,5 | 41   | 50   | 42,04                             | FI-W-35L-W3                 |
|        | 1.38               | 3625            | 1.18                  | 1.77 | 2.20            | 1.36 | 1.61 | 1.97 | 92.48                             |                             |
|        | 42                 | 250             | 36                    | 51   | 63              | 40   | 50   | 60   | 63,20                             | FI-W-42L-W3                 |
|        | 1.65               | 3625            | 1.42                  | 2.01 | 2.48            | 1.57 | 1.97 | 2.36 | 139.04                            |                             |
| S      | 6                  | 800             | 4                     | 23   | 31              | 16   | 12   | 17   | 3,32                              | FI-W-06S-W3                 |
|        | .24                | 11600           | .16                   | .91  | 1.22            | .63  | .47  | .67  | 7.30                              |                             |
|        | 8                  | 800             | 5                     | 24   | 32              | 17   | 14   | 19   | 4,68                              | FI-W-08S-W3                 |
|        | .31                | 11600           | .20                   | .94  | 1.26            | .67  | .55  | .75  | 10.30                             |                             |
|        | 10                 | 800             | 7                     | 25   | 34              | 17,5 | 17   | 22   | 6,02                              | FI-W-10S-W3                 |
|        | .39                | 11600           | .28                   | .98  | 1.34            | .69  | .67  | .87  | 13.24                             |                             |
|        | 12                 | 630             | 8                     | 29   | 38              | 21,5 | 17   | 24   | 8,14                              | FI-W-12S-W3                 |
|        | .47                | 9135            | .31                   | 1.14 | 1.50            | .85  | .67  | .94  | 17.91                             |                             |
|        | 14                 | 630             | 10                    | 30   | 40              | 22   | 19   | 27   | 9,86                              | FI-W-14S-W3                 |
|        | .55                | 9135            | .39                   | 1.18 | 1.57            | .87  | .75  | 1.06 | 21.69                             |                             |
|        | 16                 | 630             | 12                    | 33   | 43              | 24,5 | 24   | 30   | 14,13                             | FI-W-16S-W3                 |
|        | .63                | 9135            | .47                   | 1.30 | 1.69            | .96  | .94  | 1.18 | 31.09                             |                             |
|        | 20                 | 420             | 16                    | 37   | 48              | 26,5 | 27   | 36   | 20,50                             | FI-W-20S-W3                 |
|        | .79                | 6091            | .63                   | 1.46 | 1.89            | 1.04 | 1.06 | 1.42 | 45.10                             |                             |
|        | 25                 | 420             | 20                    | 42   | 54              | 30   | 36   | 46   | 36,09                             | FI-W-25S-W3                 |
|        | .98                | 6091            | .79                   | 1.65 | 2.13            | 1.18 | 1.42 | 1.81 | 79.40                             |                             |
|        | 30                 | 420             | 25                    | 49   | 62              | 35,5 | 41   | 50   | 40,20                             | FI-W-30S-W3                 |
|        | 1.18               | 6091            | .98                   | 1.93 | 2.44            | 1.40 | 1.61 | 1.97 | 102.11                            |                             |
|        | 38                 | 420             | 32                    | 57   | 72              | 41   | 50   | 60   | 89,05                             | FI-W-38S-W3                 |
|        | 1.50               | 6091            | 1.26                  | 2.24 | 2.83            | 1.61 | 1.97 | 2.36 | 196.90                            |                             |

### Ordering Codes

#### \*FI-W\*-10\*L\*-W3\*-MS

|                                                                         |                                                                      |      |
|-------------------------------------------------------------------------|----------------------------------------------------------------------|------|
| * Equal Elbow                                                           |                                                                      | FI-W |
| * Outside Tube Diameter D1 (in mm)                                      |                                                                      | -10  |
| * Series                                                                | Extra-Light Series                                                   | LL   |
|                                                                         | Light Series                                                         | L    |
|                                                                         | Heavy Series                                                         | S    |
| * Material Code                                                         | Steel, zinc/nickel-plated                                            | -W3  |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                      |      |
| * Design                                                                | Made from forging blanks                                             | —    |
|                                                                         | Made from profile material                                           | PR   |
| * Assembling / Kitting                                                  | Fitting body only                                                    | —    |
|                                                                         | Fitting body supplied with cutting rings and union nuts              | -MS  |
|                                                                         | Fitting body supplied with soft-sealing cutting rings and union nuts | -MSV |

### Connecting Parts

|  |                                            |         |
|--|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |

<sup>1</sup> Approximate dimension in assembled condition.

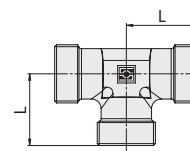
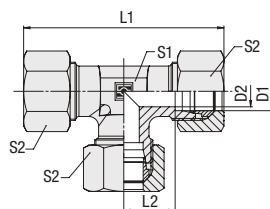
<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.



## Equal Tee

### Type FI-T ▪ Series LL / L / S



### Ordering Codes

#### \*FI-T\*-10\*L\*-W3\*-MS

|                                                                         |                                                                      |             |
|-------------------------------------------------------------------------|----------------------------------------------------------------------|-------------|
| * Equal Tee                                                             |                                                                      | <b>FI-T</b> |
| * Outside Tube Diameter D1 (in mm)                                      |                                                                      | <b>-10</b>  |
| * Series                                                                | Extra-Light Series                                                   | <b>LL</b>   |
|                                                                         | Light Series                                                         | <b>L</b>    |
|                                                                         | Heavy Series                                                         | <b>S</b>    |
| * Material Code                                                         | Steel, zinc/nickel-plated                                            | <b>-W3</b>  |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                      |             |
| * Assembling / Kitting                                                  | Fitting body only                                                    | <b>—</b>    |
|                                                                         | Fitting body supplied with cutting rings and union nuts              | <b>-MS</b>  |
|                                                                         | Fitting body supplied with soft-sealing cutting rings and union nuts | <b>-MSV</b> |

### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |                 |      |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------|------|-----------------|------|------|------|-----------------------------------|-----------------------------|
|        |                          |                 | D2                    | L    | L1 <sup>1</sup> | L2   | S1   | S2   |                                   |                             |
| LL     | 4                        | 100             | 3                     | 15   | 42              | 11   | 9    | 10   | 1,00                              | FI-T-04LL-W3                |
|        | .16                      | 1450            | .12                   | .59  | 1.65            | .43  | .35  | .39  | 2.20                              | FI-T-06LL-W3                |
|        | 6                        | 100             | 4,5                   | 15   | 42              | 9,5  | 9    | 12   | 1,23                              | FI-T-08LL-W3                |
|        | .24                      | 1450            | .18                   | .59  | 1.65            | .37  | .35  | .47  | 2.70                              | FI-T-10LL-W3                |
|        | 8                        | 100             | 6                     | 17   | 46              | 11,5 | 12   | 14   | 1,91                              | FI-T-12LL-W3                |
|        | .31                      | 1450            | .24                   | .67  | 1.81            | .45  | .47  | .55  | 4.19                              | FI-T-14LL-W3                |
|        | 10                       | 100             | 8                     | 21,5 | 54              | 16   | 14   | 17   | 3,42                              | FI-T-16LL-W3                |
|        | .39                      | 1450            | .31                   | .85  | 2.13            | .63  | .55  | .67  | 7.54                              | FI-T-18LL-W3                |
|        | 12                       | 100             | 10                    | 21,5 | 59              | 15   | 14   | 19   | 3,80                              | FI-T-20LL-W3                |
|        | .47                      | 1450            | .39                   | .85  | 2.32            | .59  | .55  | .75  | 8.38                              | FI-T-22LL-W3                |
|        | 14                       | 100             | 12                    | 21,5 | 64              | 14   | 14   | 21   | 4,06                              | FI-T-24LL-W3                |
|        | .55                      | 1450            | .47                   | .94  | 2.52            | .67  | .67  | .87  | 12.15                             | FI-T-26LL-W3                |
| L      | 6                        | 500             | 4                     | 19   | 54              | 12   | 12   | 14   | 2,66                              | FI-T-06L-W3                 |
|        | .24                      | 7250            | .16                   | .75  | 2.13            | .47  | .47  | .55  | 5.86                              | FI-T-08L-W3                 |
|        | 8                        | 500             | 6                     | 21   | 58              | 14   | 12   | 17   | 3,17                              | FI-T-10L-W3                 |
|        | .31                      | 7250            | .24                   | .83  | 2.28            | .55  | .47  | .67  | 6.97                              | FI-T-12L-W3                 |
|        | 10                       | 500             | 8                     | 22   | 60              | 15   | 14   | 19   | 4,06                              | FI-T-14L-W3                 |
|        | .39                      | 7250            | .31                   | .87  | 2.36            | .59  | .55  | .75  | 8.93                              | FI-T-16L-W3                 |
|        | 12                       | 400             | 10                    | 24   | 64              | 17   | 17   | 22   | 5,52                              | FI-T-18L-W3                 |
|        | .47                      | 5800            | .39                   | .94  | 2.52            | .67  | .67  | .87  | 12.15                             | FI-T-20L-W3                 |
|        | 15                       | 400             | 12                    | 28   | 72              | 21   | 19   | 27   | 9,98                              | FI-T-22L-W3                 |
|        | .59                      | 5800            | .47                   | 1.10 | 2.83            | .83  | .75  | 1.06 | 21.95                             | FI-T-24L-W3                 |
|        | 18                       | 400             | 15                    | 31   | 80              | 23,5 | 24   | 32   | 14,83                             | FI-T-26L-W3                 |
|        | .71                      | 5800            | .59                   | 1.22 | 3.15            | .93  | .94  | 1.26 | 32.63                             | FI-T-28L-W3                 |
|        | 22                       | 250             | 19                    | 35   | 88              | 27,5 | 27   | 36   | 18,81                             | FI-T-30L-W3                 |
|        | .87                      | 3625            | .75                   | 1.38 | 3.46            | 1.08 | 1.06 | 1.42 | 41.39                             | FI-T-32L-W3                 |
|        | 28                       | 250             | 24                    | 38   | 94              | 30,5 | 36   | 41   | 30,44                             | FI-T-34L-W3                 |
|        | 1.10                     | 3625            | .94                   | 1.50 | 3.70            | 1.20 | 1.42 | 1.61 | 66.97                             | FI-T-36L-W3                 |
|        | 35                       | 250             | 30                    | 45   | 112             | 34,5 | 41   | 50   | 49,27                             | FI-T-38L-W3                 |
|        | 1.38                     | 3625            | 1.18                  | 1.77 | 4.41            | 1.36 | 1.61 | 1.97 | 108.39                            | FI-T-40L-W3                 |
| S      | 42                       | 250             | 36                    | 51   | 126             | 40   | 50   | 60   | 72,20                             | FI-T-42L-W3                 |
|        | 1.65                     | 3625            | 1.42                  | 2.01 | 4.96            | 1.57 | 1.97 | 2.36 | 158.84                            | FI-T-44L-W3                 |
|        | 6                        | 800             | 4                     | 23   | 62              | 16   | 12   | 17   | 4,60                              | FI-T-06S-W3                 |
|        | .24                      | 11600           | .16                   | .91  | 2.44            | .63  | .47  | .67  | 10.12                             | FI-T-08S-W3                 |
|        | 8                        | 800             | 5                     | 24   | 64              | 17   | 14   | 19   | 6,21                              | FI-T-10S-W3                 |
|        | .31                      | 11600           | .20                   | .94  | 2.52            | .67  | .55  | .75  | 13.65                             | FI-T-12S-W3                 |
|        | 10                       | 800             | 7                     | 25   | 68              | 17,5 | 17   | 22   | 7,92                              | FI-T-14S-W3                 |
|        | .39                      | 11600           | .28                   | .98  | 2.68            | .69  | .67  | .87  | 17.42                             | FI-T-16S-W3                 |
|        | 12                       | 630             | 8                     | 29   | 76              | 21,5 | 17   | 24   | 10,88                             | FI-T-18S-W3                 |
|        | .47                      | 9135            | .31                   | 1.14 | 2.99            | .85  | .67  | .94  | 23.93                             | FI-T-20S-W3                 |
|        | 14                       | 630             | 10                    | 30   | 80              | 22   | 19   | 27   | 12,97                             | FI-T-22S-W3                 |
|        | .55                      | 9135            | .39                   | 1.18 | 3.15            | .87  | .75  | 1.06 | 28.53                             | FI-T-24S-W3                 |
|        | 16                       | 630             | 12                    | 33   | 86              | 24,5 | 24   | 30   | 10,97                             | FI-T-26S-W3                 |
|        | .63                      | 9135            | .47                   | 1.30 | 3.39            | .96  | .94  | 1.18 | 24.14                             | FI-T-28S-W3                 |
|        | 20                       | 420             | 16                    | 37   | 96              | 26,5 | 27   | 36   | 25,58                             | FI-T-30S-W3                 |
|        | .79                      | 6091            | .63                   | 1.46 | 3.78            | 1.04 | 1.06 | 1.42 | 56.28                             | FI-T-32S-W3                 |
|        | 25                       | 420             | 20                    | 42   | 108             | 30   | 36   | 46   | 44,75                             | FI-T-34S-W3                 |
|        | .98                      | 6091            | .79                   | 1.65 | 4.25            | 1.18 | 1.42 | 1.81 | 98.46                             | FI-T-36S-W3                 |
|        | 30                       | 420             | 25                    | 49   | 124             | 35,5 | 41   | 50   | 68,20                             | FI-T-38S-W3                 |
|        | 1.18                     | 6091            | .98                   | 1.93 | 4.88            | 1.40 | 1.61 | 1.97 | 150.04                            | FI-T-40S-W3                 |
|        | 38                       | 420             | 32                    | 57   | 144             | 41   | 50   | 60   | 108,00                            | FI-T-42S-W3                 |
|        | 1.50                     | 6091            | 1.26                  | 2.24 | 5.67            | 1.61 | 1.97 | 2.36 | 237.60                            | FI-T-44S-W3                 |

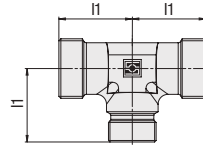
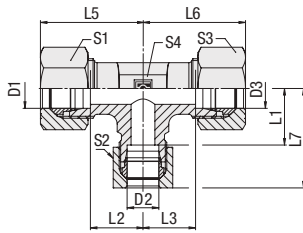
<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.



## Tee Reducer Type FI-T • Series L



Sequence of connections  
in the ordering codes for  
tee reducers:



D

| Series | Tube OD<br>(mm/in) |     |     | PN<br>(bar/psi) | Dimensions<br>(mm/in) |     |      |                 |                 |                 |      |      |     |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----|-----|-----------------|-----------------------|-----|------|-----------------|-----------------|-----------------|------|------|-----|------|-----------------------------------|-----------------------------|
| L      | D1                 | D2  | D3  |                 | L1                    | L2  | L3   | L5 <sup>1</sup> | L6 <sup>1</sup> | L7 <sup>1</sup> | S1   | S2   | S3  | S4   |                                   |                             |
|        | 6                  | 8   | 6   | 500             | 21                    | 14  | 14   | 14              | 29              | 29              | 17   | 14   | 12  | 12   | 3,81                              | FI-T-06/08/06L-W3           |
|        | .24                | .31 | .24 | 7250            | .83                   | .55 | .55  | .55             | 1.14            | 1.14            | .67  | .55  | .47 | .47  | 8.38                              |                             |
|        | 6                  | 10  | 6   | 500             | 22                    | 15  | 15   | 15              | 30              | 30              | 19   | 14   | 14  | 14   | 4,90                              | FI-T-06/10/06L-W3           |
|        | .24                | .39 | .24 | 7250            | .87                   | .59 | .59  | .59             | 1.18            | 1.18            | .75  | .55  | .55 | .55  | 10.78                             |                             |
|        | 8                  | 6   | 8   | 500             | 21                    | 14  | 14   | 14              | 29              | 29              | 14   | 17   | 12  | 12   | 3,27                              | FI-T-08/06/08L-W3           |
|        | .31                | .24 | .31 | 7250            | .83                   | .55 | .55  | .55             | 1.14            | 1.14            | .55  | .67  | .47 | .47  | 7.20                              |                             |
|        | 8                  | 10  | 8   | 500             | 22                    | 15  | 15   | 15              | 30              | 30              | 19   | 17   | 14  | 14   | 4,35                              | FI-T-08/10/08L-W3           |
|        | .31                | .39 | .31 | 7250            | .87                   | .59 | .59  | .59             | 1.18            | 1.18            | .75  | .67  | .55 | .55  | 9.57                              |                             |
|        | 8                  | 12  | 8   | 400             | 24                    | 17  | 17   | 17              | 32              | 32              | 22   | 17   | 17  | 17   | 5,94                              | FI-T-08/12/08L-W3           |
|        | .31                | .47 | .31 | 5800            | .94                   | .67 | .67  | .67             | 1.26            | 1.26            | .87  | .67  | .67 | .67  | 13.06                             |                             |
|        | 10                 | 6   | 10  | 500             | 22                    | 15  | 15   | 15              | 30              | 30              | 14   | 19   | 14  | 14   | 4,18                              | FI-T-10/06/10L-W3           |
|        | .39                | .24 | .39 | 7250            | .87                   | .59 | .59  | .59             | 1.18            | 1.18            | .75  | .55  | .55 | .55  | 9.19                              |                             |
|        | 10                 | 8   | 10  | 500             | 22                    | 15  | 15   | 15              | 30              | 30              | 17   | 19   | 14  | 14   | 4,11                              | FI-T-10/08/10L-W3           |
|        | .39                | .31 | .39 | 7250            | .87                   | .59 | .59  | .59             | 1.18            | 1.18            | .67  | .75  | .55 | .55  | 9.05                              |                             |
|        | 10                 | 10  | 6   | 500             | 21                    | 15  | 15   | 14              | 31              | 29              | 19   | 19   | 14  | 14   | 4,13                              | FI-T-10/10/06L-W3           |
|        | .39                | .39 | .24 | 7250            | .83                   | .59 | .59  | .55             | 1.22            | 1.14            | .75  | .75  | .55 | .55  | 9.11                              |                             |
|        | 10                 | 12  | 10  | 400             | 24                    | 17  | 17   | 17              | 31              | 31              | 32   | 19   | 22  | 19   | 5,81                              | FI-T-10/12/10L-W3           |
|        | .39                | .47 | .39 | 5800            | .94                   | .67 | .67  | .67             | 1.22            | 1.22            | .75  | .87  | .75 | .67  | 12.81                             |                             |
|        | 10                 | 15  | 10  | 400             | 28                    | 21  | 21   | 21              | 36              | 36              | 27   | 19   | 19  | 19   | 10,05                             | FI-T-10/15/10L-W3           |
|        | .39                | .59 | .39 | 5800            | 1.10                  | .83 | .83  | .83             | 1.42            | 1.42            | 1.06 | .75  | .75 | .75  | 22.10                             |                             |
|        | 12                 | 6   | 12  | 400             | 24                    | 17  | 17   | 17              | 32              | 32              | 14   | 22   | 17  | 17   | 5,66                              | FI-T-12/06/12L-W3           |
|        | .47                | .24 | .47 | 5800            | .94                   | .67 | .67  | .67             | 1.26            | 1.26            | .55  | .87  | .67 | .67  | 12.44                             |                             |
|        | 12                 | 8   | 8   | 400             | 24                    | 17  | 17   | 17              | 32              | 32              | 22   | 17   | 17  | 17   | 5,69                              | FI-T-12/08/08L-W3           |
|        | .47                | .31 | .31 | 5800            | .94                   | .67 | .67  | .67             | 1.26            | 1.26            | .87  | .67  | .67 | .67  | 12.54                             |                             |
|        | 12                 | 8   | 12  | 400             | 24                    | 17  | 17   | 17              | 32              | 32              | 17   | 22   | 17  | 17   | 5,68                              | FI-T-12/08/12L-W3           |
|        | .47                | .31 | .47 | 5800            | .94                   | .67 | .67  | .67             | 1.26            | 1.26            | .87  | .67  | .67 | .67  | 12.50                             |                             |
|        | 12                 | 10  | 10  | 400             | 24                    | 17  | 17   | 17              | 32              | 32              | 22   | 19   | 19  | 17   | 6,62                              | FI-T-12/10/10L-W3           |
|        | .47                | .39 | .39 | 5800            | .94                   | .67 | .67  | .67             | 1.26            | 1.26            | .87  | .75  | .75 | .67  | 14.59                             |                             |
|        | 12                 | 10  | 12  | 400             | 24                    | 17  | 17   | 17              | 32              | 32              | 19   | 22   | 17  | 17   | 5,58                              | FI-T-12/10/12L-W3           |
|        | .47                | .39 | .47 | 5800            | .94                   | .67 | .67  | .67             | 1.26            | 1.26            | .75  | .87  | .67 | .67  | 12.28                             |                             |
|        | 12                 | 12  | 8   | 400             | 24                    | 17  | 17   | 17              | 33              | 31              | 22   | 22   | 17  | 17   | 5,65                              | FI-T-12/12/08L-W3           |
|        | .47                | .47 | .31 | 5800            | .94                   | .67 | .67  | .67             | 1.30            | 1.22            | .87  | .87  | .67 | .67  | 12.46                             |                             |
|        | 12                 | 15  | 12  | 400             | 28                    | 21  | 21   | 21              | 36              | 36              | 27   | 22   | 19  | 19   | 9,73                              | FI-T-12/15/12L-W3           |
|        | .47                | .59 | .47 | 5800            | 1.10                  | .83 | .83  | .83             | 1.42            | 1.42            | 1.06 | .87  | .75 | .75  | 21.41                             |                             |
|        | 12                 | 18  | 12  | 400             | 31                    | 24  | 23,5 | 24              | 40              | 39              | 39   | 32   | 24  | 24   | 14,87                             | FI-T-12/18/12L-W3           |
|        | .47                | .71 | .47 | 5800            | 1.22                  | .94 | .93  | .94             | 1.57            | 1.54            | 1.26 | .87  | .94 | .94  | 32.72                             |                             |
|        | 15                 | 6   | 15  | 400             | 28                    | 21  | 21   | 21              | 36              | 36              | 14   | 27   | 19  | 19   | 10,06                             | FI-T-15/06/15L-W3           |
|        | .59                | .24 | .59 | 5800            | 1.10                  | .83 | .83  | .83             | 1.42            | 1.42            | .55  | 1.06 | .75 | .75  | 22.14                             |                             |
|        | 15                 | 8   | 15  | 400             | 28                    | 21  | 21   | 21              | 36              | 36              | 35   | 27   | 17  | 19   | 8,92                              | FI-T-15/08/15L-W3           |
|        | .59                | .31 | .59 | 5800            | 1.10                  | .83 | .83  | .83             | 1.42            | 1.42            | 1.38 | 1.06 | .67 | 1.06 | 19.66                             |                             |
|        | 15                 | 10  | 15  | 400             | 28                    | 21  | 21   | 21              | 36              | 36              | 19   | 27   | 19  | 19   | 9,82                              | FI-T-15/10/15L-W3           |
|        | .59                | .39 | .59 | 5800            | 1.10                  | .83 | .83  | .83             | 1.42            | 1.42            | .75  | 1.06 | .75 | .75  | 21.61                             |                             |
|        | 15                 | 12  | 12  | 400             | 28                    | 21  | 21   | 21              | 37              | 36              | 27   | 22   | 22  | 19   | 9,41                              | FI-T-15/12/12L-W3           |
|        | .59                | .47 | .47 | 5800            | 1.10                  | .83 | .83  | .83             | 1.46            | 1.42            | 1.06 | .87  | .87 | .75  | 20.75                             |                             |
|        | 15                 | 12  | 15  | 400             | 28                    | 21  | 21   | 21              | 36              | 36              | 22   | 27   | 19  | 19   | 9,70                              | FI-T-15/12/15L-W3           |
|        | .59                | .47 | .59 | 5800            | 1.10                  | .83 | .83  | .83             | 1.42            | 1.42            | .87  | 1.06 | .75 | .75  | 21.35                             |                             |
|        | 15                 | 15  | 12  | 400             | 28                    | 21  | 21   | 21              | 36              | 36              | 27   | 27   | 22  | 19   | 2,10                              | FI-T-15/15/12L-W3           |
|        | .59                | .59 | .47 | 5800            | 1.10                  | .83 | .83  | .83             | 1.42            | 1.42            | 1.06 | 1.06 | .87 | .75  | 4.63                              |                             |
|        | 15                 | 18  | 15  | 400             | 31                    | 24  | 23,5 | 24              | 40              | 39              | 39   | 32   | 27  | 24   | 15,22                             | FI-T-15/18/15L-W3           |
|        | .59                | .71 | .59 | 5800            | 1.22                  | .94 | .93  | .94             | 1.57            | 1.54            | 1.26 | 1.06 | .94 | .94  | 33.48                             |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.

### Ordering Codes

**\*FI-T\*-10/\*08/\*10\*L\*-W3\*-MS**

|                                                                         |                                                                           |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------|
| * Tee Reducer                                                           | FI-T                                                                      |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                                       |
| * Outside Tube Diameter D2 (in mm)                                      | 08                                                                        |
| * Outside Tube Diameter D3 (in mm)                                      | 10                                                                        |
| * Series                                                                | Light Series (page 101/102) L<br>Heavy Series (page 103) S                |
| * Material Code                                                         | Steel, zinc/nickel-plated -W3                                             |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                           |
| * Assembling / Kitting                                                  | Fitting body only —                                                       |
|                                                                         | Fitting body supplied with cutting rings and union nuts -MS               |
|                                                                         | Fitting body supplied with soft-sealing cutting rings and union nuts -MSV |

### Connecting Parts

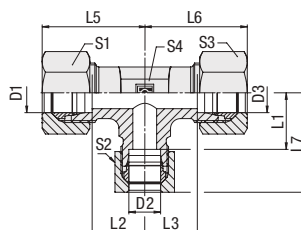
|  |                                            |         |
|--|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |





## Tee Reducer

### Type FI-T ▪ Series L



Sequence of connections  
in the ordering codes for  
tee reducers:



### Ordering Codes

**\*FI-T\*-10/\*08/\*10\*L\*-W3\*-MS**

\* Tee Reducer **FI-T**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Outside Tube Diameter D2 (in mm) **08**

\* Outside Tube Diameter D3 (in mm) **10**

\* Series Light Series (page 101/102) **L**  
Heavy Series (page 103) **S**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only **—**

Fitting body supplied with cutting rings and union nuts **-MS**

Fitting body supplied with soft-sealing cutting rings and union nuts **-MSV**

### Connecting Parts



Cutting Ring  
Type **FI-DS** **Page 28**



Soft-Sealing Cutting Ring  
Type **FI-WDDS** **Page 29**



Support Sleeve  
Type **FI-VH** **Page 31**



STAUFF Form EVO Sealing Ring  
Type **FI-FD** **Page 32**



Union Nut  
Type **FI-M** **Page 33**



37° Flared Tube Fitting Set  
Type **FI-AB** **Page 37**

<sup>1</sup> Approximate dimension in assembled condition.

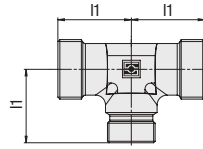
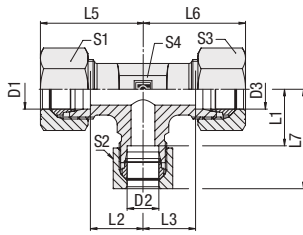
<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.

| Series | Tube OD |      |      | PN<br>( <sup>bar</sup> /Psi) | Dimensions |      |      |      |                 |                 |                 |      |      |      | Weight<br>( <sup>kg</sup> /m) ca.<br>per 100 | Ordering Codes <sup>3</sup> |                   |
|--------|---------|------|------|------------------------------|------------|------|------|------|-----------------|-----------------|-----------------|------|------|------|----------------------------------------------|-----------------------------|-------------------|
|        | D1      | D2   | D3   |                              | I1         | L1   | L2   | L3   | L5 <sup>1</sup> | L6 <sup>1</sup> | L7 <sup>1</sup> | S1   | S2   | S3   |                                              |                             | S4                |
| L      | 18      | 8    | 18   | 400                          | 31         | 23,5 | 24   | 23,5 | 40              | 40              | 39              | 32   | 17   | 32   | 24                                           | 14,80                       | FI-T-18/08/18L-W3 |
|        | .71     | .31  | .39  | 5800                         | 1.22       | .93  | .94  | .93  | 1.57            | 1.57            | 1.54            | 1.26 | .67  | 1.26 | .94                                          | 32.63                       | FI-T-18/10/10L-W3 |
|        | 18      | 10   | 10   | 400                          | 31         | 24   | 23,5 | 24   | 40              | 39              | 39              | 32   | 19   | 19   | 24                                           | 14,88                       | FI-T-18/10/18L-W3 |
|        | .71     | .39  | .39  | 5800                         | 1.22       | .94  | .93  | .94  | 1.57            | 1.54            | 1.54            | 1.26 | .75  | .75  | .94                                          | 32.80                       | FI-T-18/12/12L-W3 |
|        | 18      | 10   | 18   | 400                          | 31         | 24   | 23,5 | 23,5 | 39              | 40              | 40              | 19   | 32   | 24   | 24                                           | 14,52                       | FI-T-18/10/18L-W3 |
|        | .71     | .39  | .71  | 5800                         | 1.22       | .94  | .93  | .93  | 1.54            | 1.57            | 1.57            | .75  | 1.26 | .94  | .94                                          | 31.95                       | FI-T-18/12/12L-W3 |
|        | 18      | 12   | 12   | 400                          | 31         | 24   | 23,5 | 24   | 40              | 39              | 40              | 32   | 22   | 22   | 24                                           | 14,43                       | FI-T-18/12/12L-W3 |
|        | .71     | .47  | .47  | 5800                         | 1.22       | .94  | .93  | .94  | 1.57            | 1.54            | 1.57            | 1.26 | .87  | .87  | .94                                          | 31.81                       | FI-T-18/12/18L-W3 |
|        | 18      | 12   | 18   | 400                          | 31         | 24   | 23,5 | 23,5 | 39              | 40              | 40              | 22   | 32   | 24   | 24                                           | 14,76                       | FI-T-18/12/18L-W3 |
|        | .71     | .47  | .71  | 5800                         | 1.22       | .94  | .93  | .93  | 1.54            | 1.57            | 1.57            | .87  | 1.26 | .94  | .94                                          | 32.48                       | FI-T-18/15/15L-W3 |
|        | 18      | 15   | 15   | 400                          | 31         | 24   | 23,5 | 24   | 40              | 40              | 40              | 32   | 27   | 27   | 24                                           | 14,36                       | FI-T-18/15/15L-W3 |
|        | .71     | .59  | .59  | 5800                         | 1.22       | .94  | .93  | .94  | 1.57            | 1.57            | 1.57            | 1.26 | 1.06 | 1.06 | .94                                          | 31.66                       | FI-T-18/15/18L-W3 |
|        | 18      | 15   | 18   | 400                          | 31         | 24   | 23,5 | 23,5 | 39              | 40              | 40              | 27   | 32   | 24   | 24                                           | 14,62                       | FI-T-18/15/18L-W3 |
|        | .71     | .59  | .71  | 5800                         | 1.22       | .94  | .93  | .93  | 1.54            | 1.57            | 1.57            | 1.06 | 1.26 | .94  | .94                                          | 32.16                       | FI-T-18/18/10L-W3 |
|        | 18      | 18   | 10   | 400                          | 31         | 23,5 | 23,5 | 24   | 40              | 39              | 40              | 32   | 32   | 19   | 24                                           | 14,31                       | FI-T-18/18/10L-W3 |
|        | .71     | .71  | .39  | 5800                         | 1.22       | .93  | .93  | .94  | 1.57            | 1.54            | 1.57            | 1.26 | 1.26 | .75  | .94                                          | 31.55                       | FI-T-18/18/12L-W3 |
|        | 18      | 18   | 12   | 400                          | 31         | 23,5 | 23,5 | 24   | 40              | 39              | 40              | 32   | 32   | 22   | 24                                           | 14,53                       | FI-T-18/18/12L-W3 |
|        | .71     | .71  | .47  | 5800                         | 1.22       | .93  | .93  | .94  | 1.57            | 1.54            | 1.57            | 1.26 | 1.26 | .87  | .94                                          | 32.03                       | FI-T-18/18/22L-W3 |
|        | 18      | 22   | 18   | 250                          | 35         | 27,5 | 27,5 | 27,5 | 43,5            | 43,5            | 41              | 32   | 36   | 32   | 27                                           | 21,60                       | FI-T-18/22/18L-W3 |
|        | .71     | .87  | .71  | 3625                         | 1.38       | 1.08 | 1.08 | 1.08 | 1.71            | 1.71            | 1.61            | 1.26 | 1.42 | 1.26 | 1.06                                         | 47.62                       | FI-T-22/10/22L-W3 |
|        | 22      | 10   | 22   | 250                          | 35         | 28   | 27,5 | 27,5 | 43              | 44              | 44              | 19   | 36   | 27   | 27                                           | 19,89                       | FI-T-22/10/22L-W3 |
|        | .87     | .39  | .87  | 3625                         | 1.38       | 1.10 | 1.08 | 1.08 | 1.69            | 1.73            | 1.73            | .75  | 1.42 | 1.06 | 1.06                                         | 43.75                       | FI-T-22/12/22L-W3 |
|        | 22      | 12   | 22   | 250                          | 35         | 28   | 27,5 | 27,5 | 43              | 44              | 44              | 22   | 36   | 27   | 27                                           | 20,30                       | FI-T-22/12/22L-W3 |
|        | .87     | .47  | .87  | 3625                         | 1.38       | 1.10 | 1.08 | 1.08 | 1.69            | 1.73            | 1.73            | .87  | 1.42 | 1.06 | 1.06                                         | 44.66                       | FI-T-22/15/15L-W3 |
|        | 22      | 15   | 15   | 250                          | 35         | 28   | 27,5 | 28   | 44,5            | 42,5            | 43              | 36   | 27   | 27   | 27                                           | 21,11                       | FI-T-22/15/15L-W3 |
|        | .87     | .59  | .59  | 3625                         | 1.38       | 1.10 | 1.08 | 1.10 | 1.75            | 1.67            | 1.69            | 1.42 | 1.06 | 1.06 | 1.06                                         | 46.54                       | FI-T-22/15/22L-W3 |
|        | 22      | 15   | 22   | 250                          | 35         | 28   | 27,5 | 27,5 | 43              | 44              | 44              | 27   | 36   | 27   | 27                                           | 20,19                       | FI-T-22/15/22L-W3 |
|        | 0,87    | .59  | .87  | 3625                         | 1.38       | 1.10 | 1.08 | 1.08 | 1.69            | 1.73            | 1.73            | 1.06 | 1.42 | 1.06 | 1.06                                         | 44.43                       | FI-T-22/18/18L-W3 |
|        | 22      | 18   | 18   | 250                          | 35         | 27,5 | 27,5 | 27,5 | 44,5            | 43,5            | 44              | 36   | 32   | 32   | 27                                           | 20,66                       | FI-T-22/18/18L-W3 |
|        | .87     | .71  | .71  | 3625                         | 1.38       | 1.08 | 1.08 | 1.08 | 1.75            | 1.71            | 1.73            | 1.42 | 1.26 | 1.26 | 1.06                                         | 45.55                       | FI-T-22/18/22L-W3 |
|        | 22      | 18   | 22   | 250                          | 35         | 27,5 | 27,5 | 27,5 | 44              | 44              | 44              | 32   | 36   | 27   | 27                                           | 20,29                       | FI-T-22/18/22L-W3 |
|        | .87     | .71  | .87  | 3625                         | 1.38       | 1.08 | 1.08 | 1.08 | 1.73            | 1.73            | 1.73            | 1.26 | 1.42 | 1.06 | 1.06                                         | 44.64                       | FI-T-22/28/22L-W3 |
|        | 22      | 28   | 22   | 250                          | 38         | 30,5 | 30,5 | 30,5 | 47,5            | 47,5            | 48              | 36   | 41   | 36   | 36                                           | 33,66                       | FI-T-22/28/22L-W3 |
|        | .87     | 1.10 | .87  | 3625                         | 1.50       | 1.20 | 1.20 | 1.20 | 1.87            | 1.87            | 1.89            | 1.42 | 1.61 | 1.42 | 1.42                                         | 74.21                       | FI-T-28/10/28L-W3 |
|        | 28      | 10   | 28   | 250                          | 38         | 30,5 | 31   | 30,5 | 46              | 47              | 47              | 19   | 41   | 36   | 36                                           | 32,82                       | FI-T-28/10/28L-W3 |
|        | 1.10    | .39  | 1.10 | 3625                         | 1.50       | 1.20 | 1.22 | 1.20 | 1.81            | 1.85            | 1.85            | .75  | 1.61 | 1.42 | 1.42                                         | 72.20                       | FI-T-28/12/28L-W3 |
|        | 28      | 12   | 28   | 250                          | 38         | 30,5 | 31   | 30,5 | 46              | 47              | 47              | 22   | 41   | 36   | 36                                           | 34,10                       | FI-T-28/12/28L-W3 |
|        | 1.10    | .47  | 1.10 | 3625                         | 1.50       | 1.20 | 1.22 | 1.20 | 1.81            | 1.85            | 1.85            | .87  | 1.61 | 1.42 | 1.42                                         | 75.02                       | FI-T-28/15/28L-W3 |
|        | 28      | 15   | 28   | 250                          | 38         | 31   | 30,5 | 30,5 | 46              | 47              | 47              | 27   | 41   | 36   | 36                                           | 22,97                       | FI-T-28/15/28L-W3 |
|        | 1.10    | .59  | 1.10 | 3625                         | 1.50       | 1.22 | 1.20 | 1.20 | 1.81            | 1.85            | 1.85            | 1.06 | 1.61 | 1.42 | 1.42                                         | 50.54                       | FI-T-28/18/18L-W3 |
|        | 28      | 18   | 18   | 250                          | 38         | 30,5 | 30,5 | 30,5 | 47,5            | 46,5            | 47              | 41   | 32   | 32   | 36                                           | 36,07                       | FI-T-28/18/18L-W3 |
|        | 1.10    | .71  | .71  | 3625                         | 1.50       | 1.20 | 1.20 | 1.20 | 1.87            | 1.83            | 1.85            | 1.61 | 1.26 | 1.26 | 1.42                                         | 79.52                       | FI-T-28/18/28L-W3 |
|        | 28      | 18   | 28   | 250                          | 38         | 30,5 | 30,5 | 30,5 | 47              | 47              | 47              | 32   | 41   | 36   | 36                                           | 18,70                       | FI-T-28/22/22L-W3 |
|        | 1.10    | .71  | 1.10 | 3625                         | 1.50       | 1.20 | 1.20 | 1.20 | 1.85            | 1.85            | 1.85            | 1.26 | 1.61 | 1.42 | 1.42                                         | 41.14                       | FI-T-28/22/22L-W3 |
|        | 28      | 22   | 22   | 250                          | 38         | 30,5 | 30,5 | 30,5 | 47,5            | 46,5            | 47              | 41   | 36   | 36   | 36                                           | 31,88                       | FI-T-28/22/22L-W3 |
|        | 1.10    | .87  | .87  | 3625                         | 1.50       | 1.20 | 1.20 | 1.20 | 1.87            | 1.83            | 1.85            | 1.61 | 1.42 | 1.42 | 1.42                                         | 70.28                       | FI-T-28/22/28L-W3 |
|        | 28      | 22   | 28   | 250                          | 38         | 30,5 | 30,5 | 30,5 | 47              | 47              | 47              | 36   | 41   | 36   | 36                                           | 31,70                       | FI-T-28/28/22L-W3 |
|        | 1.10    | .87  | 1.10 | 3625                         | 1.50       | 1.20 | 1.20 | 1.20 | 1.85            | 1.85            | 1.85            | 1.42 | 1.61 | 1.42 | 1.42                                         | 69.74                       | FI-T-35/18/35L-W3 |
| 35     | 18      | 35   | 250  | 45                           | 34,5       | 37,5 | 34,5 | 54   | 56              | 56              | 32              | 50   | 41   | 41   | 59,68                                        | FI-T-35/18/35L-W3           |                   |
| 1.38   | .71     | 1.38 | 3625 | 1.77                         | 1.36       | 1.48 | 1.36 | 2.13 | 2.20            | 2.20            | 1.26            | 1.97 | 1.61 | 1.61 | 131.30                                       | FI-T-35/22/35L-W3           |                   |
| 35     | 22      | 35   | 250  | 45                           | 34,5       | 37,5 | 34,5 | 54   | 56              | 56              | 36              | 50   | 41   | 41   | 55.00                                        | FI-T-35/22/35L-W3           |                   |
| 1.38   | .87     | 1.38 | 3625 | 1.77                         | 1.36       | 1.48 | 1.36 | 2.13 | 2.20            | 2.20            | 1.42            | 1.97 | 1.61 | 1.61 | 121.00                                       | FI-T-35/28/35L-W3           |                   |
| 35     | 28      | 35   | 250  | 45                           | 34,5       | 37,5 | 34,5 | 54   | 56              | 56              | 41              | 50   | 41   | 41   | 49,74                                        | FI-T-35/28/35L-W3           |                   |
| 1.38   | 1.10    | 1.38 | 3625 | 1.77                         | 1.36       | 1.48 | 1.36 | 2.13 | 2.20            | 2.20            | 1.61            | 1.97 | 1.61 | 1.61 | 109.43                                       | FI-T-42/22/42L-W3           |                   |
| 42     | 22      | 42   | 250  | 51                           | 40         | 43,5 | 40   | 60   | 63              | 63              | 36              | 60   | 50   | 50   | 79,20                                        | FI-T-42/22/42L-W3           |                   |
| 1.65   | .87     | 1.65 | 3625 | 2.01                         | 1.57       | 1.71 | 1.57 | 2.36 | 2.48            | 2.48            | 1.42            | 2.36 | 1.97 | 1.97 | 174.61                                       | FI-T-42/28/42L-W3           |                   |
| 42     | 28      | 42   | 250  | 51                           | 40         | 43,5 | 40   | 60   | 63              | 63              | 41              | 60   | 50   | 50   | 77,33                                        | FI-T-42/28/42L-W3           |                   |
| 1.65   | 1.10    | 1.65 | 3625 | 2.01                         | 1.57       | 1.71 | 1.57 | 2.36 | 2.48            | 2.48            | 1.61            | 2.36 | 1.97 | 1.97 | 170.13                                       | FI-T-42/35/42L-W3           |                   |
| 42     | 35      | 42   | 250  | 51                           | 40         | 40,5 | 40   | 62   | 63              | 63              | 50              | 60   | 50   | 50   | 80,30                                        | FI-T-42/35/42L-W3           |                   |
| 1.65   | 1.38    | 1.65 | 3625 | 2.01                         | 1.57       | 1.59 | 1.57 | 2.44 | 2.48            | 2.48            | 1.97            | 2.36 | 1.97 | 1.97 | 176.66                                       | FI-T-42/42/35L-W3           |                   |







Sequence of connections in the ordering codes for tee reducers:



## Tee Reducer Type FI-T ▪ Series S



D

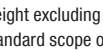
| Series | Tube OD |      |      | PN<br>( <sup>lbs</sup> /psi) | Dimensions<br>( <sup>mm</sup> /in) |      |      |      |                 |                 |                 |      |      |      | Weight<br>( <sup>kg</sup> /lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |                   |
|--------|---------|------|------|------------------------------|------------------------------------|------|------|------|-----------------|-----------------|-----------------|------|------|------|------------------------------------------------|-----------------------------|-------------------|
|        | D1      | D2   | D3   |                              | I1                                 | L1   | L2   | L3   | L5 <sup>1</sup> | L6 <sup>1</sup> | L7 <sup>1</sup> | S1   | S2   | S3   |                                                |                             | S4                |
| S      | 12      | 6    | 12   | 630                          | 29                                 | 22   | 21,5 | 21,5 | 38,5            | 38,5            | 37              | 24   | 17   | 24   | 17                                             | 10,75                       | FI-T-12/06/12S-W3 |
|        | .47     | .24  | .47  | 9135                         | 1.14                               | .87  | .85  | .85  | 1.52            | 1.52            | 1.46            | .94  | .67  | .94  | .67                                            | 23.70                       |                   |
|        | 12      | 8    | 12   | 630                          | 29                                 | 22   | 21,5 | 21,5 | 38,5            | 38,5            | 37,5            | 24   | 19   | 24   | 17                                             | 10,59                       | FI-T-12/08/12S-W3 |
|        | .47     | .31  | .47  | 9135                         | 1.14                               | .87  | .85  | .85  | 1.52            | 1.52            | 1.48            | .94  | .75  | .94  | .67                                            | 23.35                       |                   |
|        | 12      | 16   | 12   | 630                          | 33                                 | 24,5 | 25,5 | 25,5 | 41              | 41              | 43              | 24   | 30   | 24   | 24                                             | 18,74                       | FI-T-12/16/12S-W3 |
|        | .47     | .63  | .47  | 9135                         | 1.30                               | .96  | 1.00 | 1.00 | 1.61            | 1.61            | 1.69            | .94  | 1.18 | .94  | .94                                            | 41.31                       |                   |
|        | 16      | 6    | 16   | 630                          | 33                                 | 26   | 24,5 | 24,5 | 43              | 43              | 41              | 30   | 17   | 30   | 24                                             | 17,85                       | FI-T-16/06/16S-W3 |
|        | .63     | .24  | .63  | 9135                         | 1.30                               | 1.02 | .96  | .96  | 1.69            | 1.69            | 1.61            | 1.18 | .67  | 1.18 | .94                                            | 39.35                       |                   |
|        | 16      | 8    | 16   | 630                          | 33                                 | 24,5 | 26   | 24,5 | 41              | 43              | 43              | 19   | 30   | 24   | 24                                             | 18,08                       | FI-T-16/08/16S-W3 |
|        | .63     | .31  | .63  | 9135                         | 1.30                               | .96  | 1.02 | .96  | 1.61            | 1.69            | 1.69            | .75  | 1.18 | .94  | .94                                            | 39.78                       |                   |
|        | 16      | 10   | 16   | 630                          | 33                                 | 25,5 | 24,5 | 24,5 | 42              | 43              | 43              | 22   | 30   | 24   | 24                                             | 18,12                       | FI-T-16/10/16S-W3 |
|        | .63     | .39  | .63  | 9135                         | 1.30                               | 1.00 | .96  | .96  | 1.65            | 1.69            | 1.69            | .87  | 1.18 | .94  | .94                                            | 39.86                       |                   |
|        | 16      | 12   | 12   | 630                          | 33                                 | 25,5 | 24,5 | 25,5 | 43              | 41              | 42              | 30   | 24   | 24   | 24                                             | 16,44                       | FI-T-16/12/12S-W3 |
|        | .63     | .47  | .47  | 9135                         | 1.30                               | 1.00 | .96  | 1.00 | 1.69            | 1.61            | 1.65            | 1.18 | .94  | .94  | .94                                            | 36.24                       |                   |
|        | 16      | 12   | 16   | 630                          | 33                                 | 25,5 | 24,5 | 24,5 | 42              | 43              | 43              | 24   | 30   | 24   | 24                                             | 18,10                       | FI-T-16/12/16S-W3 |
|        | .63     | .47  | .63  | 9135                         | 1.30                               | 1.00 | .96  | .96  | 1.65            | 1.69            | 1.69            | .94  | 1.18 | .94  | .94                                            | 39.82                       |                   |
|        | 16      | 16   | 10   | 630                          | 33                                 | 24,5 | 24,5 | 25,5 | 43,5            | 39,5            | 43,5            | 30   | 30   | 22   | 24                                             | 17,98                       | FI-T-16/16/10S-W3 |
|        | .63     | .63  | .39  | 9135                         | 1.30                               | .96  | .96  | 1.00 | 1.71            | 1.56            | 1.71            | 1.18 | 1.18 | .87  | .94                                            | 39.64                       |                   |
|        | 16      | 20   | 16   | 420                          | 37                                 | 26,5 | 28,5 | 28,5 | 47              | 47              | 47              | 30   | 36   | 30   | 27                                             | 26,02                       | FI-T-16/20/16S-W3 |
|        | .63     | .79  | .63  | 6091                         | 1.46                               | 1.04 | 1.12 | 1.12 | 1.85            | 1.85            | 1.85            | 1.18 | 1.42 | 1.18 | 1.06                                           | 57.36                       |                   |
|        | 20      | 10   | 20   | 420                          | 37                                 | 29,5 | 26,5 | 26,5 | 46              | 48              | 48              | 22   | 36   | 27   | 27                                             | 28,30                       | FI-T-20/10/20S-W3 |
|        | .79     | .39  | .79  | 6091                         | 1.46                               | 1.16 | 1.04 | 1.04 | 1.81            | 1.89            | 1.89            | .87  | 1.42 | 1.06 | 1.06                                           | 62.26                       |                   |
|        | 20      | 12   | 20   | 420                          | 37                                 | 29,5 | 26,5 | 26,5 | 48              | 48              | 45,5            | 36   | 24   | 36   | 27                                             | 26,42                       | FI-T-20/12/20S-W3 |
|        | .79     | .47  | .79  | 6091                         | 1.46                               | 1.16 | 1.04 | 1.04 | 1.89            | 1.89            | 1.79            | 1.42 | .94  | 1.42 | 1.06                                           | 58.25                       |                   |
|        | 20      | 16   | 20   | 420                          | 37                                 | 28,5 | 26,5 | 26,5 | 47              | 48              | 48              | 30   | 36   | 27   | 27                                             | 26,21                       | FI-T-20/16/20S-W3 |
|        | .79     | .63  | .79  | 6091                         | 1.46                               | 1.12 | 1.04 | 1.04 | 1.85            | 1.89            | 1.89            | 1.18 | 1.42 | 1.06 | 1.06                                           | 57.66                       |                   |
|        | 20      | 25   | 20   | 420                          | 42                                 | 30   | 31,5 | 31,5 | 52              | 52              | 54              | 36   | 46   | 36   | 36                                             | 45,59                       | FI-T-20/25/20S-W3 |
|        | .79     | .98  | .79  | 6091                         | 1.65                               | 1.18 | 1.24 | 1.24 | 2.05            | 2.05            | 2.13            | 1.42 | 1.81 | 1.42 | 1.42                                           | 100.51                      |                   |
|        | 25      | 12   | 25   | 420                          | 42                                 | 34,5 | 30   | 30   | 54              | 54              | 51              | 46   | 24   | 46   | 36                                             | 40,90                       | FI-T-25/12/25S-W3 |
|        | .98     | .47  | .98  | 6091                         | 1.65                               | 1.36 | 1.18 | 1.18 | 2.13            | 2.13            | 2.01            | 1.81 | .94  | 1.81 | 1.42                                           | 103.40                      |                   |
|        | 25      | 16   | 25   | 420                          | 42                                 | 33,5 | 30   | 30   | 52              | 54              | 54              | 30   | 46   | 36   | 36                                             | 45,80                       | FI-T-25/16/25S-W3 |
|        | .98     | .63  | .98  | 6091                         | 1.65                               | 1.32 | 1.18 | 1.18 | 2.05            | 2.13            | 2.13            | 1.18 | 1.81 | 1.42 | 1.42                                           | 100.76                      |                   |
|        | 25      | 20   | 25   | 420                          | 42                                 | 31,5 | 30   | 30   | 53              | 54              | 54              | 36   | 46   | 36   | 36                                             | 45,04                       | FI-T-25/20/25S-W3 |
|        | .98     | .79  | .98  | 6091                         | 1.65                               | 1.24 | 1.18 | 1.18 | 2.09            | 2.13            | 2.13            | 1.42 | 1.81 | 1.42 | 1.42                                           | 99.08                       |                   |
|        | 25      | 30   | 25   | 420                          | 49                                 | 37   | 35,5 | 37   | 62              | 61              | 61              | 50   | 46   | 41   | 41                                             | 72,40                       | FI-T-25/30/25S-W3 |
|        | .98     | 1.18 | .98  | 6091                         | 1.93                               | 1.46 | 1.40 | 1.46 | 2.44            | 2.40            | 2.40            | 1.97 | 1.81 | 1.61 | 1.61                                           | 159.28                      |                   |
|        | 30      | 20   | 30   | 420                          | 49                                 | 35,5 | 38,5 | 35,5 | 48              | 62              | 62              | 36   | 50   | 41   | 41                                             | 80,00                       | FI-T-30/20/30S-W3 |
|        | 1.18    | .79  | 1.18 | 6091                         | 1.93                               | 1.40 | 1.52 | 1.40 | 1.89            | 2.44            | 2.44            | 1.42 | 1.97 | 1.61 | 1.61                                           | 176.00                      |                   |
|        | 38      | 20   | 38   | 420                          | 57                                 | 46,5 | 41   | 41   | 72,5            | 72,5            | 68              | 60   | 36   | 60   | 50                                             | 108,90                      | FI-T-38/20/38S-W3 |
|        | 1.18    | .79  | 1.50 | 6091                         | 2.24                               | 1.83 | 1.61 | 1.61 | 2.85            | 2.85            | 2.68            | 2.36 | 1.42 | 2.36 | 1.97                                           | 240.08                      |                   |
| 38     | 25      | 38   | 420  | 57                           | 41                                 | 45   | 41   | 69   | 72              | 72              | 46              | 60   | 50   | 50   | 134,72                                         | FI-T-38/25/38S-W3           |                   |
| 1.50   | .98     | 1.50 | 6091 | 2.24                         | 1.61                               | 1.77 | 1.61 | 2.72 | 2.83            | 2.83            | 1.81            | 2.36 | 1.97 | 1.97 | 296.38                                         |                             |                   |
| 38     | 30      | 38   | 400  | 57                           | 41                                 | 43,5 | 41   | 70   | 72              | 72              | 60              | 60   | 50   | 50   | 125,00                                         | FI-T-38/30/38S-W3           |                   |
| 1.50   | 1.18    | 1.50 | 5800 | 2.24                         | 1.61                               | 1.71 | 1.61 | 2.76 | 2.83            | 2.83            | 1.97            | 2.36 | 1.97 | 1.97 | 275.00                                         |                             |                   |

## Ordering Codes

**\*FI-T\*-12/\*06/\*12\*S\*-W3\*-MS**

|                                                                         |                                                                      |                      |
|-------------------------------------------------------------------------|----------------------------------------------------------------------|----------------------|
| <b>* Tee Reducer</b>                                                    |                                                                      | <b>FI-T</b>          |
| <b>* Outside Tube Diameter D1 (in mm)</b>                               |                                                                      | <b>-12</b>           |
| <b>* Outside Tube Diameter D2 (in mm)</b>                               |                                                                      | <b>06</b>            |
| <b>* Outside Tube Diameter D3 (in mm)</b>                               |                                                                      | <b>12</b>            |
| <b>* Series</b>                                                         | Light Series (page 101/102)<br>Heavy Series (page 103)               | <b>L</b><br><b>S</b> |
| <b>* Material Code</b>                                                  | Steel, zinc/nickel-plated                                            | <b>-W3</b>           |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                      |                      |
| <b>* Assembling / Kitting</b>                                           | Fitting body only                                                    | <b>—</b>             |
|                                                                         | Fitting body supplied with cutting rings and union nuts              | <b>-MS</b>           |
|                                                                         | Fitting body supplied with soft-sealing cutting rings and union nuts | <b>-MSV</b>          |

## Connecting Parts

|                                                                                       |                                                   |         |
|---------------------------------------------------------------------------------------|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

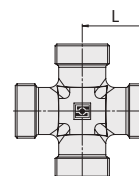
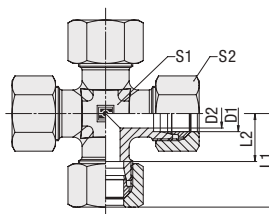
<sup>1</sup>Approximate dimension in assembled condition.

<sup>2</sup>Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.



## Equal Cross Type FI-K • Series LL / L / S



### Ordering Codes

#### \*FI-K\*-10\*L\*-W3\*-MS

|                                                                         |                                                                                  |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| * Equal Cross                                                           | <b>FI-K</b>                                                                      |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                       |
| * Series                                                                | Extra-Light Series <b>LL</b><br>Light Series <b>L</b><br>Heavy Series <b>S</b>   |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                             |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                  |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b>                                                       |
|                                                                         | Fitting body supplied with cutting rings and union nuts <b>-MS</b>               |
|                                                                         | Fitting body supplied with soft-sealing cutting rings and union nuts <b>-MSV</b> |

### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

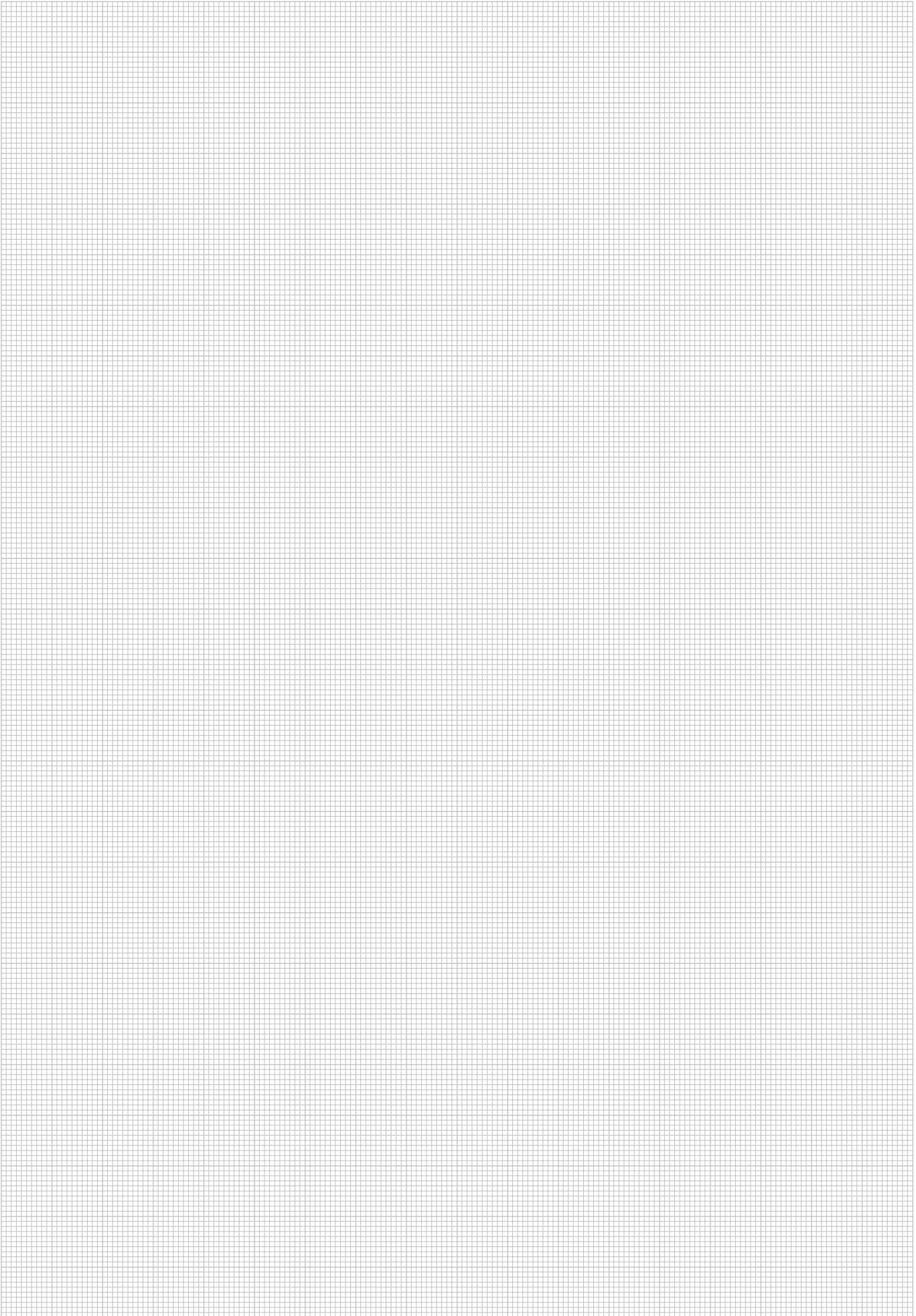
| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |                 |      |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------|-----------------|------|------|------|-----------------------------------|-----------------------------|
|        | D1                 |                 | D2                    | L    | L1 <sup>1</sup> | L2   | S1   | S2   |                                   |                             |
| LL     | 4                  | 100             | 3                     | 15   | 21              | 11   | 9    | 10   | 1,68                              | FI-K-04LL-W3                |
|        | .16                | 1450            | .12                   | .59  | .83             | .43  | .35  | .39  | 3.69                              |                             |
|        | 6                  | 100             | 4,5                   | 15   | 21              | 9,5  | 9    | 12   | 1,76                              | FI-K-06LL-W3                |
|        | .24                | 1450            | .18                   | .59  | .83             | .37  | .35  | .47  | 3.87                              |                             |
|        | 8                  | 100             | 6                     | 17   | 23              | 11,5 | 12   | 14   | 2,85                              | FI-K-08LL-W3                |
| L      | .31                | 1450            | .24                   | .67  | .91             | .45  | .47  | .55  | 6.27                              |                             |
|        | 6                  | 500             | 4                     | 19   | 27              | 12   | 12   | 14   | 3,40                              | FI-K-06L-W3                 |
|        | .24                | 7250            | .16                   | .75  | 1.06            | .47  | .47  | .55  | 7.48                              |                             |
|        | 8                  | 500             | 6                     | 21   | 29              | 14   | 12   | 17   | 3,93                              | FI-K-08L-W3                 |
|        | .31                | 7250            | .24                   | .83  | 1.14            | .55  | .47  | .67  | 8.64                              |                             |
|        | 10                 | 500             | 8                     | 22   | 30              | 15   | 14   | 19   | 5,01                              | FI-K-10L-W3                 |
|        | .39                | 7250            | .31                   | .87  | 1.18            | .59  | .55  | .75  | 11.02                             |                             |
|        | 12                 | 400             | 10                    | 24   | 32              | 17   | 17   | 22   | 6,90                              | FI-K-12L-W3                 |
|        | .47                | 5800            | .39                   | .94  | 1.26            | .67  | .67  | .87  | 15.19                             |                             |
|        | 15                 | 400             | 12                    | 28   | 36              | 21   | 19   | 27   | 12,36                             | FI-K-15L-W3                 |
|        | .59                | 5800            | .47                   | 1.10 | 1.42            | .83  | .75  | 1.06 | 27.19                             |                             |
|        | 18                 | 400             | 15                    | 31   | 40              | 23,5 | 24   | 32   | 17,40                             | FI-K-18L-W3                 |
|        | .71                | 5800            | .59                   | 1.22 | 1.57            | .93  | .94  | 1.26 | 38.28                             |                             |
|        | 22                 | 250             | 19                    | 35   | 44              | 27,5 | 27   | 36   | 22,60                             | FI-K-22L-W3                 |
|        | .87                | 3625            | .75                   | 1.38 | 1.73            | 1.08 | 1.06 | 1.42 | 49.72                             |                             |
|        | 28                 | 250             | 24                    | 38   | 47              | 30,5 | 36   | 41   | 35,60                             | FI-K-28L-W3                 |
|        | 1.10               | 3625            | .94                   | 1.50 | 1.85            | 1.20 | 1.42 | 1.61 | 78.32                             |                             |
|        | 35                 | 250             | 30                    | 45   | 56              | 34,5 | 41   | 50   | 54,67                             | FI-K-35L-W3                 |
|        | 1.38               | 3625            | 1.18                  | 1.77 | 2.20            | 1.36 | 1.61 | 1.97 | 120.27                            |                             |
|        | 42                 | 250             | 36                    | 51   | 63              | 40   | 50   | 60   | 92,70                             | FI-K-42L-W3                 |
|        | 1.65               | 3625            | 1.42                  | 2.01 | 2.48            | 1.57 | 1.97 | 2.36 | 209.30                            |                             |
| S      | 6                  | 800             | 4                     | 23   | 31              | 16   | 12   | 17   | 5,79                              | FI-K-06S-W3                 |
|        | .24                | 11600           | .16                   | .91  | 1.22            | .63  | .47  | .67  | 12.74                             |                             |
|        | 8                  | 800             | 5                     | 24   | 32              | 17   | 14   | 19   | 7,91                              | FI-K-08S-W3                 |
|        | .31                | 11600           | .20                   | .94  | 1.26            | .67  | .55  | .75  | 17.41                             |                             |
|        | 10                 | 800             | 7                     | 25   | 34              | 17,5 | 17   | 22   | 10,13                             | FI-K-10S-W3                 |
|        | .39                | 11600           | .28                   | .98  | 1.34            | .69  | .67  | .87  | 22.28                             |                             |
|        | 12                 | 630             | 8                     | 29   | 38              | 21,5 | 17   | 24   | 13,59                             | FI-K-12S-W3                 |
|        | .47                | 9135            | .31                   | 1.14 | 1.50            | .85  | .67  | .94  | 29.90                             |                             |
|        | 14                 | 630             | 10                    | 30   | 40              | 22   | 19   | 27   | 16,21                             | FI-K-14S-W3                 |
|        | .55                | 9135            | .39                   | 1.18 | 1.57            | .87  | .75  | 1.06 | 35.65                             |                             |
|        | 16                 | 630             | 12                    | 33   | 43              | 24,5 | 24   | 30   | 22,15                             | FI-K-16S-W3                 |
|        | .63                | 9135            | .47                   | 1.30 | 1.69            | .96  | .94  | 1.18 | 48.73                             |                             |
|        | 20                 | 420             | 16                    | 37   | 48              | 26,5 | 27   | 36   | 31,07                             | FI-K-20S-W3                 |
|        | .79                | 6091            | .63                   | 1.46 | 1.89            | 1.04 | 1.06 | 1.42 | 68.35                             |                             |
|        | 25                 | 420             | 20                    | 42   | 54              | 30   | 36   | 46   | 53,00                             | FI-K-25S-W3                 |
|        | .98                | 6091            | .79                   | 1.65 | 2.13            | 1.18 | 1.42 | 1.81 | 116.60                            |                             |
|        | 30                 | 420             | 25                    | 49   | 62              | 35,5 | 41   | 50   | 84,30                             | FI-K-30S-W3                 |
|        | 1.18               | 6091            | .98                   | 1.93 | 2.44            | 1.40 | 1.61 | 1.97 | 185.46                            |                             |
|        | 38                 | 420             | 32                    | 57   | 72              | 41   | 50   | 60   | 135,10                            | FI-K-38S-W3                 |
|        | 1.50               | 6091            | 1.26                  | 2.24 | 2.83            | 1.61 | 1.97 | 2.36 | 297.22                            |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.









## Straight Bulkhead Fitting

FI-GS

108



## Elbow Bulkhead Fittings

FI-WS

109



## Straight Bulkhead Weld Fitting

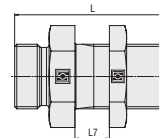
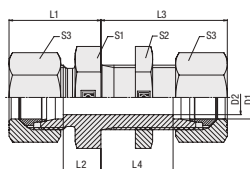
FI-ES

110

E



## Straight Bulkhead Fitting Type FI-GS • Series L / S



### Ordering Codes

#### \*FI-GS\*-10\*L\*-W3\*-MS

|                                                                         |                                                                      |
|-------------------------------------------------------------------------|----------------------------------------------------------------------|
| * Straight Bulkhead Fitting                                             | FI-GS                                                                |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                                  |
| * Series                                                                | Light Series<br>Heavy Series                                         |
|                                                                         | L<br>S                                                               |
| * Material Code                                                         | Steel, zinc/nickel-plated                                            |
|                                                                         | -W3                                                                  |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                      |
| * Assembling / Kitting                                                  | Fitting body only                                                    |
|                                                                         | —                                                                    |
|                                                                         | Fitting body supplied with hexagon lock nut                          |
|                                                                         | -SKM                                                                 |
|                                                                         | Fitting body supplied with cutting rings and union nuts              |
|                                                                         | -MS                                                                  |
|                                                                         | Fitting body supplied with soft-sealing cutting rings and union nuts |
|                                                                         | -MSV                                                                 |

### Connecting Parts

|                                                                                     |                                            |         |
|-------------------------------------------------------------------------------------|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |

### Spare Parts / Accessories

|                                                                                     |                                 |          |
|-------------------------------------------------------------------------------------|---------------------------------|----------|
|  | Hexagon Lock Nut<br>Type FI-SKM | Page 237 |
|-------------------------------------------------------------------------------------|---------------------------------|----------|

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |                 |      |                 |      |           |      |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------|------|-----------------|------|-----------------|------|-----------|------|------|------|-----------------------------------|-----------------------------|
|        |                          |                 | D2                    | L    | L1 <sup>1</sup> | L2   | L3 <sup>1</sup> | L4   | L7<br>max | S1   | S2   | S3   |                                   |                             |
| L      | 6                        | 500             | 4                     | 48   | 22              | 7    | 42              | 27   | 16        | 17   | 17   | 14   | 3,85                              | FI-GS-06L-W3-SKM            |
|        | .24                      | 7250            | .16                   | 1.89 | .87             | .28  | 1.65            | 1.06 | .63       | .67  | .67  | .55  | 8.48                              | FI-GS-08L-W3-SKM            |
|        | 8                        | 500             | 6                     | 49   | 23              | 8    | 42              | 27   | 16        | 19   | 19   | 17   | 4,93                              | FI-GS-10L-W3-SKM            |
|        | .31                      | 7250            | .24                   | 1.93 | .91             | .31  | 1.65            | 1.06 | .63       | .75  | .75  | .67  | 10.85                             | FI-GS-12L-W3-SKM            |
|        | 10                       | 500             | 8                     | 52   | 25              | 10   | 43              | 28   | 16        | 22   | 22   | 19   | 6,76                              | FI-GS-15L-W3-SKM            |
|        | .39                      | 7250            | .31                   | 2.05 | .98             | .39  | 1.69            | 1.10 | .63       | .87  | .87  | .75  | 14.87                             | FI-GS-18L-W3-SKM            |
|        | 12                       | 400             | 10                    | 53   | 25              | 10   | 44              | 29   | 16        | 24   | 24   | 22   | 7,81                              | FI-GS-22L-W3-SKM            |
|        | .47                      | 5800            | .39                   | 2.09 | .98             | .39  | 1.73            | 1.14 | .63       | .94  | .94  | .87  | 17.18                             | FI-GS-28L-W3-SKM            |
|        | 15                       | 400             | 12                    | 57   | 27              | 12   | 46              | 31   | 16        | 27   | 30   | 27   | 12,89                             | FI-GS-35L-W3-SKM            |
|        | .59                      | 5800            | .47                   | 2.24 | 1.06            | .47  | 1.81            | 1.22 | .63       | 1.06 | 1.18 | 1.06 | 28.37                             | FI-GS-42L-W3-SKM            |
|        | 18                       | 400             | 15                    | 61   | 30              | 13,5 | 49              | 32,5 | 16        | 32   | 36   | 32   | 19,87                             | FI-GS-42L-W3-SKM            |
|        | .71                      | 5800            | .59                   | 2.40 | 1.18            | .53  | 1.93            | 1.28 | .63       | 1.26 | 1.42 | 1.26 | 43.72                             | FI-GS-42L-W3-SKM            |
|        | 22                       | 250             | 19                    | 66   | 33              | 16,5 | 51              | 34,5 | 16        | 36   | 41   | 36   | 25,19                             | FI-GS-42L-W3-SKM            |
|        | .87                      | 3625            | .75                   | 2.60 | 1.30            | .65  | 2.01            | 1.36 | .63       | 1.42 | 1.61 | 1.42 | 55.42                             | FI-GS-42L-W3-SKM            |
|        | 28                       | 250             | 24                    | 69   | 35              | 18,5 | 52              | 35,5 | 16        | 41   | 46   | 41   | 34,12                             | FI-GS-42L-W3-SKM            |
|        | 1.10                     | 3625            | .94                   | 2.72 | 1.38            | .73  | 2.05            | 1.40 | .63       | 1.61 | 1.81 | 1.61 | 75.07                             | FI-GS-42L-W3-SKM            |
|        | 35                       | 250             | 30                    | 76   | 40              | 18,5 | 58              | 36,5 | 16        | 50   | 55   | 50   | 55,40                             | FI-GS-42L-W3-SKM            |
|        | 1.38                     | 3625            | 1.18                  | 2.99 | 1.57            | .73  | 2.28            | 1.44 | .63       | 1.97 | 2.17 | 1.97 | 121.88                            | FI-GS-42L-W3-SKM            |
|        | 42                       | 250             | 36                    | 77   | 42              | 19   | 59              | 36   | 16        | 60   | 65   | 60   | 75,30                             | FI-GS-42L-W3-SKM            |
|        | 1.65                     | 3625            | 1.42                  | 3.03 | 1.65            | .75  | 2.32            | 1.42 | .63       | 2.36 | 2.56 | 2.36 | 165.66                            | FI-GS-42L-W3-SKM            |
| S      | 6                        | 800             | 4                     | 55   | 27              | 12   | 44              | 29   | 16        | 19   | 19   | 17   | 6,50                              | FI-GS-06S-W3-SKM            |
|        | .24                      | 11600           | .16                   | 2.17 | 1.06            | .47  | 1.73            | 1.14 | .63       | .75  | .75  | .67  | 14.30                             | FI-GS-08S-W3-SKM            |
|        | 8                        | 800             | 5                     | 56   | 28              | 13   | 44              | 29   | 16        | 22   | 22   | 19   | 8,84                              | FI-GS-10S-W3-SKM            |
|        | .31                      | 11600           | .20                   | 2.20 | 1.10            | .51  | 1.73            | 1.14 | .63       | .87  | .87  | .75  | 19.44                             | FI-GS-12S-W3-SKM            |
|        | 10                       | 800             | 7                     | 59   | 31              | 14,5 | 46              | 29,5 | 16        | 24   | 24   | 22   | 11,18                             | FI-GS-14S-W3-SKM            |
|        | .39                      | 11600           | .28                   | 2.32 | 1.22            | .57  | 1.81            | 1.16 | .63       | .94  | .94  | .87  | 24.59                             | FI-GS-16S-W3-SKM            |
|        | 12                       | 630             | 8                     | 60   | 31              | 14,5 | 47              | 30,5 | 16        | 27   | 27   | 24   | 14,00                             | FI-GS-18S-W3-SKM            |
|        | .47                      | 9135            | .31                   | 2.36 | 1.22            | .57  | 1.85            | 1.20 | .63       | 1.06 | 1.06 | .94  | 30.80                             | FI-GS-20S-W3-SKM            |
|        | 14                       | 630             | 10                    | 65   | 35              | 17   | 50              | 32   | 16        | 30   | 30   | 27   | 18,17                             | FI-GS-22S-W3-SKM            |
|        | .55                      | 9135            | .39                   | 2.56 | 1.38            | .67  | 1.97            | 1.26 | .63       | 1.18 | 1.18 | 1.06 | 39.97                             | FI-GS-24S-W3-SKM            |
|        | 16                       | 630             | 12                    | 65   | 35              | 16,5 | 50              | 31,5 | 16        | 32   | 32   | 30   | 20,12                             | FI-GS-26S-W3-SKM            |
|        | .63                      | 9135            | .47                   | 2.56 | 1.38            | .65  | 1.97            | 1.24 | .63       | 1.26 | 1.26 | 1.18 | 44.27                             | FI-GS-28S-W3-SKM            |
|        | 20                       | 420             | 16                    | 72   | 39              | 17,5 | 55              | 33,5 | 16        | 41   | 41   | 36   | 34,45                             | FI-GS-30S-W3-SKM            |
|        | .79                      | 6091            | .63                   | 2.83 | 1.54            | .69  | 2.17            | 1.32 | .63       | 1.61 | 1.61 | 1.42 | 75.79                             | FI-GS-32S-W3-SKM            |
|        | 25                       | 420             | 20                    | 79   | 44              | 20   | 59              | 35   | 16        | 46   | 46   | 46   | 49,56                             | FI-GS-34S-W3-SKM            |
|        | .98                      | 6091            | .79                   | 3.11 | 1.73            | .79  | 2.32            | 1.38 | .63       | 1.81 | 1.81 | 1.81 | 109.04                            | FI-GS-36S-W3-SKM            |
|        | 30                       | 420             | 25                    | 86   | 48              | 21,5 | 64              | 37,5 | 16        | 50   | 50   | 50   | 64,90                             | FI-GS-38S-W3-SKM            |
|        | 1.18                     | 6091            | .98                   | 3.39 | 1.89            | .85  | 2.52            | 1.48 | .63       | 1.97 | 1.97 | 1.97 | 142.78                            | FI-GS-38S-W3-SKM            |
|        | 38                       | 420             | 32                    | 91   | 53              | 22   | 68              | 37   | 16        | 65   | 65   | 60   | 108,30                            | FI-GS-38S-W3-SKM            |
|        | 1.50                     | 6091            | 1.26                  | 3.58 | 2.09            | .87  | 2.68            | 1.46 | .63       | 2.56 | 2.56 | 2.36 | 238.26                            | FI-GS-38S-W3-SKM            |

<sup>1</sup> Approximate dimension in assembled condition.

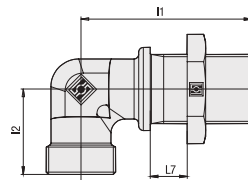
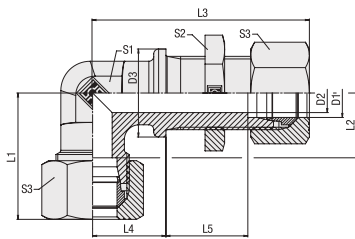
<sup>2</sup> Weight excluding lock nut, cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body with hexagon lock nut.





# Elbow Bulkhead Fittings Type FI-WS • Series L / S



| Series | Tube OD PN<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in)                                                                        | Weight<br>(kg/lbs) ca. | Ordering Codes <sup>3</sup> |
|--------|-----------------------|-----------------|----------------------------------------------------------------------------------------------|------------------------|-----------------------------|
|        | D1                    |                 | D2 L i1 i2 L1 <sup>1</sup> L2 L3 <sup>1</sup> L4 L5 L7 <sup>1</sup> L7 <sup>1</sup> S1 S2 S3 | per 100                |                             |
| L      | 6                     | 500             | 4 17 48 19 27 12 56 14 27 3 16 12 17 14                                                      | 4,88                   | FI-WS-06L-W3-SKM            |
|        | .24                   | 7252            | .16 .67 1.89 .75 1.06 .47 2.20 .55 1.06 .12 .63 .47 .67 .55                                  | 10,74                  |                             |
|        | 8                     | 500             | 6 19 51 21 29 14 59 17 27 3 16 12 19 17                                                      | 6,11                   | FI-WS-08L-W3-SKM            |
|        | .31                   | 7252            | .24 .75 2.01 .83 1.14 .55 2.32 .67 1.06 .12 .63 .47 .75 .67                                  | 13,43                  |                             |
|        | 10                    | 500             | 8 22 53 22 30 15 61 18 28 3 16 14 22 19                                                      | 7,89                   | FI-WS-10L-W3-SKM            |
|        | .39                   | 7252            | .31 .87 2.09 .87 1.18 .59 2.40 .71 1.10 .12 .63 .55 .87 .75                                  | 17,35                  |                             |
|        | 12                    | 400             | 10 24 56 24 32 17 64 20 29 3 16 17 24 22                                                     | 9,65                   | FI-WS-12L-W3-SKM            |
|        | .47                   | 5802            | .39 .94 2.20 .94 1.26 .67 2.52 .79 1.14 .12 .63 .67 .94 .87                                  | 21,23                  |                             |
|        | 15                    | 400             | 12 27 61 28 36 21 69 23 31 3 16 19 30 27                                                     | 16,31                  | FI-WS-15L-W3-SKM            |
|        | .59                   | 5802            | .47 1.06 2.40 1.10 1.42 .83 2.72 .91 1.22 .12 .63 .75 1.18 1.06                              | 35,88                  |                             |
|        | 18                    | 400             | 15 32 64 31 40 23,5 73 24 32,5 3 16 24 36 32                                                 | 23,82                  | FI-WS-18L-W3-SKM            |
|        | .71                   | 5802            | .59 1.26 2.52 1.22 1.57 .93 2.87 .94 1.28 .12 .63 .94 1.42 1.26                              | 52,40                  |                             |
|        | 22                    | 250             | 19 36 72 35 44 27,5 81 30 34,5 4 16 27 41 36                                                 | 30,41                  | FI-WS-22L-W3-SKM            |
|        | .87                   | 3626            | .75 1.42 2.83 1.38 1.73 1.08 3.19 1.18 1.36 .16 .63 1.06 1.61 1.42                           | 66,90                  |                             |
|        | 28                    | 250             | 24 42 77 38 47 30,5 86 34 35,5 4 16 36 46 41                                                 | 45,92                  | FI-WS-28L-W3-SKM            |
|        | 1.10                  | 3626            | .94 1.65 3.03 1.50 1.85 1.20 3.39 1.34 1.40 .16 .63 1.42 1.81 1.61                           | 101,03                 |                             |
|        | 35                    | 250             | 30 50 86 45 56 34,5 97 39 36,5 4 16 41 55 50                                                 | 75,00                  | FI-WS-35L-W3-SKM            |
|        | 1.38                  | 3626            | 1.18 1.97 3.39 1.77 2.20 1.36 3.82 1.54 1.44 .16 .63 1.61 2.17 1.97                          | 165,00                 |                             |
|        | 42                    | 250             | 36 60 90 51 63 40 102 43 36 4 16 50 65 60                                                    | 107,00                 | FI-WS-42L-W3-SKM            |
|        | 1.65                  | 3626            | 1.42 2.36 3.54 2.01 2.48 1.57 4.02 1.69 1.42 .16 .63 1.97 2.56 2.36                          | 235,40                 |                             |
| S      | 6                     | 800             | 4 19 53 23 31 16 61 17 29 3 16 12 19 17                                                      | 7,34                   | FI-WS-06S-W3-SKM            |
|        | .24                   | 11603           | .16 .75 2.09 .91 1.22 .63 2.40 .67 1.14 .12 .63 .47 .75 .67                                  | 16,15                  |                             |
|        | 8                     | 800             | 5 22 54 24 32 17 62 18 29 3 16 14 22 19                                                      | 10,16                  | FI-WS-08S-W3-SKM            |
|        | .31                   | 11603           | .20 .87 2.13 .94 1.26 .67 2.44 .71 1.14 .12 .63 .55 .87 .75                                  | 22,35                  |                             |
|        | 10                    | 800             | 7 24 57 25 34 17,5 66 20 29,5 3 16 17 24 22                                                  | 12,59                  | FI-WS-10S-W3-SKM            |
|        | .39                   | 11603           | .28 .94 2.24 .98 1.34 .69 2.60 .79 1.16 .12 .63 .67 .94 .87                                  | 27,71                  |                             |
|        | 12                    | 630             | 8 27 59 29 38 21,5 68 21 30,5 3 16 17 27 24                                                  | 16,05                  | FI-WS-12S-W3-SKM            |
|        | .47                   | 9137            | .31 1.06 2.32 1.14 1.50 .85 2.68 .83 1.20 .12 .63 .67 1.06 .94                               | 35,30                  |                             |
|        | 14                    | 630             | 10 27 63 30 40 22 73 23 32 3 16 19 30 27                                                     | 19,62                  | FI-WS-14S-W3-SKM            |
|        | .55                   | 9137            | .39 1.06 2.48 1.18 1.57 .87 2.87 .91 1.26 .12 .63 .75 1.18 1.06                              | 43,17                  |                             |
|        | 16                    | 630             | 12 30 64 33 43 24,5 74 24 31,5 3 16 24 32 30                                                 | 24,14                  | FI-WS-16S-W3-SKM            |
|        | .63                   | 9137            | .47 1.18 2.52 1.30 1.69 .96 2.91 .94 1.24 .12 .63 .94 1.26 1.18                              | 53,10                  |                             |
|        | 20                    | 400             | 16 36 74 37 48 26,5 85 30 33,5 4 16 27 41 36                                                 | 38,01                  | FI-WS-20S-W3-SKM            |
|        | .79                   | 5802            | .63 1.42 2.91 1.46 1.89 1.04 3.35 1.18 1.32 .16 .63 1.06 1.61 1.42                           | 83,63                  |                             |
|        | 25                    | 400             | 20 42 81 42 54 30 93 34 35 4 16 36 46 46                                                     | 61,10                  | FI-WS-25S-W3-SKM            |
|        | .98                   | 5802            | .79 1.65 3.19 1.65 2.13 1.18 3.66 1.34 1.38 .16 .63 1.42 1.81 1.81                           | 134,42                 |                             |
|        | 30                    | 400             | 25 50 90 49 62 35,5 103 39 37,5 4 16 41 50 50                                                | 91,00                  | FI-WS-30S-W3-SKM            |
|        | 1.18                  | 5802            | .98 1.97 3.54 1.93 2.44 1.40 4.06 1.54 1.48 .16 .63 1.61 1.97 1.97                           | 200,20                 |                             |
|        | 38                    | 400             | 32 60 96 57 72 41 112 43 37 4 16 50 65 60                                                    | 138,90                 | FI-WS-38S-W3-SKM            |
|        | 1.50                  | 5802            | 1.26 2.36 3.78 2.24 2.83 1.61 4.41 1.69 1.46 .16 .63 1.97 2.56 2.36                          | 305,58                 |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.

## Ordering Codes

**\*FI-WS\*-10\*L\*-W3\*-MS**

|                                                                         |                                                                      |
|-------------------------------------------------------------------------|----------------------------------------------------------------------|
| * Elbow Bulkhead Fitting                                                | FI-WS                                                                |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                                  |
| * Series                                                                | Light Series<br>Heavy Series                                         |
|                                                                         | L<br>S                                                               |
| * Material Code                                                         | Steel, zinc/nickel-plated                                            |
|                                                                         | -W3                                                                  |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                      |
| * Assembling / Kitting                                                  | Fitting body only                                                    |
|                                                                         | —                                                                    |
|                                                                         | Fitting body supplied with hexagon lock nut                          |
|                                                                         | -SKM                                                                 |
|                                                                         | Fitting body supplied with cutting rings and union nuts              |
|                                                                         | -MS                                                                  |
|                                                                         | Fitting body supplied with soft-sealing cutting rings and union nuts |
|                                                                         | -MSV                                                                 |

## Connecting Parts

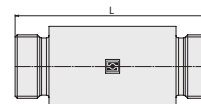
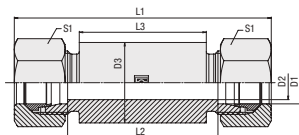
|  |                                            |         |
|--|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |

## Spare Parts / Accessories

|  |                                 |          |
|--|---------------------------------|----------|
|  | Hexagon Lock Nut<br>Type FI-SKM | Page 237 |
|--|---------------------------------|----------|



## Straight Bulkhead Weld Fitting Type FI-ES • Series L / S



### Ordering Codes

#### \*FI-ES\*-10\*L\*-W159\*-MS

|                                                                         |                                                                                                                                                                                              |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * Straight Bulkhead Weld Fitting                                        | <b>FI-ES</b>                                                                                                                                                                                 |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                                                                                                                                   |
| * Series                                                                | Light Series <b>L</b><br>Heavy Series <b>S</b>                                                                                                                                               |
| * Material Code                                                         | Steel, phosphated <b>-W2</b><br><br>Fitting body:<br>Steel, phosphated <b>-W159</b><br>Connecting parts:<br>Steel, zinc/nickel-plated                                                        |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                                                                                              |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b><br><br>Fitting body supplied with cutting rings and union nuts <b>-MS</b><br><br>Fitting body supplied with soft-sealing cutting rings and union nuts <b>-MSV</b> |

### Connecting Parts

|                                                                                     |                                                   |         |
|-------------------------------------------------------------------------------------|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

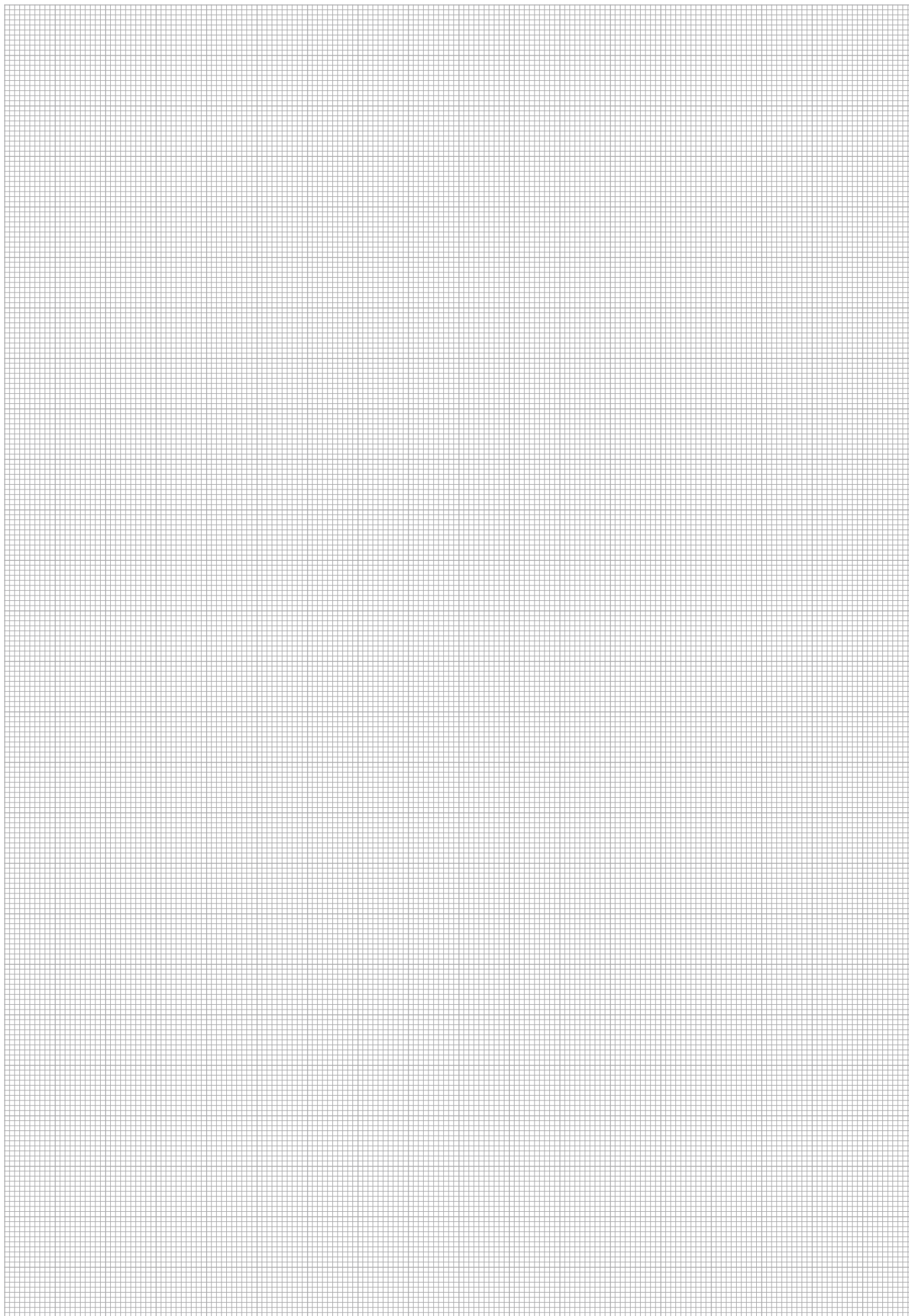
| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |      |                 |      |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------|------|------|-----------------|------|------|------|-----------------------------------|-----------------------------|
|        |                          |                 | D2                    | D3   | L    | L1 <sup>1</sup> | L2   | L3   | S1   |                                   |                             |
| L      | 6                        | 500             | 4                     | 18   | 70   | 85              | 56   | 50   | 14   | 10,33                             | FI-ES-06L-W2                |
|        | .24                      | 7252            | .16                   | .71  | 2.76 | 3.35            | 2.20 | 1.97 | .55  | 22.73                             |                             |
|        | 8                        | 500             | 6                     | 20   | 70   | 85              | 56   | 50   | 17   | 12,21                             | FI-ES-08L-W2                |
|        | .31                      | 7252            | .24                   | .79  | 2.76 | 3.35            | 2.20 | 1.97 | .67  | 26.87                             |                             |
|        | 10                       | 500             | 8                     | 22   | 72   | 87              | 58   | 50   | 19   | 14,30                             | FI-ES-10L-W2                |
|        | .39                      | 7252            | .31                   | .87  | 2.83 | 3.43            | 2.28 | 1.97 | .75  | 31.46                             |                             |
|        | 12                       | 400             | 10                    | 25   | 72   | 87              | 58   | 50   | 22   | 17,75                             | FI-ES-12L-W2                |
|        | .47                      | 5802            | .39                   | .98  | 2.83 | 3.43            | 2.28 | 1.97 | .87  | 39.05                             |                             |
|        | 15                       | 400             | 12                    | 28   | 84   | 100             | 70   | 60   | 27   | 26,69                             | FI-ES-15L-W2                |
|        | .59                      | 5802            | .47                   | 1.10 | 3.31 | 3.94            | 2.76 | 2.36 | 1.06 | 58.73                             |                             |
|        | 18                       | 400             | 15                    | 32   | 84   | 101             | 69   | 60   | 32   | 33,60                             | FI-ES-18L-W2                |
|        | .71                      | 5802            | .59                   | 1.26 | 3.31 | 3.98            | 2.72 | 2.36 | 1.26 | 73.92                             |                             |
|        | 22                       | 250             | 19                    | 36   | 88   | 105             | 73   | 60   | 36   | 39,92                             | FI-ES-22L-W2                |
|        | .87                      | 3626            | .75                   | 1.42 | 3.46 | 4.13            | 2.87 | 2.36 | 1.42 | 87.83                             |                             |
|        | 28                       | 250             | 24                    | 40   | 88   | 106             | 73   | 60   | 41   | 45,18                             | FI-ES-28L-W2                |
|        | 1.10                     | 3626            | .94                   | 1.57 | 3.46 | 4.17            | 2.87 | 2.36 | 1.61 | 99.40                             |                             |
|        | 35                       | 250             | 30                    | 50   | 92   | 114             | 71   | 60   | 50   | 72,80                             | FI-ES-35L-W2                |
|        | 1.38                     | 3626            | 1.18                  | 1.97 | 3.62 | 4.49            | 2.80 | 2.36 | 1.97 | 160.16                            |                             |
|        | 42                       | 250             | 36                    | 60   | 92   | 115             | 70   | 60   | 60   | 100,60                            | FI-ES-42L-W2                |
|        | 1.65                     | 3626            | 1.42                  | 2.36 | 3.62 | 4.53            | 2.76 | 2.36 | 2.36 | 221.32                            |                             |
| S      | 6                        | 800             | 4                     | 20   | 74   | 89              | 60   | 50   | 17   | 13,56                             | FI-ES-06S-W2                |
|        | .24                      | 11603           | .16                   | .79  | 2.91 | 3.50            | 2.36 | 1.97 | .67  | 29.83                             |                             |
|        | 8                        | 800             | 5                     | 22   | 74   | 89              | 60   | 50   | 19   | 16,35                             | FI-ES-08S-W2                |
|        | .31                      | 11603           | .20                   | .87  | 2.91 | 3.50            | 2.36 | 1.97 | .75  | 35.96                             |                             |
|        | 10                       | 800             | 7                     | 25   | 74   | 91              | 59   | 50   | 22   | 20,24                             | FI-ES-10S-W2                |
|        | .39                      | 11603           | .28                   | .98  | 2.91 | 3.58            | 2.32 | 1.97 | .87  | 44.52                             |                             |
|        | 12                       | 630             | 8                     | 28   | 74   | 91              | 59   | 50   | 24   | 25,17                             | FI-ES-12S-W2                |
|        | .47                      | 9137            | .31                   | 1.10 | 2.91 | 3.58            | 2.32 | 1.97 | .94  | 55.38                             |                             |
|        | 14                       | 630             | 10                    | 30   | 88   | 107             | 72   | 60   | 27   | 33,72                             | FI-ES-14S-W2                |
|        | .55                      | 9137            | .39                   | 1.18 | 3.46 | 4.21            | 2.83 | 2.36 | 1.06 | 74.18                             |                             |
|        | 16                       | 630             | 12                    | 35   | 88   | 107             | 71   | 60   | 30   | 44,42                             | FI-ES-16S-W2                |
|        | .63                      | 9137            | .47                   | 1.38 | 3.46 | 4.21            | 2.80 | 2.36 | 1.18 | 97.72                             |                             |
|        | 20                       | 420             | 16                    | 38   | 92   | 114             | 71   | 60   | 36   | 51,50                             | FI-ES-20S-W2                |
|        | .79                      | 6091            | .63                   | 1.50 | 3.62 | 4.49            | 2.80 | 2.36 | 1.42 | 113.30                            |                             |
|        | 25                       | 420             | 20                    | 45   | 96   | 120             | 72   | 60   | 46   | 72,50                             | FI-ES-25S-W2                |
|        | .98                      | 6091            | .79                   | 1.77 | 3.78 | 4.72            | 2.83 | 2.36 | 1.81 | 159.50                            |                             |
|        | 30                       | 420             | 25                    | 50   | 100  | 126             | 73   | 60   | 50   | 87,80                             | FI-ES-30S-W2                |
|        | 1.18                     | 6091            | .98                   | 1.97 | 3.94 | 4.96            | 2.87 | 2.36 | 1.97 | 193.16                            |                             |
|        | 38                       | 420             | 32                    | 60   | 104  | 133             | 72   | 60   | 60   | 125,30                            | FI-ES-38S-W2                |
|        | 1.50                     | 6091            | 1.26                  | 2.36 | 4.09 | 5.24            | 2.83 | 2.36 | 2.36 | 275.66                            |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Fitting body only.








**Straight Weld Fitting**

FI-AS

114


**Elbow Weld Fitting**

FI-WAS

115


**24° Weld Cone with O-Ring**

FI-SN

116


**24° Weld Cone Reducer with O-Ring**

FI-SNR

118


**Straight Weld Fitting for Tubes**

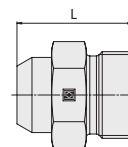
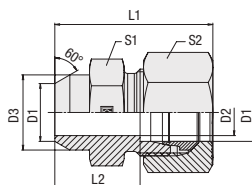
FI-ASV

120

F



## Straight Weld Fitting Type FI-AS • Series L / S



### Ordering Codes

#### \*FI-AS\*-10\*L\*-W159\*-MS

|                                                                         |                                                                                                                                                             |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * Straight Weld Fitting                                                 | FI-AS                                                                                                                                                       |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                                                                                                                         |
| * Series                                                                | Light Series L<br>Heavy Series S                                                                                                                            |
| * Material Code                                                         | Steel, phosphated -W2<br>Fitting body:<br>Steel, phosphated -W159<br>Connecting parts:<br>Steel, zinc/nickel-plated -MSV                                    |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                                                             |
| * Assembling / Kitting                                                  | Fitting body only —<br>Fitting body supplied with cutting ring and union nut -MS<br>Fitting body supplied with soft-sealing cutting ring and union nut -MSV |

### Connecting Parts

|                                                                                     |                                            |         |
|-------------------------------------------------------------------------------------|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |

| Series | Tube OD<br>( <sup>mm</sup> / <sub>in</sub> ) | PN<br>( <sup>bar</sup> / <sub>PSI</sub> ) | Dimensions<br>( <sup>mm</sup> / <sub>in</sub> ) |      |      |                 |      |      |      |       | Weight<br>( <sup>kg</sup> / <sub>lbs</sub> ) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|----------------------------------------------|-------------------------------------------|-------------------------------------------------|------|------|-----------------|------|------|------|-------|-------------------------------------------------------------|-----------------------------|
|        | D1                                           |                                           | D2                                              | D3   | L    | L1 <sup>1</sup> | L2   | S1   | S2   |       |                                                             |                             |
| L      | 6                                            | 500                                       | 4                                               | 10   | 21   | 29              | 14   | 12   | 14   | 1,06  |                                                             |                             |
|        | .24                                          | 7252                                      | .16                                             | .39  | .83  | 1.14            | .55  | .47  | .55  | 2.33  | FI-AS-06L-W2                                                |                             |
|        | 8                                            | 500                                       | 6                                               | 12   | 23   | 31              | 16   | 14   | 17   | 1,52  |                                                             |                             |
|        | .31                                          | 7252                                      | .24                                             | .47  | .91  | 1.22            | .63  | .55  | .67  | 3.35  | FI-AS-08L-W2                                                |                             |
|        | 10                                           | 500                                       | 8                                               | 14   | 25   | 33              | 18   | 17   | 19   | 2,20  |                                                             |                             |
|        | .39                                          | 7252                                      | .31                                             | .55  | .98  | 1.30            | .71  | .67  | .75  | 4.83  | FI-AS-10L-W2                                                |                             |
|        | 12                                           | 400                                       | 10                                              | 16   | 25   | 33              | 18   | 19   | 22   | 2,57  |                                                             |                             |
|        | .47                                          | 5802                                      | .39                                             | .63  | .98  | 1.30            | .71  | .75  | .87  | 5.66  | FI-AS-12L-W2                                                |                             |
|        | 15                                           | 400                                       | 12                                              | 19   | 29   | 37              | 22   | 22   | 27   | 4,37  |                                                             |                             |
|        | .59                                          | 5802                                      | .47                                             | .75  | 1.14 | 1.46            | .87  | .87  | 1.06 | 9.62  | FI-AS-15L-W2                                                |                             |
|        | 18                                           | 400                                       | 15                                              | 22   | 31   | 40              | 23,5 | 27   | 32   | 6,70  |                                                             |                             |
|        | .71                                          | 5802                                      | .59                                             | .87  | 1.22 | 1.57            | .93  | 1.06 | 1.26 | 14.75 | FI-AS-18L-W2                                                |                             |
|        | 22                                           | 250                                       | 19                                              | 27   | 36   | 45              | 28,5 | 32   | 36   | 9,87  |                                                             |                             |
|        | .87                                          | 3626                                      | .75                                             | 1.06 | 1.42 | 1.77            | 1.12 | 1.26 | 1.42 | 21.72 | FI-AS-22L-W2                                                |                             |
|        | 28                                           | 250                                       | 24                                              | 32   | 38   | 47              | 30,5 | 41   | 41   | 16,10 |                                                             |                             |
|        | 1.10                                         | 3626                                      | .94                                             | 1.26 | 1.50 | 1.85            | 1.20 | 1.61 | 1.61 | 35.42 | FI-AS-28L-W2                                                |                             |
|        | 35                                           | 250                                       | 30                                              | 40   | 43   | 54              | 32,5 | 46   | 50   | 23,43 |                                                             |                             |
|        | 1.38                                         | 3626                                      | 1.18                                            | 1.57 | 1.69 | 2.13            | 1.28 | 1.81 | 1.97 | 51.55 | FI-AS-35L-W2                                                |                             |
|        | 42                                           | 250                                       | 36                                              | 46   | 46   | 58              | 35   | 55   | 60   | 32,82 |                                                             |                             |
|        | 1.65                                         | 3626                                      | 1.42                                            | 1.81 | 1.81 | 2.28            | 1.38 | 2.17 | 2.36 | 72.21 | FI-AS-42L-W2                                                |                             |
| S      | 6                                            | 800                                       | 4                                               | 11   | 26   | 34              | 19   | 14   | 17   | 2,06  |                                                             |                             |
|        | .24                                          | 11603                                     | .16                                             | .43  | 1.02 | 1.34            | .75  | .55  | .67  | 4.53  | FI-AS-06S-W2                                                |                             |
|        | 8                                            | 800                                       | 5                                               | 13   | 28   | 36              | 21   | 17   | 19   | 3,12  |                                                             |                             |
|        | .31                                          | 11603                                     | .20                                             | .51  | 1.10 | 1.42            | .83  | .67  | .75  | 6.87  | FI-AS-08S-W2                                                |                             |
|        | 10                                           | 800                                       | 7                                               | 15   | 30   | 39              | 22,5 | 19   | 22   | 4,12  |                                                             |                             |
|        | .39                                          | 11603                                     | .28                                             | .59  | 1.18 | 1.54            | .89  | .75  | .87  | 9.06  | FI-AS-10S-W2                                                |                             |
|        | 12                                           | 630                                       | 8                                               | 17   | 32   | 41              | 24,5 | 22   | 24   | 4,80  |                                                             |                             |
|        | .47                                          | 9137                                      | .31                                             | .67  | 1.26 | 1.61            | .96  | .87  | .94  | 10.56 | FI-AS-12S-W2                                                |                             |
|        | 14                                           | 630                                       | 10                                              | 19   | 35   | 45              | 27   | 24   | 27   | 7,11  |                                                             |                             |
|        | .55                                          | 9137                                      | .39                                             | .75  | 1.38 | 1.77            | 1.06 | .94  | 1.06 | 15.64 | FI-AS-14S-W2                                                |                             |
|        | 16                                           | 630                                       | 12                                              | 21   | 35   | 45              | 26,5 | 27   | 30   | 8,36  |                                                             |                             |
|        | .63                                          | 9137                                      | .47                                             | .83  | 1.38 | 1.77            | 1.04 | 1.06 | 1.18 | 18.38 | FI-AS-16S-W2                                                |                             |
|        | 20                                           | 400                                       | 16                                              | 26   | 40   | 51              | 29,5 | 32   | 36   | 13,01 |                                                             |                             |
|        | .79                                          | 5802                                      | .63                                             | 1.02 | 1.57 | 2.01            | 1.16 | 1.26 | 1.42 | 28.61 | FI-AS-20S-W2                                                |                             |
|        | 25                                           | 400                                       | 20                                              | 31   | 44   | 56              | 32   | 41   | 46   | 22,16 |                                                             |                             |
|        | .98                                          | 5802                                      | .79                                             | 1.22 | 1.73 | 2.20            | 1.26 | 1.61 | 1.81 | 48.75 | FI-AS-25S-W2                                                |                             |
|        | 30                                           | 400                                       | 25                                              | 36   | 49   | 62              | 35,5 | 46   | 50   | 23,12 |                                                             |                             |
|        | 1.18                                         | 5802                                      | .98                                             | 1.42 | 1.93 | 2.44            | 1.40 | 1.81 | 1.97 | 50.86 | FI-AS-30S-W2                                                |                             |
|        | 38                                           | 400                                       | 32                                              | 44   | 54   | 69              | 38   | 55   | 60   | 45,26 |                                                             |                             |
|        | 1.50                                         | 5802                                      | 1.26                                            | 1.73 | 2.13 | 2.72            | 1.50 | 2.17 | 2.36 | 99.57 | FI-AS-38S-W2                                                |                             |

<sup>1</sup> Approximate dimension in assembled condition.

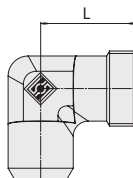
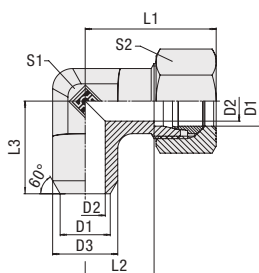
<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.





## Elbow Weld Fitting Type FI-WAS • Series L / S



| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |      |                 |      |      |      |      |        |  | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------|------|-----------------|------|------|------|------|--------|--|-----------------------------------|-----------------------------|
|        | D1                 |                 | D2                    | D3   | L    | L1 <sup>1</sup> | L2   | L3   | S1   | S2   |        |  |                                   |                             |
| L      | 6                  | 315             | 4                     | 10   | 19   | 28              | 12   | 19   | 12   | 14   | 23     |  |                                   | FI-WAS-06L-W2               |
|        | .24                | 4568            | .16                   | .39  | .75  | 1.10            | .47  | .75  | .47  | .55  | 50.71  |  |                                   |                             |
|        | 8                  | 315             | 6                     | 12   | 21   | 29              | 14   | 23   | 12   | 17   | 2,56   |  |                                   | FI-WAS-08L-W2               |
|        | .31                | 4568            | .24                   | .47  | .83  | 1.14            | .55  | .91  | .47  | .67  | 5.64   |  |                                   |                             |
|        | 10                 | 315             | 8                     | 14   | 22   | 30              | 15   | 24   | 14   | 19   | 3,34   |  |                                   | FI-WAS-10L-W2               |
|        | .39                | 4568            | .31                   | .55  | .87  | 1.18            | .59  | .94  | .55  | .75  | 7.34   |  |                                   |                             |
|        | 12                 | 315             | 10                    | 16   | 24   | 32              | 17   | 25   | 17   | 22   | 4,52   |  |                                   | FI-WAS-12L-W2               |
|        | .47                | 4568            | .39                   | .63  | .94  | 1.26            | .67  | .98  | .67  | .87  | 9.94   |  |                                   |                             |
|        | 15                 | 315             | 12                    | 19   | 28   | 36              | 21   | 30   | 19   | 27   | 7,88   |  |                                   | FI-WAS-15L-W2               |
|        | .59                | 4568            | .47                   | .75  | 1.10 | 1.42            | .83  | 1.18 | .75  | 1.06 | 17.34  |  |                                   |                             |
|        | 18                 | 315             | 15                    | 22   | 31   | 40              | 23,5 | 33   | 24   | 32   | 11,53  |  |                                   | FI-WAS-18L-W2               |
|        | .71                | 4568            | .59                   | .87  | 1.22 | 1.57            | .93  | 1.30 | .94  | 1.26 | 25.37  |  |                                   |                             |
|        | 22                 | 160             | 19                    | 27   | 35   | 44              | 27,5 | 37   | 27   | 36   | 16,10  |  |                                   | FI-WAS-22L-W2               |
|        | .87                | 2320            | .75                   | 1.06 | 1.38 | 1.73            | 1.08 | 1.46 | 1.06 | 1.42 | 35.41  |  |                                   |                             |
|        | 28                 | 160             | 24                    | 32   | 38   | 47              | 30,5 | 42   | 36   | 41   | 5,99   |  |                                   | FI-WAS-28L-W2               |
|        | 1.10               | 2320            | .94                   | 1.26 | 1.50 | 1.85            | 1.20 | 1.65 | 1.42 | 1.61 | 13.17  |  |                                   |                             |
|        | 35                 | 160             | 30                    | 40   | 45   | 56              | 34,5 | 49   | 41   | 50   | 42,27  |  |                                   | FI-WAS-35L-W2               |
|        | 1.38               | 2320            | 1.18                  | 1.57 | 1.77 | 2.20            | 1.36 | 1.93 | 1.61 | 1.97 | 92.99  |  |                                   |                             |
|        | 42                 | 160             | 36                    | 46   | 51   | 63              | 40   | 57   | 50   | 60   | 65,80  |  |                                   | FI-WAS-42L-W2               |
|        | 1.65               | 2320            | 1.42                  | 1.81 | 2.01 | 2.48            | 1.57 | 2.24 | 1.97 | 2.36 | 144.76 |  |                                   |                             |
| S      | 6                  | 400             | 4                     | 11   | 23   | 30              | 16   | 23   | 12   | 17   | 30,96  |  |                                   | FI-WAS-06S-W2               |
|        | .24                | 5800            | .16                   | .43  | .93  | 1.18            | .63  | .91  | .47  | .67  | 68.26  |  |                                   |                             |
|        | 8                  | 400             | 5                     | 13   | 24   | 31              | 17   | 24   | 14   | 19   | 43,75  |  |                                   | FI-WAS-08S-W2               |
|        | .31                | 5800            | .20                   | .51  | .94  | 1.22            | .67  | .94  | .55  | .75  | 96.45  |  |                                   |                             |
|        | 10                 | 400             | 7                     | 15   | 25   | 33              | 17,5 | 25   | 17   | 22   | 56,74  |  |                                   | FI-WAS-10S-W2               |
|        | .39                | 5800            | .28                   | .59  | .98  | 1.30            | .69  | .98  | .67  | .87  | 125.10 |  |                                   |                             |
|        | 12                 | 400             | 8                     | 17   | 29   | 38              | 21,5 | 29   | 17   | 24   | 8,03   |  |                                   | FI-WAS-12S-W2               |
|        | .47                | 5800            | .31                   | .67  | 1.14 | 1.50            | .85  | 1.14 | .67  | .94  | 17.67  |  |                                   |                             |
|        | 16                 | 400             | 12                    | 21   | 33   | 43              | 24,5 | 33   | 24   | 30   | 13,89  |  |                                   | FI-WAS-16S-W2               |
|        | .63                | 5800            | .47                   | .83  | 1.30 | 1.69            | .96  | 1.30 | .94  | 1.18 | 30.56  |  |                                   |                             |
|        | 20                 | 400             | 16                    | 26   | 37   | 48              | 26,5 | 37   | 27   | 36   | 20,24  |  |                                   | FI-WAS-20S-W2               |
|        | .79                | 5800            | .63                   | 1.02 | 1.46 | 1.89            | 1.04 | 1.46 | 1.06 | 1.42 | 44.54  |  |                                   |                             |
|        | 25                 | 400             | 20                    | 31   | 42   | 54              | 30   | 42   | 36   | 46   | 35,01  |  |                                   | FI-WAS-25S-W2               |
|        | .98                | 5800            | .79                   | 1.22 | 1.65 | 2.13            | 1.18 | 1.65 | 1.42 | 1.81 | 77.03  |  |                                   |                             |
|        | 30                 | 400             | 25                    | 36   | 49   | 62              | 35,5 | 49   | 41   | 50   | 53,00  |  |                                   | FI-WAS-30S-W2               |
|        | 1.18               | 5800            | .98                   | 1.42 | 1.93 | 2.44            | 1.40 | 1.93 | 1.61 | 1.97 | 116.60 |  |                                   |                             |
|        | 38                 | 315             | 32                    | 44   | 57   | 72              | 41   | 57   | 50   | 60   | 83,70  |  |                                   | FI-WAS-38S-W2               |
|        | 1.50               | 4568            | 1.26                  | 1.73 | 2.24 | 2.83            | 1.61 | 2.24 | 1.97 | 2.36 | 184.14 |  |                                   |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

### Ordering Codes

#### \*FI-WAS\*-10\*L\*-W159\*-MS

|                                    |                                  |
|------------------------------------|----------------------------------|
| * Elbow Weld Fitting               | FI-WAS                           |
| * Outside Tube Diameter D1 (in mm) | -10                              |
| * Series                           | Light Series L<br>Heavy Series S |
| * Material Code                    | Steel, phosphated -W2            |
| Fitting body:                      |                                  |
| Steel, phosphated                  | -W159                            |
| Connecting parts:                  |                                  |
| Steel, zinc/nickel-plated          |                                  |

Please contact STAUFF for alternative materials and surface finishings.

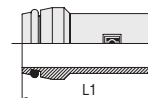
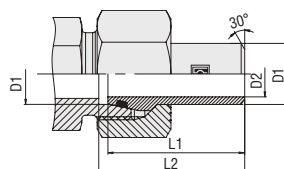
|                                                                    |                   |      |
|--------------------------------------------------------------------|-------------------|------|
| * Assembling / Kitting                                             | Fitting body only | —    |
| Fitting body supplied with cutting ring and union nut              |                   | -MS  |
| Fitting body supplied with soft-sealing cutting ring and union nut |                   | -MSV |

### Connecting Parts

|  |                                            |         |
|--|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |



## 24° Weld Cone with O-Ring Type FI-SN • Series L / S



### Ordering Codes

#### \*FI-SN\*-10x1.5\*-B\*-W2

|                                 |                                                                     |
|---------------------------------|---------------------------------------------------------------------|
| * 24° Weld Cone with O-Ring     | <b>FI-SN</b>                                                        |
| * Outside Tube Diameter (in mm) | <b>-10</b>                                                          |
| * Wall Thickness (in mm)        | <b>x1.5</b>                                                         |
| * Seal Material                 | NBR (Buna-N®) <b>-B</b><br>FKM (Viton®) <b>-V</b><br>EPDM <b>-E</b> |
| * Material Code                 | Steel, phosphated <b>-W2</b>                                        |

Please contact STAUFF for alternative materials and surface finishings.

#### \*FI-SN\*-10\*L\*x1.5\*-B\*-W159\*-M

|                                 |                                                                                         |
|---------------------------------|-----------------------------------------------------------------------------------------|
| * 24° Weld Cone with O-Ring     | <b>FI-SN</b>                                                                            |
| * Outside Tube Diameter (in mm) | <b>-10</b>                                                                              |
| * Series                        | Light Series (page 116) <b>L</b><br>Heavy Series (pages 117) <b>S</b>                   |
| * Wall Thickness (in mm)        | <b>x1.5</b>                                                                             |
| * Seal Material                 | NBR (Buna-N®) <b>-B</b><br>FKM (Viton®) <b>-V</b><br>EPDM <b>-E</b>                     |
| * Material Code                 | Weld cone: <b>-W159</b><br>Steel, phosphated<br>Union nut:<br>Steel, zinc/nickel-plated |

Please contact STAUFF for alternative materials and surface finishings.

|                        |                                                             |
|------------------------|-------------------------------------------------------------|
| * Assembling / Kitting | 24° weld cone with O-ring supplied with union nut <b>-M</b> |
|------------------------|-------------------------------------------------------------|

### Connecting Parts



Union Nut  
Type **FI-M**

Page 33

### Spare Parts / Accessories



O-Ring  
Type **O-RING**

Page 239

| Series | Tube OD<br>(mm/in) | for Tube   | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|------------|-----------------|-----------------------|------|------|-----------------------------------|-----------------------------|
|        | D1                 |            |                 | D2                    | L1   | L2   |                                   |                             |
| L/S    | 6                  | 6 x 1,5    | 400             | 3                     | 31   | 32   | 0,70                              | FI-SN-6x1.5-B-W2            |
|        | .24                | .24 x .06  | 5800            | .12                   | 1.22 | 1.26 | 1.54                              |                             |
|        | 8                  | 8 x 1,5    | 315             | 5                     | 31   | 32   | 0,90                              | FI-SN-8x1.5-B-W2            |
|        | .31                | .31 x .06  | 4568            | .20                   | 1.22 | 1.26 | 1.98                              |                             |
|        | 8                  | 8 x 2,0    | 400             | 4                     | 31   | 32   | 1,10                              | FI-SN-8x2-B-W2              |
|        | .31                | .31 x .08  | 5800            | .16                   | 1.22 | 1.26 | 2.42                              |                             |
|        | 10                 | 10 x 1,0   | 250             | 8                     | 32,5 | 33,5 | 0,89                              | FI-SN-10x1-B-W2             |
|        | .39                | .39 x .03  | 3625            | .31                   | 1.28 | 1.32 | 1.96                              |                             |
|        | 10                 | 10 x 1,5   | 250             | 7                     | 32,5 | 33,5 | 1,30                              | FI-SN-10x1.5-B-W2           |
|        | .39                | .39 x .06  | 3625            | .28                   | 1.28 | 1.32 | 2.86                              |                             |
|        | 10                 | 10 x 2,0   | 315             | 6                     | 32,5 | 33,5 | 1,60                              | FI-SN-10x2-B-W2             |
|        | .39                | .39 x .08  | 4568            | .24                   | 1.28 | 1.32 | 3.52                              |                             |
|        | 10                 | 10 x 2,5   | 400             | 5                     | 32,5 | 33,5 | 1,80                              | FI-SN-10x2.5-B-W2           |
|        | .39                | .39 x .10  | 5800            | .20                   | 1.28 | 1.32 | 3.96                              |                             |
|        | 12                 | 12 x 1,5   | 160             | 9                     | 32,5 | 33,5 | 1,60                              | FI-SN-12x1.5-B-W2           |
|        | .47                | .47 x .06  | 2320            | .35                   | 1.28 | 1.32 | 3.52                              |                             |
|        | 12                 | 12 x 2,0   | 250             | 8                     | 32,5 | 33,5 | 1,90                              | FI-SN-12x2-B-W2             |
|        | .47                | .47 x .08  | 3625            | .31                   | 1.28 | 1.32 | 4.18                              |                             |
|        | 12                 | 12 x 2,5   | 315             | 7                     | 32,5 | 33,5 | 2,20                              | FI-SN-12x2.5-B-W2           |
|        | .47                | .47 x .10  | 4568            | .28                   | 1.28 | 1.32 | 4.84                              |                             |
|        | 12                 | 12 x 3,0   | 400             | 6                     | 32,5 | 33,5 | 2,4                               | FI-SN-12x3-B-W2             |
|        | .47                | .47 x .11  | 5800            | .24                   | 1.28 | 1.32 | 5.29                              |                             |
| L      | 15                 | 15 x 2,0   | 250             | 11                    | 35   | 36   | 2,70                              | FI-SN-15x2-B-W2             |
|        | .59                | .59 x .08  | 3625            | .43                   | 1.38 | 1.42 | 5.93                              |                             |
|        | 15                 | 15 x 2,5   | 315             | 10                    | 35   | 36   | 3,00                              | FI-SN-15x2.5-B-W2           |
|        | .59                | .59 x .10  | 4568            | .39                   | 1.38 | 1.42 | 6.60                              |                             |
|        | 18                 | 18 x 2,0   | 160             | 14                    | 36   | 37   | 3,76                              | FI-SN-18x2-B-W2             |
|        | .71                | .71 x .08  | 2320            | .55                   | 1.42 | 1.46 | 8.27                              |                             |
|        | 18                 | 18 x 2,5   | 315             | 18                    | 36   | 37   | 3,79                              | FI-SN-18x2.5-B-W2           |
|        | .71                | .71 x .10  | 4568            | .71                   | 1.42 | 1.46 | 8.36                              |                             |
|        | 22                 | 22 x 2,0   | 160             | 22                    | 38,5 | 39,5 | 4,46                              | FI-SN-22x2-B-W2             |
|        | .87                | .87 x .08  | 2320            | .87                   | 1.52 | 1.56 | 9.83                              |                             |
|        | 22                 | 22 x 2,5   | 160             | 17                    | 38,5 | 39,5 | 5,21                              | FI-SN-22x2.5-B-W2           |
|        | .87                | .87 x .10  | 2320            | .67                   | 1.52 | 1.56 | 11.45                             |                             |
|        | 22                 | 22 x 3,0   | 160             | 16                    | 38,5 | 39,5 | 5,72                              | FI-SN-22x3-B-W2             |
|        | .87                | .87 x .12  | 2320            | .63                   | 1.52 | 1.56 | 12.61                             |                             |
|        | 28                 | 28 x 2,5   | 160             | 23                    | 41,5 | 42,5 | 7,27                              | FI-SN-28x2.5-B-W2           |
|        | 1.10               | 1.10 x .10 | 2320            | .91                   | 1.63 | 1.67 | 15.99                             |                             |
|        | 28                 | 28 x 3,0   | 160             | 22                    | 41,5 | 42,5 | 8,34                              | FI-SN-28x3-B-W2             |
|        | 1.10               | 1.1 x .12  | 2320            | .87                   | 1.63 | 1.67 | 18.34                             |                             |
|        | 35                 | 35 x 3,0   | 160             | 29                    | 47   | 49,5 | 12,62                             | FI-SN-35x3-B-W2             |
|        | 1.38               | 1.38 x .12 | 2320            | 1.14                  | 1.85 | 1.95 | 27.76                             |                             |
|        | 35                 | 35 x 3,5   | 160             | 28                    | 47   | 49,5 | 14,05                             | FI-SN-35x3.5-B-W2           |
|        | 1.38               | 1.38 x .14 | 2320            | 1.10                  | 1.85 | 1.95 | 30.97                             |                             |
|        | 35                 | 35 x 4,0   | 160             | 27                    | 47   | 49,5 | 15,59                             | FI-SN-35x4-B-W2             |
|        | 1.38               | 1.38 x .16 | 2320            | 1.06                  | 1.85 | 1.95 | 34.30                             |                             |
|        | 42                 | 42 x 3,0   | 160             | 36                    | 47   | 50   | 15,13                             | FI-SN-42x3-B-W2             |
|        | 1.65               | 1.65 x .12 | 2320            | 1.42                  | 1.85 | 1.97 | 33.29                             |                             |
|        | 42                 | 42 x 4,0   | 160             | 34                    | 47   | 50   | 19,10                             | FI-SN-42x4-B-W2             |
|        | 1.65               | 1.65 x .16 | 2320            | 1.34                  | 1.85 | 1.97 | 42.02                             |                             |

<sup>1</sup> Approximate dimension in assembled condition.

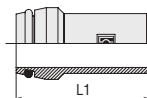
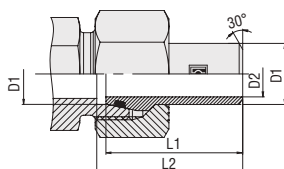
<sup>2</sup> Weight excluding union nut.

<sup>3</sup> Standard scope of delivery: 24° weld cone and O-ring.

Standard seal material is NBR (Buna-N®).



## 24° Weld Cone with O-Ring Type FI-SN • Series S



| Series | Tube OD       |            | PN<br>(bar/psi) | Dimensions    |      |      | Weight<br>( <sup>kg</sup> /lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|---------------|------------|-----------------|---------------|------|------|------------------------------------------------|-----------------------------|
|        | D1<br>(mm/in) | for Tube   |                 | D2<br>(mm/in) | L1   | L2   |                                                |                             |
| S      | 14            | 14 x 2,0   | 315             | 10            | 38,5 | 39,5 | 2,75                                           | FI-SN-14x2-B-W2             |
|        | .55           | .55 x .08  | 4568            | .39           | 1.52 | 1.56 | 6.06                                           |                             |
|        | 14            | 14 x 2,5   | 400             | 9             | 38,5 | 39,5 | 3,17                                           | FI-SN-14x2.5-B-W2           |
|        | .55           | .55 x .10  | 5800            | .35           | 1.52 | 1.56 | 6.98                                           |                             |
|        | 14            | 14 x 3,0   | 400             | 8             | 38,5 | 39,5 | 3,56                                           | FI-SN-14x3-B-W2             |
|        | .55           | .55 x .12  | 5800            | .31           | 1.52 | 1.56 | 7.83                                           |                             |
|        | 16            | 16 x 1,5   | 250             | 13            | 39   | 41   | 2,69                                           | FI-SN-16x1.5-B-W2           |
|        | .63           | .63 x .06  | 3625            | .51           | 1.54 | 1.61 | 5.93                                           |                             |
|        | 16            | 16 x 2,0   | 315             | 12            | 39   | 41   | 3,29                                           | FI-SN-16x2-B-W2             |
|        | .63           | .63 x .08  | 4568            | .47           | 1.54 | 1.61 | 7.24                                           |                             |
|        | 16            | 16 x 2,5   | 400             | 11            | 39   | 41   | 3,81                                           | FI-SN-16x2.5-B-W2           |
|        | .63           | .63 x .10  | 5800            | .43           | 1.54 | 1.61 | 8.38                                           |                             |
|        | 16            | 16 x 3,0   | 400             | 10            | 39   | 41   | 4,23                                           | FI-SN-16x3-B-W2             |
|        | .63           | .63 x .12  | 5800            | .39           | 1.54 | 1.61 | 9.31                                           |                             |
|        | 20            | 20 x 2,0   | 160             | 16            | 44,5 | 47   | 4,77                                           | FI-SN-20x2-B-W2             |
|        | .79           | .79 x .08  | 2320            | .63           | 1.75 | 1.85 | 10.50                                          |                             |
|        | 20            | 20 x 2,5   | 250             | 15            | 44,5 | 47   | 5,48                                           | FI-SN-20x2.5-B-W2           |
|        | .79           | .79 x .10  | 3625            | .59           | 1.75 | 1.85 | 12.05                                          |                             |
|        | 20            | 20 x 3,0   | 400             | 14            | 44,5 | 47   | 6,39                                           | FI-SN-20x3-B-W2             |
|        | .79           | .79 x .12  | 5800            | .55           | 1.75 | 1.85 | 14.05                                          |                             |
|        | 20            | 20 x 3,5   | 400             | 13            | 44,5 | 47   | 7,15                                           | FI-SN-20x3.5-B-W2           |
|        | .79           | .79 x .14  | 5800            | .51           | 1.75 | 1.85 | 15.76                                          |                             |
|        | 20            | 20 x 4,0   | 400             | 12            | 44,5 | 47   | 7,73                                           | FI-SN-20x4-B-W2             |
|        | .79           | .79 x .16  | 5800            | .47           | 1.75 | 1.85 | 17.01                                          |                             |
|        | 25            | 25 x 2,5   | 250             | 20            | 49,5 | 53,5 | 7,89                                           | FI-SN-25x2.5-B-W2           |
|        | .98           | .98 x .10  | 3625            | .79           | 1.95 | 2.11 | 17.39                                          |                             |
|        | 25            | 25 x 3,0   | 315             | 19            | 49,5 | 53,5 | 9,00                                           | FI-SN-25x3-B-W2             |
|        | .98           | .98 x .12  | 4568            | .75           | 1.95 | 2.11 | 19.80                                          |                             |
|        | 25            | 25 x 4,0   | 400             | 17            | 49,5 | 53,5 | 10,89                                          | FI-SN-25x4-B-W2             |
|        | .98           | .98 x .16  | 5800            | .67           | 1.95 | 2.11 | 23.97                                          |                             |
|        | 25            | 25 x 5,0   | 400             | 15            | 49,5 | 53,5 | 12,90                                          | FI-SN-25x5-B-W2             |
|        | .98           | .98 x .20  | 5800            | .59           | 1.95 | 2.11 | 28.38                                          |                             |
|        | 30            | 30 x 3,0   | 160             | 24            | 52   | 57,5 | 11,55                                          | FI-SN-30x3-B-W2             |
|        | 1.18          | 1.18 x .12 | 2320            | .94           | 2.05 | 2.26 | 25.40                                          |                             |
|        | 30            | 30 x 4,0   | 250             | 22            | 52   | 57,5 | 14,65                                          | FI-SN-30x4-B-W2             |
|        | 1.18          | 1.18 x .16 | 3625            | .87           | 2.05 | 2.26 | 32.23                                          |                             |
|        | 30            | 30 x 5,0   | 315             | 20            | 52   | 57,5 | 16,91                                          | FI-SN-30x5-B-W2             |
|        | 1.18          | 1.18 x .20 | 4568            | .79           | 2.05 | 2.26 | 37.21                                          |                             |
|        | 38            | 38 x 3,0   | 160             | 32            | 56,5 | 64,5 | 16,02                                          | FI-SN-38x3-B-W2             |
|        | 1.50          | 1.50 x .12 | 2320            | 1.26          | 2.22 | 2.54 | 35.32                                          |                             |
|        | 38            | 38 x 4,0   | 315             | 30            | 56,5 | 64,5 | 20,29                                          | FI-SN-38x4-B-W2             |
|        | 1.50          | 1.50 x .16 | 4568            | 1.18          | 2.22 | 2.54 | 44.64                                          |                             |
|        | 38            | 38 x 5,0   | 315             | 28            | 56,5 | 64,5 | 24,05                                          | FI-SN-38x5-B-W2             |
|        | 1.50          | 1.50 x .20 | 4568            | 1.10          | 2.22 | 2.54 | 52.91                                          |                             |
|        | 38            | 38 x 6,0   | 315             | 26            | 56,5 | 64,5 | 27,91                                          | FI-SN-38x6-B-W2             |
|        | 1.50          | 1.50 x .24 | 4568            | 1.02          | 2.22 | 2.54 | 61.41                                          |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding union nut.

<sup>3</sup> Standard scope of delivery: 24° weld cone and O-ring.

Standard seal material is NBR (Buna-N®).

### Ordering Codes

#### \*FI-SN\*-14x2\*-B\*-W2

|                                 |                                                |
|---------------------------------|------------------------------------------------|
| * 24° Weld Cone with O-Ring     | FI-SN                                          |
| * Outside Tube Diameter (in mm) | -14                                            |
| * Wall Thickness (in mm)        | x2                                             |
| * Seal Material                 | NBR (Buna-N®) -B<br>FKM (Viton®) -V<br>EPDM -E |
| * Material Code                 | Steel, phosphated -W2                          |

Please contact STAUFF for alternative materials and surface finishings.

#### \*FI-SN\*-14Sx2\*-B\*-W159\*-M

|                                 |                                                                            |
|---------------------------------|----------------------------------------------------------------------------|
| * 24° Weld Cone with O-Ring     | FI-SN                                                                      |
| * Outside Tube Diameter (in mm) | -14                                                                        |
| * Wall Thickness (in mm)        | x2                                                                         |
| * Series                        | Light Series (page 116) L<br>Heavy Series (pages 117) S                    |
| * Seal Material                 | NBR (Buna-N®) -B<br>FKM (Viton®) -V<br>EPDM -E                             |
| * Material Code                 | Weld cone: Steel, phosphated<br>Union nut: Steel, zinc/nickel-plated -W159 |

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting 24° weld cone with O-ring supplied with union nut -M

### Connecting Parts



Union Nut  
Type FI-M

Page 33

### Spare Parts / Accessories

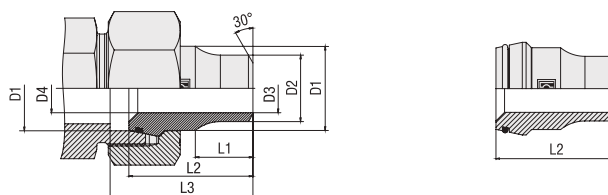


O-Ring  
Type O-RING

Page 239



## 24° Weld Cone Reducer with O-Ring Type FI-SNR • Series L / S



### Ordering Codes

#### \*FI-SNR\*-10/\*08\*x2.5\*-B\*-W2

|                                     |                                                                     |
|-------------------------------------|---------------------------------------------------------------------|
| * 24° Weld Cone Reducer with O-Ring | <b>FI-SNR</b>                                                       |
| * Outside Tube Diameter D1 (in mm)  | <b>-10/</b>                                                         |
| * Outside Tube Diameter D2 (in mm)  | <b>-08</b>                                                          |
| * Wall Thickness (in mm)            | <b>x2.5</b>                                                         |
| * Seal Material                     | NBR (Buna-N®) <b>-B</b><br>FKM (Viton®) <b>-V</b><br>EPDM <b>-E</b> |
| * Material Code                     | Steel, phosphated <b>-W2</b>                                        |

Please contact STAUFF for alternative materials and surface finishings.

#### \*FI-SNR\*-10\*L/\*08\*x2.5\*-B\*-W159\*-M

|                                     |                                                                                         |
|-------------------------------------|-----------------------------------------------------------------------------------------|
| * 24° Weld Cone Reducer with O-Ring | <b>FI-SNR</b>                                                                           |
| * Outside Tube Diameter D1 (in mm)  | <b>-10</b>                                                                              |
| * Series                            | Light Series <b>L</b><br>Heavy Series <b>S</b>                                          |
| * Outside Tube Diameter D2 (in mm)  | <b>-08</b>                                                                              |
| * Wall Thickness (in mm)            | <b>x2.5</b>                                                                             |
| * Seal Material                     | NBR (Buna-N®) <b>-B</b><br>FKM (Viton®) <b>-V</b><br>EPDM <b>-E</b>                     |
| * Material Code                     | Weld cone: <b>-W159</b><br>Steel, phosphated<br>Union nut:<br>Steel, zinc/nickel-plated |

Please contact STAUFF for alternative materials and surface finishings.

|                        |                                                             |
|------------------------|-------------------------------------------------------------|
| * Assembling / Kitting | 24° weld cone with O-ring supplied with union nut <b>-M</b> |
|------------------------|-------------------------------------------------------------|

| Series | Tube OD<br>(mm/in) |            | PN<br>(bar/psi) | Dimensions<br>(mm/in) |     |      |      |      |      |       | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|------------|-----------------|-----------------------|-----|------|------|------|------|-------|-----------------------------------|-----------------------------|
|        | D1                 | for Tube   |                 | D2                    | D3  | D4   | L1   | L2   | L3   |       |                                   |                             |
| L/S    | 8                  | 6 x 2,0    | 400             | 6                     | 2   | 5    | 12   | 31   | 32   | 1,45  |                                   | FI-SNR-08/06x2-B-W2         |
|        | .31                | .24 x .08  | 5800            | .24                   | .08 | .20  | .47  | 1.22 | 1.26 | 3.19  |                                   |                             |
|        | 10                 | 8 x 2,5    | 400             | 8                     | 3   | 6,50 | 12   | 32,5 | 33,5 | 1,75  |                                   | FI-SNR-10/08x2.5-B-W2       |
|        | .39                | .31 x .10  | 5800            | .31                   | .12 | .26  | .47  | 1.28 | 1.32 | 3.85  |                                   |                             |
|        | 12                 | 10 x 3,0   | 400             | 10                    | 4   | 8    | 14   | 32,5 | 33,5 | 2,19  |                                   | FI-SNR-12/10x3-B-W2         |
| S      | .47                | .39 x .12  | 5800            | .39                   | .16 | .31  | .55  | 1.28 | 1.32 | 4.82  |                                   |                             |
|        | 14                 | 12 x 3,5   | 400             | 12                    | 5   | 9    | 15   | 38,5 | 39,5 | 3,56  |                                   | FI-SNR-14/12x3.5-B-W2       |
|        | .55                | .47 x .14  | 5800            | .47                   | .20 | .35  | .59  | 1.52 | 1.56 | 7.83  |                                   |                             |
|        | 16                 | 12 x 2,0   | 250             | 12                    | 8   | 11   | 17   | 38,5 | 41   | 4,70  |                                   | FI-SNR-16/12x2-B-W2         |
|        | .63                | .47 x .08  | 3625            | .47                   | .31 | .43  | .67  | 1.52 | 1.61 | 10.34 |                                   |                             |
|        | 20                 | 12 x 3,5   | 400             | 12                    | 5   | 14   | 17   | 44,5 | 47   | 8,55  |                                   | FI-SNR-20/12x3.5-B-W2       |
|        | .79                | .47 x .14  | 5800            | .47                   | .20 | .55  | .67  | 1.75 | 1.85 | 18.85 |                                   |                             |
|        | 20                 | 16 x 2,0   | 315             | 16                    | 12  | 14   | 17   | 44,5 | 47   | 6,65  |                                   | FI-SNR-20/16x2-B-W2         |
|        | .79                | .63 x .08  | 4568            | .63                   | .47 | .55  | .67  | 1.75 | 1.85 | 14.66 |                                   |                             |
|        | 20                 | 16 x 3,0   | 315             | 16                    | 10  | 14   | 17   | 44,5 | 47   | 7,73  |                                   | FI-SNR-20/16x3-B-W2         |
|        | .79                | .63 x .12  | 4568            | .63                   | .39 | .55  | .67  | 1.75 | 1.85 | 17.01 |                                   |                             |
|        | 25                 | 16 x 2,0   | 315             | 16                    | 12  | 18   | 20   | 49,5 | 53   | 11,72 |                                   | FI-SNR-25/16x2-B-W2         |
|        | .98                | .63 x .08  | 4568            | .63                   | .47 | .71  | .79  | 1.95 | 2.09 | 25.84 |                                   |                             |
|        | 25                 | 16 x 3,0   | 315             | 16                    | 10  | 18   | 20   | 49,5 | 53   | 12,96 |                                   | FI-SNR-25/16x3-B-W2         |
|        | .98                | .63 x .12  | 4568            | .63                   | .39 | .71  | .79  | 1.95 | 2.09 | 28.57 |                                   |                             |
|        | 25                 | 20 x 2,0   | 160             | 20                    | 16  | 18   | 20   | 49,5 | 53   | 11,72 |                                   | FI-SNR-25/20x2-B-W2         |
|        | .98                | .79 x .08  | 2320            | .79                   | .63 | .71  | .79  | 1.95 | 2.09 | 21.94 |                                   |                             |
|        | 25                 | 20 x 4,0   | 400             | 20                    | 12  | 18   | 20   | 49,5 | 53   | 12,82 |                                   | FI-SNR-25/20x4-B-W2         |
|        | .98                | .79 x .16  | 5800            | .79                   | .47 | .71  | .79  | 1.95 | 2.09 | 28.26 |                                   |                             |
|        | 30                 | 16 x 3,0   | 315             | 16                    | 10  | 22   | 22   | 52   | 57,5 | 19,04 |                                   | FI-SNR-30/16x3-B-W2         |
|        | 1.18               | .63 x .12  | 4568            | .63                   | .39 | .87  | .87  | 2.05 | 2.26 | 41.98 |                                   |                             |
|        | 30                 | 20 x 4,0   | 315             | 20                    | 12  | 22   | 22   | 52   | 57,5 | 19,31 |                                   | FI-SNR-30/20x4-B-W2         |
|        | 1.18               | .79 x .16  | 4568            | .79                   | .47 | .87  | .87  | 2.05 | 2.26 | 42.57 |                                   |                             |
|        | 30                 | 25 x 5,0   | 315             | 25                    | 15  | 22   | 22   | 52   | 57,5 | 16,91 |                                   | FI-SNR-30/25x5-B-W2         |
|        | 1.18               | .98 x .20  | 4568            | .98                   | .59 | .87  | .87  | 2.05 | 2.26 | 37.21 |                                   |                             |
|        | 38                 | 16 x 3,0   | 315             | 16                    | 10  | 30   | 26   | 56   | 62   | 29,79 |                                   | FI-SNR-38/16x3-B-W2         |
|        | 1.50               | .63 x .12  | 4568            | .63                   | .39 | 1.18 | 1.02 | 2.20 | 2.44 | 65.68 |                                   |                             |
|        | 38                 | 20 x 4,0   | 315             | 20                    | 12  | 30   | 26   | 56   | 62   | 30,32 |                                   | FI-SNR-38/20x4-B-W2         |
|        | 1.50               | .79 x .16  | 4568            | .79                   | .47 | 1.18 | 1.02 | 2.20 | 2.44 | 66.84 |                                   |                             |
|        | 38                 | 25 x 5,0   | 315             | 25                    | 15  | 30   | 26   | 56   | 62   | 30,95 |                                   | FI-SNR-38/25x5-B-W2         |
|        | 1.50               | .98 x .20  | 4568            | .98                   | .59 | 1.18 | 1.02 | 2.20 | 2.44 | 68.23 |                                   |                             |
|        | 38                 | 30 x 4,0   | 315             | 30                    | 22  | 30   | 26   | 56   | 62   | 26,36 |                                   | FI-SNR-38/30x4-B-W2         |
|        | 1.50               | 1.18 x .16 | 4568            | 1.18                  | .87 | 1.18 | 1.02 | 2.20 | 2.44 | 58.11 |                                   |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding union nut.

<sup>3</sup> Standard scope of delivery: 24° weld cone and O-ring.

Standard seal material is NBR (Buna-N®).

### Connecting Parts



Union Nut  
Type **FI-M**

Page 33

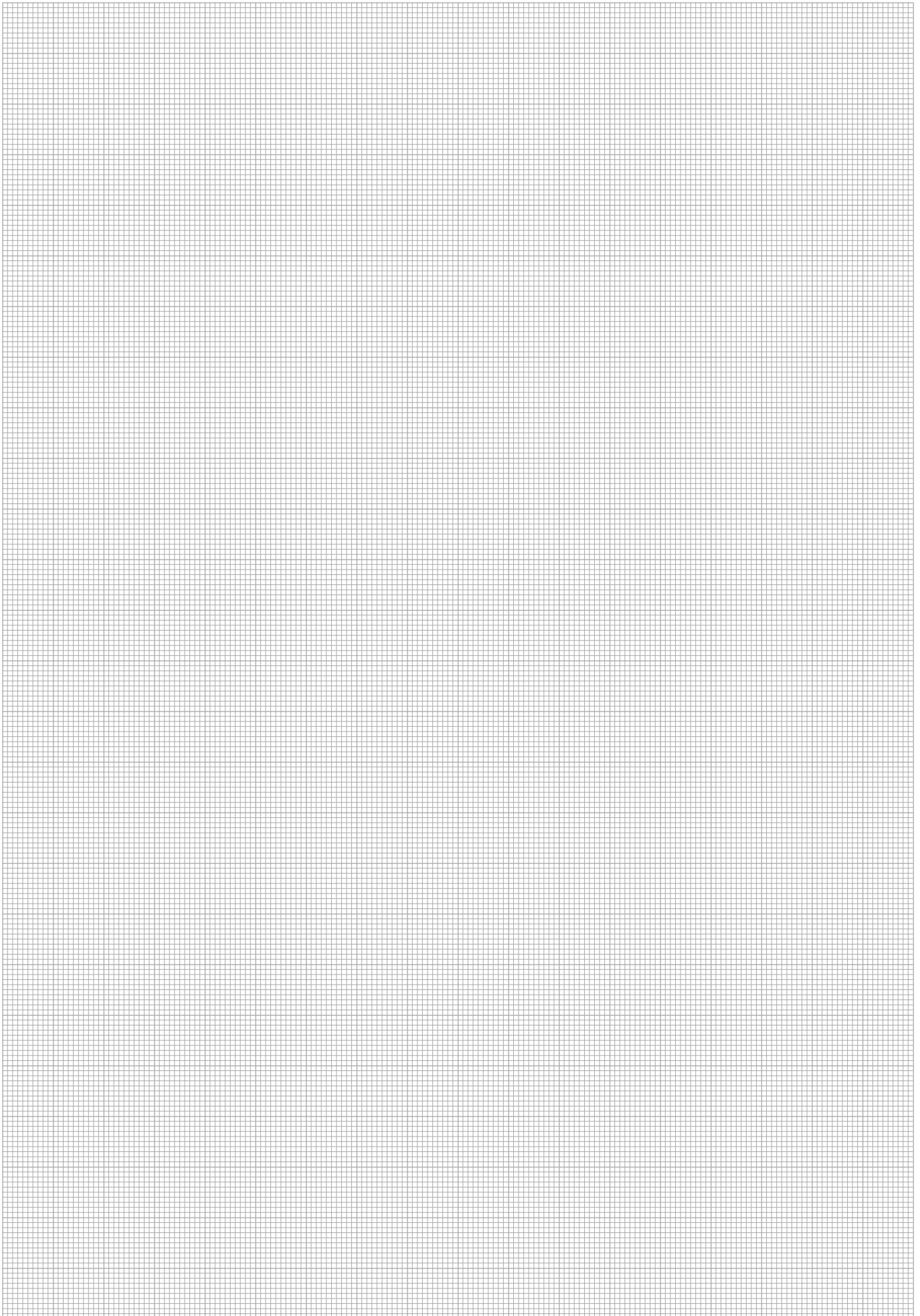
### Spare Parts / Accessories



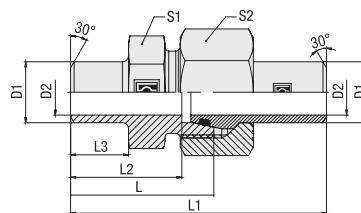
O-Ring  
Type **O-RING**

Page 239





## Straight Weld Fitting for Tubes Type FI-ASV • Series S



### Ordering Codes

**\*FI-ASV\*-06\*S\*x1.5\*-B\*-W159\*-MSN**

|                                   |                                                                                                                                            |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| * Straight Weld Fitting for Tubes | <b>FI-ASV</b>                                                                                                                              |
| * Outside Tube Diameter (in mm)   | <b>-06</b>                                                                                                                                 |
| * Series                          | Heavy Series <b>S</b>                                                                                                                      |
| * Wall Thickness (in mm)          | <b>x1.5</b>                                                                                                                                |
| * Seal Material                   | NBR (Buna-N®) <b>-B</b><br>FKM (Viton®) <b>-V</b><br>EPDM <b>-E</b>                                                                        |
| * Material Code                   | Steel, phosphated <b>-W2</b><br><br>Fitting body / weld cone:<br>Steel, phosphated <b>-W159</b><br>Union nut:<br>Steel, zinc/nickel-plated |

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Straight weld fitting for tubes supplied with 24° weld cone with O-ring and union nut **-MSN**

### Connecting Parts



Union Nut  
Type **FI-M**

Page 33

### Spare Parts / Accessories



O-Ring  
Type **O-RING**

Page 239

| Series | Tube OD<br>(mm/in) | for Tube | PN<br>(bar/PSI) | Dimensions<br>(mm/in) |      |                 |      |      |      |        |  | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|----------|-----------------|-----------------------|------|-----------------|------|------|------|--------|--|-----------------------------------|-----------------------------|
| S      | D1                 |          |                 | D2                    | L    | L1 <sup>1</sup> | L2   | L3   | S1   | S2     |  |                                   |                             |
| 10     | 10 x 1,0           | 249      | 8               | 32                    | 58   | 24,5            | 10   | 19   | 22   | 8,11   |  |                                   | FI-ASV-10Sx1-B-W159-MSN     |
| .39    | .39 x .04          | 3610     | .31             | 1.26                  | 2.28 | .96             | .39  | .75  | .87  | 17.84  |  |                                   |                             |
| 10     | 10 x 1,5           | 358      | 7               | 32                    | 58   | 24,5            | 10   | 19   | 22   | 8,54   |  |                                   | FI-ASV-10Sx1.5-B-W159-MSN   |
| .39    | .39 x .06          | 5191     | .28             | 1.26                  | 2.28 | .96             | .39  | .75  | .87  | 18.79  |  |                                   |                             |
| 10     | 10 x 2,0           | 460      | 6               | 32                    | 58   | 24,5            | 10   | 19   | 22   | 8,99   |  |                                   | FI-ASV-10Sx2-B-W159-MSN     |
| .39    | .39 x .08          | 6670     | .24             | 1.26                  | 2.28 | .96             | .39  | .75  | .87  | 19.78  |  |                                   |                             |
| 12     | 12 x 1,5           | 305      | 9               | 37                    | 63   | 29,5            | 15   | 22   | 24   | 10,47  |  |                                   | FI-ASV-12Sx1.5-B-W159-MSN   |
| .47    | .47 x .06          | 4423     | .35             | 1.46                  | 2.48 | 1.16            | .59  | .87  | .94  | 23.03  |  |                                   |                             |
| 12     | 12 x 2,0           | 393      | 8               | 37                    | 63   | 29,5            | 15   | 22   | 24   | 11,00  |  |                                   | FI-ASV-12Sx2-B-W159-MSN     |
| .47    | .47 x .08          | 5699     | .31             | 1.46                  | 2.48 | 1.16            | .59  | .87  | .94  | 24.20  |  |                                   |                             |
| 12     | 12 x 2,5           | 476      | 7               | 37                    | 63   | 29,5            | 15   | 22   | 24   | 11,54  |  |                                   | FI-ASV-12Sx2.5-B-W159-MSN   |
| .47    | .47 x .10          | 6902     | .28             | 1.46                  | 2.48 | 1.16            | .59  | .87  | .94  | 25.39  |  |                                   |                             |
| 16     | 16 x 1,5           | 234      | 13              | 41,5                  | 74   | 33              | 16,5 | 27   | 30   | 17,40  |  |                                   | FI-ASV-16Sx1.5-B-W159-MSN   |
| .63    | .63 x .06          | 3393     | .51             | 1.63                  | 2.91 | 1.30            | .65  | 1.06 | 1.18 | 38.28  |  |                                   |                             |
| 16     | 16 x 2,0           | 305      | 12              | 41,5                  | 74   | 33              | 16,5 | 27   | 30   | 18,30  |  |                                   | FI-ASV-16Sx2-B-W159-MSN     |
| .63    | .63 x .08          | 4423     | .47             | 1.63                  | 2.91 | 1.30            | .65  | 1.06 | 1.18 | 40.26  |  |                                   |                             |
| 16     | 16 x 2,5           | 372      | 11              | 41,5                  | 74   | 33              | 16,5 | 27   | 30   | 19,27  |  |                                   | FI-ASV-16Sx2.5-B-W159-MSN   |
| .63    | .63 x .10          | 5394     | .43             | 1.63                  | 2.91 | 1.30            | .65  | 1.06 | 1.18 | 42.39  |  |                                   |                             |
| 16     | 16 x 3,0           | 400      | 10              | 41,5                  | 74   | 33              | 16,5 | 27   | 30   | 20,09  |  |                                   | FI-ASV-16Sx3-B-W159-MSN     |
| .63    | .63 x .12          | 5800     | .39             | 1.63                  | 2.91 | 1.30            | .65  | 1.06 | 1.18 | 44.20  |  |                                   |                             |
| 20     | 20 x 2,0           | 249      | 16              | 47                    | 84   | 36,5            | 19   | 32   | 36   | 28,18  |  |                                   | FI-ASV-20Sx2-B-W159-MSN     |
| .79    | .79 x .08          | 3611     | .63             | 1.85                  | 3.31 | 1.44            | .75  | 1.26 | 1.42 | 62.00  |  |                                   |                             |
| 20     | 20 x 2,5           | 305      | 15              | 47                    | 84   | 36,5            | 19   | 32   | 36   | 29,67  |  |                                   | FI-ASV-20Sx2.5-B-W159-MSN   |
| .79    | .79 x .10          | 4423     | .59             | 1.85                  | 3.31 | 1.44            | .75  | 1.26 | 1.42 | 65.27  |  |                                   |                             |
| 20     | 20 x 3,0           | 358      | 14              | 47                    | 84   | 36,5            | 19   | 32   | 36   | 31,08  |  |                                   | FI-ASV-20Sx3-B-W159-MSN     |
| .79    | .79 x .12          | 5191     | .55             | 1.85                  | 3.31 | 1.44            | .75  | 1.26 | 1.42 | 68.38  |  |                                   |                             |
| 20     | 20 x 4,0           | 400      | 12              | 47                    | 84   | 36,5            | 19   | 32   | 36   | 33,10  |  |                                   | FI-ASV-20Sx4-B-W159-MSN     |
| .79    | .79 x .16          | 5800     | .47             | 1.85                  | 3.31 | 1.44            | .75  | 1.26 | 1.42 | 72.82  |  |                                   |                             |
| 25     | 25 x 3,0           | 294      | 19              | 51,5                  | 93   | 39,5            | 19,5 | 41   | 46   | 53,44  |  |                                   | FI-ASV-25Sx3-B-W159-MSN     |
| .98    | .98 x .12          | 4263     | .75             | 2.03                  | 3.66 | 1.56            | .77  | 1.61 | 1.81 | 117.57 |  |                                   |                             |
| 25     | 25 x 4,0           | 379      | 17              | 51,5                  | 93   | 39,5            | 19,5 | 41   | 46   | 57,29  |  |                                   | FI-ASV-25Sx4-B-W159-MSN     |
| .98    | .98 x .16          | 5496     | .67             | 2.03                  | 3.66 | 1.56            | .77  | 1.61 | 1.81 | 126.04 |  |                                   |                             |
| 25     | 25 x 5,0           | 400      | 15              | 51,5                  | 93   | 39,5            | 19,5 | 41   | 46   | 59,90  |  |                                   | FI-ASV-25Sx5-B-W159-MSN     |
| .98    | .98 x .20          | 5800     | .59             | 2.03                  | 3.66 | 1.56            | .77  | 1.61 | 1.81 | 131.78 |  |                                   |                             |
| 30     | 30 x 3,0           | 249      | 24              | 58                    | 102  | 44,5            | 23   | 46   | 50   | 66,38  |  |                                   | FI-ASV-30Sx3-B-W159-MSN     |
| 1.18   | 1.18 x .12         | 3611     | .94             | 2.28                  | 4.02 | 1.75            | .91  | 1.81 | 1.97 | 146.04 |  |                                   |                             |
| 30     | 30 x 4,0           | 323      | 22              | 58                    | 102  | 44,5            | 23   | 46   | 50   | 71,62  |  |                                   | FI-ASV-30Sx4-B-W159-MSN     |
| 1.18   | 1.18 x .16         | 4684     | .87             | 2.28                  | 4.02 | 1.75            | .91  | 1.81 | 1.97 | 157.56 |  |                                   |                             |
| 30     | 30 x 5,0           | 393      | 20              | 58                    | 102  | 44,5            | 23   | 46   | 50   | 75,33  |  |                                   | FI-ASV-30Sx5-B-W159-MSN     |
| 1.18   | 1.18 x .20         | 5699     | .79             | 2.28                  | 4.02 | 1.75            | .91  | 1.81 | 1.97 | 165.73 |  |                                   |                             |
| 30     | 30 x 6,0           | 400      | 18              | 58                    | 102  | 44,5            | 23   | 46   | 50   | 79,03  |  |                                   | FI-ASV-30Sx6-B-W159-MSN     |
| 1.18   | 1.18 x .24         | 5800     | .71             | 2.28                  | 4.02 | 1.75            | .91  | 1.81 | 1.97 | 173.87 |  |                                   |                             |
| 38     | 38 x 4,0           | 261      | 30              | 60                    | 109  | 44              | 22   | 55   | 60   | 102,93 |  |                                   | FI-ASV-38Sx4-B-W159-MSN     |
| 1.50   | 1.50 x .16         | 3785     | 1.18            | 2.36                  | 4.29 | 1.73            | .87  | 2.17 | 2.36 | 226.45 |  |                                   |                             |
| 38     | 38 x 5,0           | 315      | 28              | 60                    | 109  | 44              | 22   | 55   | 60   | 108,61 |  |                                   | FI-ASV-38Sx5-B-W159-MSN     |
| 1.50   | 1.50 x .20         | 4568     | 1.10            | 2.36                  | 4.29 | 1.73            | .87  | 2.17 | 2.36 | 238.94 |  |                                   |                             |
| 38     | 38 x 6,0           | 315      | 26              | 60                    | 109  | 44              | 22   | 55   | 60   | 114,48 |  |                                   | FI-ASV-38Sx6-B-W159-MSN     |
| 1.50   | 1.50 x .24         | 4568     | 1.02            | 2.36                  | 4.29 | 1.73            | .87  | 2.17 | 2.36 | 251.86 |  |                                   |                             |
| 38     | 38 x 7,0           | 315      | 24              | 60                    | 109  | 44              | 22   | 55   | 60   | 119,83 |  |                                   | FI-ASV-38Sx7-B-W159-MSN     |
| 1.50   | 1.50 x .28         | 4568     | .94             | 2.36                  | 4.29 | 1.73            | .87  | 2.17 | 2.36 | 263.63 |  |                                   |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight including 24° weld cone and union nut.

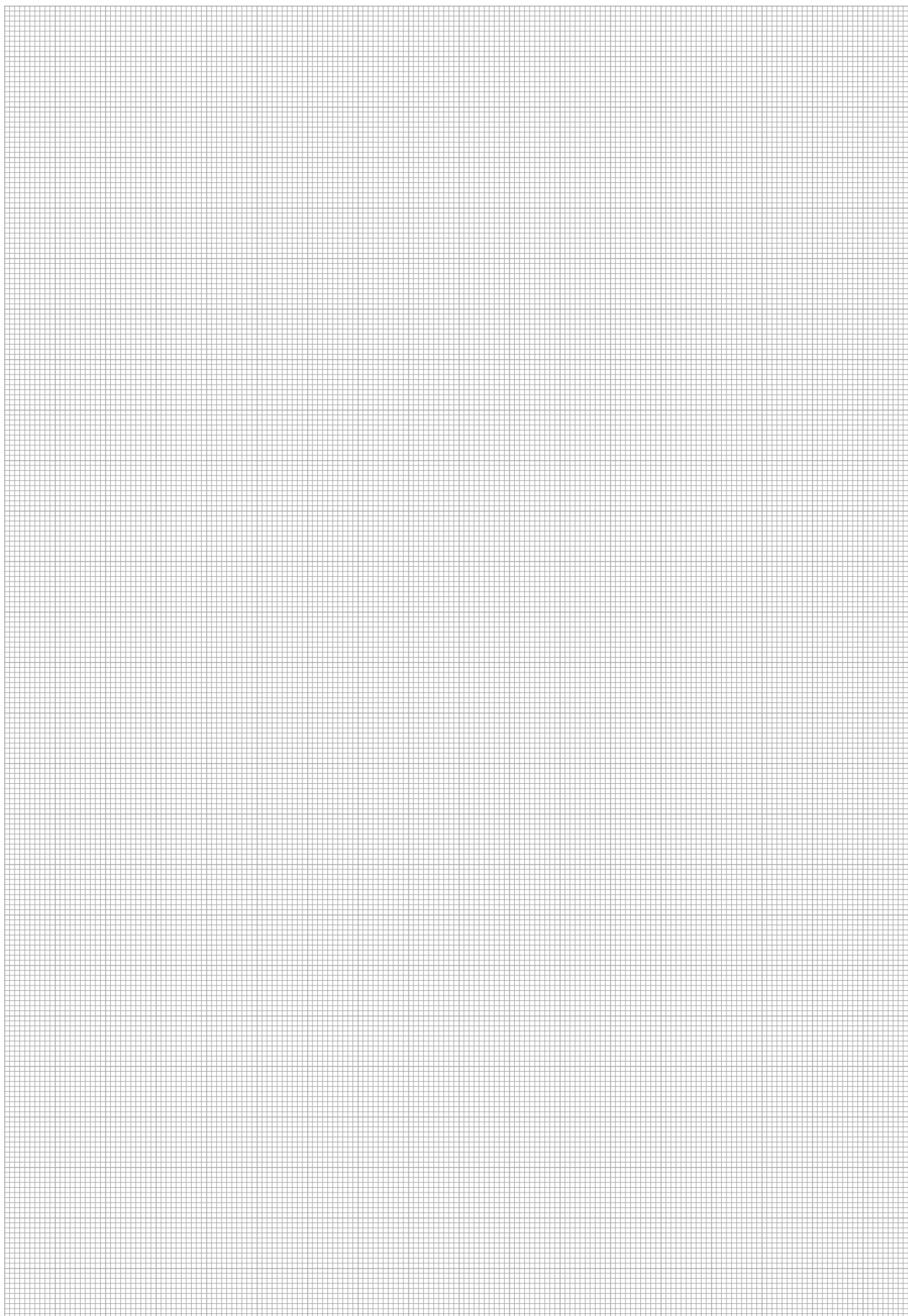
<sup>3</sup> Standard scope of delivery:

24° weld cone, O-ring and union nut.

Standard seal material is NBR (Buna-N®).









## Straight Female Stud Fitting

FI-GA

124-127



**Female Whitworth Parallel Pipe Thread (BSPP)**

FI-GA-...-R

124



**Female Metric Parallel Thread**

FI-GA-...-M

126



**Female NPT Thread**

FI-GA-...-N

127

## Gauge Fitting

FI-MA

129



**Female Whitworth Parallel Pipe Thread (BSPP) /  
Internal Metallic Sealing Ring**

FI-MA-...-R

129

## Gauge Fitting with 24° Taper / O-Ring

FI-EMAD

130



**Female Whitworth Parallel Pipe Thread (BSPP) /  
Internal Metallic Sealing Ring**

FI-EMAD-...-R

130

## Gauge Standpipe Fitting

FI-EMA

131



**Female Whitworth Parallel Pipe Thread (BSPP) /  
Internal Metallic Sealing Ring**

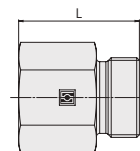
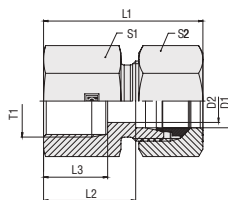
FI-EMA-...-R

131

G



## Straight Female Stud Fitting Type FI-GA-...-R • Series L



### Female Whitworth Parallel Pipe Thread (BSPP)

#### Ordering Codes

#### \*FI-GA\*-10\*L\*R\*-W3\*-MS

|                                                                         |                                                                                |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| * Straight Female Stud Fitting                                          | <b>FI-GA</b>                                                                   |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                     |
| * Series                                                                | Light Series (page 124) <b>L</b><br>Heavy Series (page 125) <b>S</b>           |
| * Thread Type                                                           | Female Whitworth Parallel Pipe Thread (BSPP) <b>R</b>                          |
| If required, please indicate special sizes, e.g. R3/8!                  |                                                                                |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                           |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b>                                                     |
|                                                                         | Fitting body supplied with cutting ring and union nut <b>-MS</b>               |
|                                                                         | Fitting body supplied with soft-sealing cutting ring and union nut <b>-MSV</b> |

#### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in)                      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|--------------------------------------------|-----------------------------------|-----------------------------|
|        | D1                 |                 | Thread T D2 L L1 <sup>1</sup> L2 L3 S1 S2  |                                   |                             |
| L      | 6                  | 315             | G 1/8 4 26 34 19 12 14 14 3,26             |                                   | FI-GA-06LR-W3               |
|        | .24                | 4568            | .16 1.02 1.34 .75 .47 .55 .55 7.16         |                                   |                             |
|        | 6                  | 315             | G 1/4 4 31 39 24 18 19 14 3,78             |                                   | FI-GA-06LR1/4-W3            |
|        | .24                | 4568            | .16 1.22 1.54 .94 .71 .75 .55 8.32         |                                   |                             |
|        | 6                  | 315             | G 3/8 6 26 34 19 12 14 17 5,88             |                                   | FI-GA-06LR3/8-W3            |
|        | .24                | 4568            | .24 1.02 1.34 .75 .47 .55 .67 12.96        |                                   |                             |
|        | 8                  | 315             | G 1/8 6 26 34 19 12 14 17 1,95             |                                   | FI-GA-08LR1/8-W3            |
|        | .31                | 4568            | .24 1.02 1.34 .75 .47 .55 .67 4.30         |                                   |                             |
|        | 8                  | 315             | G 1/4 6 31 39 24 17 19 17 3,91             |                                   | FI-GA-08LR-W3               |
|        | .31                | 4568            | .24 1.22 1.54 .94 .67 .75 .67 8.61         |                                   |                             |
|        | 8                  | 315             | G 3/8 6 31 39 24 16 24 17 2,28             |                                   | FI-GA-08LR3/8-W3            |
|        | .31                | 4568            | .24 1.22 1.54 .94 .63 .94 .67 5.02         |                                   |                             |
|        | 8                  | 315             | G 1/2 6 36 44 29 20 27 17 8,35             |                                   | FI-GA-08LR1/2-W3            |
|        | .31                | 4568            | .24 1.42 1.73 1.14 .79 1.06 .67 18.37      |                                   |                             |
|        | 10                 | 315             | G 1/4 8 32 40 25 17 19 19 3,95             |                                   | FI-GA-10LR-W3               |
|        | .39                | 4568            | .31 1.26 1.57 .98 .67 .75 .75 8.69         |                                   |                             |
|        | 10                 | 315             | G 3/8 8 32 40 25 16 24 19 4,94             |                                   | FI-GA-10LR3/8-W3            |
|        | .39                | 4568            | .31 1.26 1.57 .98 .63 .94 .75 10.86        |                                   |                             |
|        | 10                 | 315             | G 1/2 8 37 45 30 20 27 19 8,36             |                                   | FI-GA-10LR1/2-W3            |
|        | .39                | 4568            | .31 1.46 1.77 1.18 .79 1.06 .75 18.39      |                                   |                             |
|        | 12                 | 315             | G 1/4 8 33 41 26 17 19 22 4,44             |                                   | FI-GA-12LR1/4-W3            |
|        | .47                | 4568            | .31 1.3 1.61 1.02 .67 .75 .87 9.76         |                                   |                             |
|        | 12                 | 315             | G 3/8 10 33 41 26 17 24 22 6,43            |                                   | FI-GA-12LR-W3               |
|        | .47                | 4568            | .39 1.3 1.61 1.02 .67 .94 .87 14.14        |                                   |                             |
|        | 12                 | 315             | G 1/2 10 37 45 30 20 27 22 8,38            |                                   | FI-GA-12LR1/2-W3            |
|        | .47                | 4568            | .39 1.46 1.77 1.18 .79 1.06 .87 18.44      |                                   |                             |
|        | 15                 | 315             | G 3/8 12 34 43 27 17 24 27 6,95            |                                   | FI-GA-15LR3/8-W3            |
|        | .59                | 4568            | 0.47 1.34 1.69 1.06 0.67 0.94 1.06 15.32   |                                   |                             |
|        | 15                 | 315             | G 1/2 12 38 46 31 20 27 27 8,84            |                                   | FI-GA-15LR-W3               |
|        | .59                | 4568            | .47 1.50 1.81 1.22 .79 1.06 1.06 19.46     |                                   |                             |
|        | 15                 | 315             | G 3/4 12 38 46 31 20 30 27 19,13           |                                   | FI-GA-15LR3/4-W3            |
|        | .59                | 4568            | .47 1.5 1.81 1.22 .79 1.18 1.06 42.17      |                                   |                             |
|        | 18                 | 315             | G 3/8 15 34 43 26,5 20 27 32 9,61          |                                   | FI-GA-18LR3/8-W3            |
|        | .71                | 4568            | .59 1.34 1.69 1.04 .79 1.06 1.26 21.15     |                                   |                             |
|        | 18                 | 315             | G 1/2 15 38 47 30,5 20 27 32 9,15          |                                   | FI-GA-18LR-W3               |
|        | .71                | 4568            | .59 1.50 1.85 1.20 .79 1.06 1.26 20.14     |                                   |                             |
|        | 22                 | 160             | G 1/2 18,5 39 48,5 31,5 15,5 32 36 14,1    |                                   | FI-GA-22LR1/2-W3            |
|        | .87                | 2320            | .73 1.54 1.91 1.24 .61 1.26 1.42 31.09     |                                   |                             |
|        | 22                 | 160             | G 3/4 19 43 52 35,5 22 36 36 17,87         |                                   | FI-GA-22LR-W3               |
|        | .87                | 2320            | .75 1.69 2.05 1.40 .87 1.42 1.42 39.31     |                                   |                             |
|        | 22                 | 160             | G1 19 45,5 54,5 38 24,5 41 36 21,68        |                                   | FI-GA-22LR1-W3              |
|        | .87                | 2320            | .75 1.79 2.15 1.5 .96 1.61 1.42 47.80      |                                   |                             |
|        | 28                 | 160             | G 1 24 45,5 54,5 38 24,5 41 41 21,80       |                                   | FI-GA-28LR-W3               |
|        | 1.1                | 2320            | .94 1.79 2.15 1.50 .96 1.61 1.61 47.96     |                                   |                             |
|        | 35                 | 160             | G 1 1/4 30 51,5 62,5 41 26,5 55 50 47,49   |                                   | FI-GA-35LR-W3               |
|        | 1.38               | 2320            | 1.18 2.03 2.46 1.61 1.04 2.17 1.97 104.47  |                                   |                             |
|        | 42                 | 160             | G 1 1/4 36 53,5 67 42,5 26,5 55 60 48,83   |                                   | FI-GA-42LR1-1/4-W3          |
|        | 1.65               | 2320            | 1.42 2.11 2.64 1.67 1.04 2.17 2.36 107.65  |                                   |                             |
|        | 42                 | 160             | G 1 1/2 36 53,5 65,5 42,5 28,5 60 60 53,90 |                                   | FI-GA-42LR-W3               |
|        | 1.65               | 2320            | 1.42 2.11 2.58 1.67 1.12 2.36 2.36 118.58  |                                   |                             |

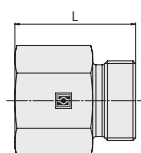
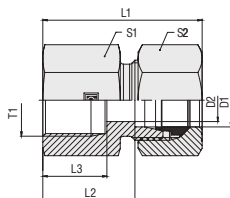
<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.



## Straight Female Stud Fitting Type FI-GA-...-R • Series S



### Female Whitworth Parallel Pipe Thread (BSPP)

| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |      |                 |      |      |      |      |        | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------|------|-----------------|------|------|------|------|--------|-----------------------------------|-----------------------------|
|        | D1                 |                 | Thread T              | D2   | L    | L1 <sup>1</sup> | L2   | L3   | S1   | S2   |        |                                   |                             |
| S      | 6                  | 630             | G 1/4                 | 4    | 33   | 41              | 26   | 17   | 19   | 17   | 4,33   |                                   | FI-GA-06SR-W3               |
|        | .24                | 9135            |                       | .16  | 1.3  | 1.61            | 1.02 | .67  | .75  | .67  | 9,52   |                                   |                             |
|        | 8                  | 630             | G 1/4                 | 5    | 33   | 41              | 26   | 17   | 19   | 19   | 4,53   |                                   | FI-GA-08SR-W3               |
|        | .31                | 9135            |                       | .2   | 1.30 | 1.61            | 1.02 | .67  | .75  | .75  | 9,96   |                                   |                             |
|        | 8                  | 630             | G 3/8                 | 5    | 34   | 41,5            | 26,5 | 17   | 24   | 19   | 7      |                                   | FI-GA-08SR3/8-W3            |
|        | .31                | 9135            |                       | .2   | 1.34 | 1.63            | 1.04 | .67  | .94  | .75  | 15,43  |                                   |                             |
|        | 10                 | 630             | G 1/4                 | 7    | 33   | 43,5            | 25,5 | 17   | 19   | 22   | 4,68   |                                   | FI-GA-10SR1/4-W3            |
|        | .39                | 9135            |                       | .28  | 1.3  | 1.71            | 1.00 | .67  | .75  | .87  | 10,32  |                                   |                             |
|        | 10                 | 630             | G 3/8                 | 7    | 34   | 43              | 26,5 | 17   | 24   | 22   | 6,99   |                                   | FI-GA-10SR-W3               |
|        | .39                | 9135            |                       | .28  | 1.34 | 1.69            | 1.04 | .67  | .94  | .87  | 15,37  |                                   |                             |
|        | 12                 | 630             | G 1/4                 | 8    | 33   | 43,5            | 25,5 | 17   | 22   | 24   | 6,58   |                                   | FI-GA-12SR1/4-W3            |
|        | .47                | 9135            |                       | .31  | 1.3  | 1.71            | 1.00 | .67  | .87  | .94  | 14,51  |                                   |                             |
|        | 12                 | 630             | G 3/8                 | 8    | 34   | 43              | 26,5 | 17   | 24   | 24   | 7,08   |                                   | FI-GA-12SR-W3               |
|        | .47                | 9135            |                       | .31  | 1.34 | 1.69            | 1.04 | .67  | .94  | .94  | 15,57  |                                   |                             |
|        | 12                 | 630             | G 1/2                 | 8    | 38   | 47              | 30,5 | 20   | 27   | 24   | 9,23   |                                   | FI-GA-12SR1/2-W3            |
|        | .47                | 9135            |                       | .31  | 1.50 | 1.85            | 1.20 | .79  | 1.06 | .94  | 20,31  |                                   |                             |
|        | 14                 | 630             | G 1/2                 | 10   | 40   | 50              | 32   | 20   | 27   | 27   | 9,64   |                                   | FI-GA-14SR-W3               |
|        | .55                | 9135            |                       | .39  | 1.57 | 1.97            | 1.26 | .79  | 1.06 | 1.06 | 21,20  |                                   |                             |
|        | 16                 | 630             | G 3/8                 | 12   | 36   | 52              | 27,5 | 17   | 24   | 30   | 7,77   |                                   | FI-GA-16SR3/8-W3            |
|        | .63                | 9135            |                       | .47  | 1.42 | 2.05            | 1.08 | .67  | .94  | 1.18 | 12,13  |                                   |                             |
|        | 16                 | 630             | G 1/2                 | 12   | 40   | 50              | 31,5 | 20   | 27   | 30   | 9,70   |                                   | FI-GA-16SR-W3               |
|        | .63                | 9135            |                       | .47  | 1.57 | 1.97            | 1.24 | .79  | 1.06 | 1.18 | 21,33  |                                   |                             |
|        | 20                 | 400             | G 3/4                 | 16   | 45   | 56              | 34,5 | 22   | 36   | 36   | 19,50  |                                   | FI-GA-20SR-W3               |
|        | .79                | 5800            |                       | .63  | 1.77 | 2.20            | 1.36 | .87  | 1.42 | 1.42 | 42,90  |                                   |                             |
|        | 25                 | 400             | G 3/4                 | 20   | 47   | 59              | 35   | 22   | 41   | 46   | 28,74  |                                   | FI-GA-25SR3/4-W3            |
|        | .98                | 5800            |                       | .79  | 1.85 | 2.32            | 1.38 | .87  | 1.61 | 1.81 | 63,36  |                                   |                             |
|        | 25                 | 400             | G 1                   | 20   | 49,5 | 61,5            | 37,5 | 24,5 | 41   | 46   | 25,14  |                                   | FI-GA-25SR-W3               |
|        | .98                | 5800            |                       | .79  | 1.95 | 2.42            | 1.48 | .96  | 1.61 | 1.81 | 55,30  |                                   |                             |
|        | 30                 | 400             | G 1 1/4               | 25   | 55,5 | 68,5            | 42   | 26,5 | 55   | 50   | 51,30  |                                   | FI-GA-30SR-W3               |
|        | 1.18               | 5800            |                       | .98  | 2.19 | 2.70            | 1.65 | 1.04 | 2.17 | 1.97 | 112,86 |                                   |                             |
|        | 38                 | 315             | G 1 1/2               | 32   | 59,5 | 74,5            | 43,5 | 28,5 | 60   | 60   | 62,80  |                                   | FI-GA-38SR-W3               |
|        | 1.50               | 4568            |                       | 1.26 | 2.34 | 2.93            | 1.71 | 1.12 | 2.36 | 2.36 | 138,16 |                                   |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

### Ordering Codes

**\*FI-GA\*-10\*S\*R\*-W3\*-MS**

\* Straight Female Stud Fitting **FI-GA**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series (page 124) **L**  
Heavy Series (page 125) **S**

\* Thread Type Female Whitworth Parallel Pipe Thread (BSPP) **R**

If required, please indicate special sizes, e.g. R3/8!

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only **—**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33

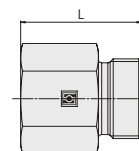
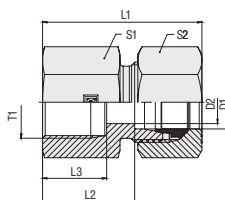


37° Flared Tube Fitting Set  
Type **FI-AB** Page 37



## Straight Female Stud Fitting

### Type FI-GA...-M ▪ Series L / S



#### Female Metric Parallel Thread

#### Ordering Codes

**\*FI-GA\*-10\*L\*M\*-W3\*-MS**

★ Straight Female Stud Fitting **FI-GA**

★ Outside Tube Diameter D1 (in mm) **-10**

★ Series Light Series **L**  
Heavy Series **S**

★ Thread Type Female Metric Parallel Thread **M**

If required, please indicate special sizes, e.g. M12x1.5!

★ Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

★ Assembling / Kitting Fitting body only **—**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

#### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in)<br>Thread T | D2   | L    | L1 <sup>1</sup> | L2   | L3   | S1   | S2   | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------------------|------|------|-----------------|------|------|------|------|-----------------------------------|-----------------------------|
| L      | 6                        | 315             | M10 x 1                           | 4    | 26,5 | 34,5            | 19,5 | 12,5 | 14   | 14   | 1,89                              | FI-GA-06LM-W3               |
|        | .24                      | 4568            |                                   | .16  | 1.04 | 1.36            | .77  | .49  | .55  | .55  | 4.15                              |                             |
|        | 8                        | 315             | M12 x 1,5                         | 6    | 31   | 39              | 24   | 17   | 17   | 17   | 3,40                              | FI-GA-08LM-W3               |
|        | .31                      | 4568            |                                   | .24  | 1.22 | 1.54            | .94  | .67  | .67  | .67  | 7.48                              |                             |
|        | 10                       | 315             | M14 x 1,5                         | 8    | 32   | 40              | 25   | 17   | 19   | 19   | 3,73                              | FI-GA-10LM-W3               |
|        | .39                      | 4568            |                                   | .31  | 1.26 | 1.57            | .98  | .67  | .75  | .75  | 8.20                              |                             |
|        | 12                       | 315             | M16 x 1,5                         | 10   | 33   | 41              | 26   | 17   | 22   | 22   | 5,29                              | FI-GA-12LM-W3               |
|        | .47                      | 4568            |                                   | .39  | 1.30 | 1.61            | 1.02 | .67  | .87  | .87  | 11.64                             |                             |
|        | 12                       | 315             | M18 x 1,5                         | 10   | 33   | 42,5            | 26   | 17   | 24   | 22   | 6                                 | FI-GA-12LM18x1.5-W3         |
|        | .47                      | 4568            |                                   | .39  | 1.3  | 1.67            | 1.02 | .67  | .94  | .87  | 13.23                             |                             |
|        | 15                       | 315             | M18 x 1,5                         | 12   | 35   | 43              | 28   | 17   | 24   | 27   | 6,77                              | FI-GA-15LM-W3               |
|        | .59                      | 4568            |                                   | .47  | 1.38 | 1.69            | 1.10 | .67  | .94  | 1.06 | 14.89                             |                             |
|        | 18                       | 315             | M22 x 1,5                         | 15   | 37   | 46              | 29,5 | 19   | 30   | 32   | 11,20                             | FI-GA-18LM-W3               |
|        | .71                      | 4568            |                                   | .59  | 1.46 | 1.81            | 1.16 | .75  | 1.18 | 1.26 | 24.63                             |                             |
|        | 22                       | 160             | M26 x 1,5                         | 19   | 42   | 51              | 34,5 | 21   | 32   | 36   | 12,42                             | FI-GA-22LM-W3               |
|        | .87                      | 2320            |                                   | .75  | 1.65 | 2.01            | 1.36 | .83  | 1.26 | 1.42 | 27.33                             |                             |
|        | 28                       | 160             | M33 x 2                           | 24   | 45   | 54              | 37,5 | 24   | 41   | 41   | 21,35                             | FI-GA-28LM-W3               |
|        | 1.10                     | 2320            |                                   | .94  | 1.77 | 2.13            | 1.48 | .94  | 1.61 | 1.61 | 46.97                             |                             |
|        | 35                       | 160             | M42 x 2                           | 30   | 51   | 62              | 40,5 | 26   | 55   | 50   | 46,20                             | FI-GA-35LM-W3               |
|        | 1.38                     | 2320            |                                   | 1.18 | 2.01 | 2.44            | 1.59 | 1.02 | 2.17 | 1.97 | 101.64                            |                             |
|        | 42                       | 160             | M48 x 2                           | 36   | 53   | 65              | 42   | 28   | 60   | 60   | 52,10                             | FI-GA-42LM-W3               |
|        | 1.65                     | 2320            |                                   | 1.42 | 2.09 | 2.56            | 1.65 | 1.10 | 2.36 | 2.36 | 114.62                            |                             |
| S      | 6                        | 630             | M12 x 1,5                         | 4    | 33   | 41,5            | 26   | 17   | 17   | 17   | 3,49                              | FI-GA-06SM-W3               |
|        | .24                      | 9135            |                                   | .16  | 1.3  | 1.63            | 1.02 | .67  | .67  | .67  | 7.69                              |                             |
|        | 8                        | 630             | M14 x 1,5                         | 5    | 33   | 41              | 26   | 17   | 19   | 19   | 4,36                              | FI-GA-08SM-W3               |
|        | .31                      | 9135            |                                   | .20  | 1.30 | 1.61            | 1.02 | .67  | .75  | .75  | 9.59                              |                             |
|        | 10                       | 630             | M16 x 1,5                         | 7    | 34   | 43              | 26,5 | 17   | 22   | 22   | 1,31                              | FI-GA-10SM-W3               |
|        | .39                      | 9135            |                                   | .28  | 1.34 | 1.69            | 1.04 | .67  | .87  | .87  | 2.89                              |                             |
|        | 12                       | 630             | M18 x 1,5                         | 8    | 35   | 44              | 27,5 | 17   | 24   | 24   | 7,01                              | FI-GA-12SM-W3               |
|        | .47                      | 9135            |                                   | .31  | 1.38 | 1.73            | 1.08 | .67  | .94  | .94  | 15.41                             |                             |
|        | 14                       | 630             | M20 x 1,5                         | 10   | 39   | 49              | 31   | 19   | 27   | 27   | 9,54                              | FI-GA-14SM-W3               |
|        | .55                      | 9135            |                                   | .39  | 1.54 | 1.93            | 1.22 | .75  | 1.06 | 1.06 | 20.99                             |                             |
|        | 16                       | 630             | M22 x 1,5                         | 12   | 39   | 49              | 30,5 | 19   | 30   | 30   | 11,71                             | FI-GA-16SM-W3               |
|        | .63                      | 9135            |                                   | .47  | 1.54 | 1.93            | 1.20 | .75  | 1.18 | 1.18 | 25.76                             |                             |
|        | 20                       | 400             | M27 x 2                           | 16   | 45   | 56              | 34,5 | 22   | 36   | 36   | 18,68                             | FI-GA-20SM-W3               |
|        | .79                      | 5800            |                                   | .63  | 1.77 | 2.20            | 1.36 | .87  | 1.42 | 1.42 | 41.09                             |                             |
|        | 25                       | 400             | M33 x 2                           | 20   | 49   | 61              | 37   | 24   | 41   | 46   | 24,73                             | FI-GA-25SM-W3               |
|        | .98                      | 5800            |                                   | .79  | 1.93 | 2.40            | 1.46 | .94  | 1.61 | 1.81 | 54.40                             |                             |
|        | 30                       | 400             | M42 x 2                           | 25   | 55   | 68              | 41,5 | 26   | 55   | 50   | 50,30                             | FI-GA-30SM-W3               |
|        | 1.18                     | 5800            |                                   | .98  | 2.17 | 2.68            | 1.63 | 1.02 | 2.17 | 1.97 | 110.66                            |                             |
|        | 38                       | 400             | M48 x 2                           | 32   | 59   | 74              | 43   | 28   | 60   | 60   | 62,80                             | FI-GA-38SM-W3               |
|        | 1.50                     | 5800            |                                   | 1.26 | 2.32 | 2.91            | 1.69 | 1.10 | 2.36 | 2.36 | 138.16                            |                             |

<sup>1</sup> Approximate dimension in assembled condition.

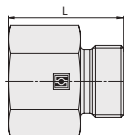
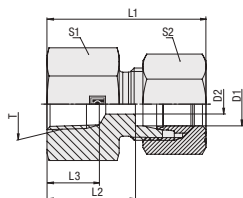
<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.





## Straight Female Stud Fitting Type FI-GA-...-N • Series L / S



### NPT Thread

| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in) |     |      |                 |      |      |      |      |       | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|-----|------|-----------------|------|------|------|------|-------|-----------------------------------|-----------------------------|
|        | D1                 |                 | Thread T              | D2  | L    | L1 <sup>1</sup> | L2   | L3   | S1   | S2   |       |                                   |                             |
| L      | 6                  | 315             | 1/4 NPT               | 4   | 30,5 | 38              | 23,5 | 16,4 | 19   | 14   | 4,20  |                                   | FI-GA-06L1/4N-W3            |
|        | .24                | 4568            |                       | .16 | 1.20 | 1.50            | .93  | .65  | .75  | .55  | 9.24  |                                   |                             |
|        | 8                  | 315             | 1/4 NPT               | 6   | 30,5 | 38              | 23,5 | 16,4 | 19   | 17   | 4,30  |                                   | FI-GA-08L1/4N-W3            |
|        | .31                | 4568            |                       | .24 | 1.20 | 1.50            | .93  | .65  | .75  | .67  | 9.46  |                                   |                             |
|        | 10                 | 315             | 1/4 NPT               | 8   | 31   | 39              | 24,0 | 16,4 | 19   | 19   | 4,10  |                                   | FI-GA-10L1/4N-W3            |
|        | .39                | 4568            |                       | .31 | 1.22 | 1.54            | .95  | .65  | .75  | .75  | 9.02  |                                   |                             |
|        | 12                 | 315             | 3/8 NPT               | 10  | 34   | 42              | 27   | 20,8 | 24   | 22   | 6,6   |                                   | FI-GA-12L3/8N-W3            |
|        | .47                | 4568            |                       | .39 | 1.34 | 1.65            | 1.06 | .82  | .94  | .87  | 14.55 |                                   |                             |
|        | 18                 | 315             | 1/2 NPT               | 15  | 40   | 49              | 32   | 28,5 | 27   | 32   | 9,71  |                                   | FI-GA-18L1/2N-W3            |
|        | .71                | 4568            |                       | .59 | 1.57 | 1.93            | 1.26 | 1.12 | 1.06 | 1.26 | 21.41 |                                   |                             |
| S      | 14                 | 400             | 1/2 NPT               | 10  | 43   | 49              | 35   | 26   | 27   | 27   | 9,58  |                                   | FI-GA-14S1/2N-W3            |
|        | .55                | 5800            |                       | .39 | 1.69 | 1.93            | 1.38 | 1.02 | 1.06 | 1.06 | 21.12 |                                   |                             |
|        | 16                 | 400             | 1/2 NPT               | 12  | 43   | 50              | 34,5 | 22,6 | 27   | 30   | 11,70 |                                   | FI-GA-16S1/2N-W3            |
|        | .63                | 5800            |                       | .47 | 1.69 | 1.97            | 1.36 | .89  | 1.06 | 1.18 | 25.74 |                                   |                             |
|        | 20                 | 315             | 1/2 NPT               | 16  | 44   | 55              | 33,5 | 23,1 | 32   | 36   | 16,00 |                                   | FI-GA-20S1/2N-W3            |
|        | .79                | 4568            |                       | .63 | 1.73 | 2.17            | 1.32 | .91  | 1.26 | 1.42 | 35.20 |                                   |                             |
|        | 20                 | 315             | 3/4 NPT               | 16  | 46   | 57              | 35,5 | 23,1 | 36   | 36   | 20,29 |                                   | FI-GA-20S3/4N-W3            |
|        | .79                | 4568            |                       | .63 | 1.81 | 2.24            | 1.40 | .91  | 1.42 | 1.42 | 44.63 |                                   |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

### Ordering Codes

**\*FI-GA\*-10\*L\*1/4\*N\*-W3\*-MS**

\* Straight Female Stud Fitting **FI-GA**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Size acc. to dimension table **1/4**

Please always indicate thread sizes, e.g. 1/4!

\* Thread Type NPT Thread **N**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only **—**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32

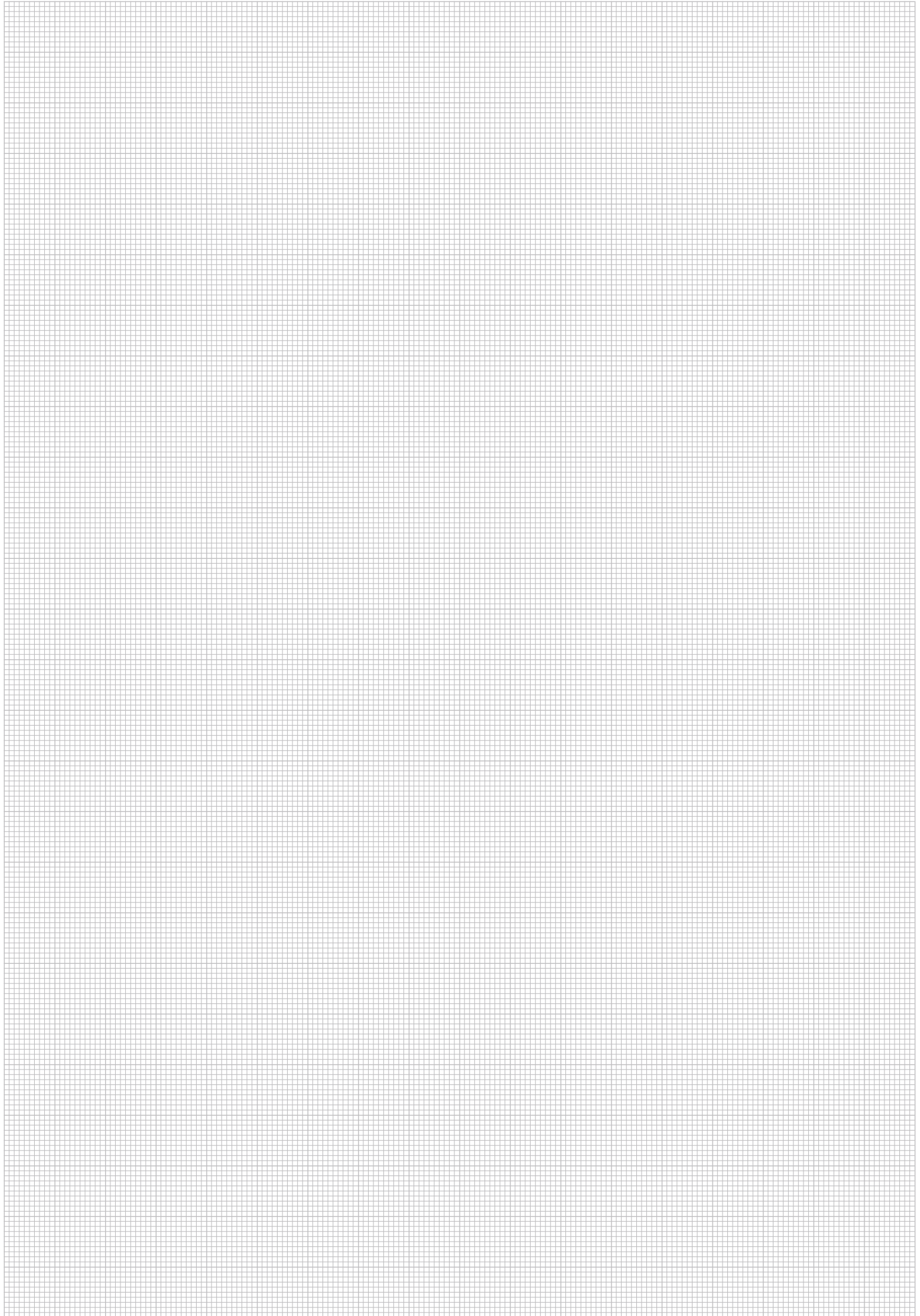


Union Nut  
Type **FI-M** Page 33

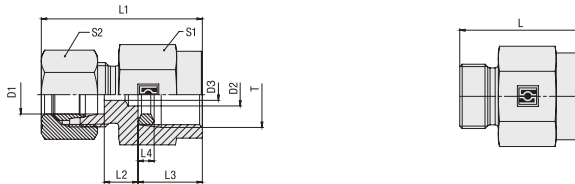


37° Flared Tube Fitting Set  
Type **FI-AB** Page 37





## Gauge Fitting Type FI-MA-...-R • Series L / S



### Internal Metallic Sealing Ring

### Female Whitworth Parallel Pipe Thread (BSPP)

| Series | Tube OD | PN        | Dimensions |     |     |      |                 |      |      |     |      |     |         |                      | Weight | Ordering Codes <sup>3</sup> |
|--------|---------|-----------|------------|-----|-----|------|-----------------|------|------|-----|------|-----|---------|----------------------|--------|-----------------------------|
|        | (mm/in) | (bar/PSI) | (mm/in)    |     |     |      |                 |      |      |     |      |     |         |                      |        |                             |
|        | D1      |           | Thread T   | D2  | D3  | L    | L1 <sup>1</sup> | L2   | L3   | L4  | S1   | S2  | per 100 |                      |        |                             |
| L      | 6       | 500       | G 1/4      | 5,5 | 4   | 29   | 37              | 7,5  | 14,5 | 4,5 | 19   | 14  | 3,76    | FI-MA-06LR-W3-DKI    |        |                             |
|        | .24     | 7250      |            | .22 | .16 | 1.14 | 1.46            | .30  | .57  | .18 | .75  | .55 | 8.27    |                      |        |                             |
|        | 8       | 500       | G 1/4      | 5,5 | 5,5 | 29   | 37              | 7,5  | 14,5 | 4,5 | 19   | 17  | 3,74    | FI-MA-08LR-W3-DKI    |        |                             |
|        | .31     | 7250      |            | .22 | .22 | 1.14 | 1.46            | .30  | .57  | .18 | .75  | .67 | 8.23    |                      |        |                             |
|        | 10      | 500       | G 1/4      | 5,5 | 5,5 | 30   | 38              | 8,5  | 14,5 | 4,5 | 19   | 19  | 4,05    | FI-MA-10LR-W3-DKI    |        |                             |
|        | .39     | 7250      |            | .22 | .22 | 1.18 | 1.50            | .33  | .57  | .18 | .75  | .75 | 8.92    |                      |        |                             |
| S      | 12      | 400       | G 1/4      | 5,5 | 5,5 | 30   | 38              | 8,5  | 14,5 | 4,5 | 19   | 22  | 4,31    | FI-MA-12LR-W3-DKI    |        |                             |
|        | .47     | 5801      |            | .22 | .22 | 1.18 | 1.50            | .33  | .57  | .18 | .75  | .87 | 9.48    |                      |        |                             |
|        | 6       | 800       | G 1/2      | 7   | 4   | 38   | 46              | 11   | 20   | 5   | 27   | 17  | 9,16    | FI-MA-06SR-W3-DKI    |        |                             |
|        | .24     | 11600     |            | .28 | .16 | 1.50 | 1.81            | .43  | .79  | .20 | 1.06 | .67 | 2.16    |                      |        |                             |
|        | 8       | 800       | G 1/4      | 6   | 3,5 | 31   | 39              | 9,5  | 14,5 | 4,5 | 19   | 19  | 4,38    | FI-MA-08SR1/4-W3-DKI |        |                             |
|        | .31     | 11600     |            | .24 | .14 | 1.22 | 1.54            | .37  | .57  | .18 | .75  | .75 | 9.66    |                      |        |                             |
|        | 8       | 800       | G 1/2      | 7   | 5   | 38   | 46              | 11   | 20   | 5   | 27   | 19  | 9,30    | FI-MA-08SR-W3-DKI    |        |                             |
|        | .31     | 11600     |            | .28 | .20 | 1.50 | 1.81            | .43  | .79  | .20 | 1.06 | .75 | 2.46    |                      |        |                             |
|        | 10      | 800       | G 1/2      | 7   | 3,5 | 38   | 47              | 10,5 | 20   | 5   | 27   | 22  | 9,39    | FI-MA-10SR-W3-DKI    |        |                             |
|        | .39     | 11600     |            | .28 | .14 | 1.50 | 1.85            | .41  | .79  | .20 | 1.06 | .87 | 2.65    |                      |        |                             |
|        | 12      | 630       | G 1/4      | 5,5 | 5,5 | 34   | 43,5            | 12   | 14,5 | 4,5 | 22   | 24  | 6,72    | FI-MA-12SR1/4-W3-DKI |        |                             |
|        | .47     | 9135      |            | .22 | .22 | 1.34 | 1.71            | .47  | .57  | .18 | .87  | .94 | 14.82   |                      |        |                             |
|        | 12      | 630       | G 1/2      | 7   | 3,5 | 38   | 47              | 10,5 | 20   | 5   | 27   | 24  | 9,76    | FI-MA-12SR-W3-DKI    |        |                             |
|        | .47     | 9135      |            | .28 | .14 | 1.50 | 1.85            | .41  | .79  | .20 | 1.06 | .94 | 21.47   |                      |        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

### Ordering Codes

**\*FI-MA\*-10\*L\*R\*-W3\*-DKI**

|                                                                         |                                                                         |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------|
| * Gauge Fitting                                                         | FI-MA                                                                   |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                                     |
| * Series                                                                | Light Series L<br>Heavy Series S                                        |
| * Thread Type                                                           | Female Whitworth Parallel Pipe Thread (BSPP) R                          |
| If required, please indicate special sizes, e.g. R1/2!                  |                                                                         |
| * Material Code                                                         | Steel, zinc/nickel-plated -W3                                           |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                         |
| * Internal Seal Type                                                    | Internal metallic sealing ring -DKI                                     |
| * Assembling / Kitting                                                  | Fitting body only —                                                     |
|                                                                         | Fitting body supplied with cutting ring and union nut -MS               |
|                                                                         | Fitting body supplied with soft-sealing cutting ring and union nut -MSV |

### Connecting Parts

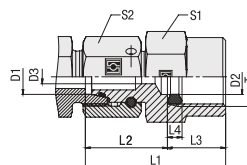
|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

### Spare Parts / Accessories

|  |                                                      |          |
|--|------------------------------------------------------|----------|
|  | Internal Metallic Sealing Ring<br>Type <b>FI-DKI</b> | Page 246 |
|--|------------------------------------------------------|----------|



## Gauge Fitting with 24° Taper / O-Ring Type FI-EMAD-...-R ■ Series L / S



### Ordering Codes

#### \*FI-EMAD\*-10\*L\*R\*-V\*-W3\*-DKI-DKO

|                                                                         |                                                                 |
|-------------------------------------------------------------------------|-----------------------------------------------------------------|
| * Gauge Fitting with 24° Taper / O-Ring                                 | FI-EMAD                                                         |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                             |
| * Series                                                                | Light Series <b>L</b><br>Heavy Series <b>S</b>                  |
| * Thread Type                                                           | Female Whitworth Parallel<br>Pipe Thread (BSPP) <b>R</b>        |
| If required, please indicate special sizes, e.g. R1/2!                  |                                                                 |
| * Seal Material                                                         | FKM (Viton®) <b>-V</b><br>EPDM <b>-E</b>                        |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                            |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                 |
| * Internal Seal Type                                                    | Internal metallic sealing ring <b>-DKI</b>                      |
| * Assembling / Kitting                                                  | Fitting body supplied with<br>swivel nut and O-ring <b>-DKO</b> |

### Spare Parts / Accessories



O-Ring  
Type **O-RING** Page 239



Internal Metallic Sealing Ring  
Type **FI-DKI** Page 246

### Female Whitworth Parallel Pipe Thread (BSPP)

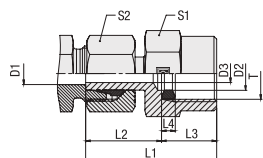
### Internal Metallic Sealing Ring

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in)<br>Thread T | D2  | D3  | L1   | L2   | L3   | L4  | S1   | S2  | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes               |
|--------|--------------------------|-----------------|-----------------------------------|-----|-----|------|------|------|-----|------|-----|-----------------------------------|------------------------------|
| L      | 6                        | 500             | G 1/4                             | 5,5 | 3   | 38,5 | 24   | 14,5 | 4,5 | 19   | 14  | 6,34                              | FI-EMAD-06LR-V-W3-DKI-DKO    |
|        | .24                      | 7251            |                                   | .22 | .12 | 1.52 | .94  | .57  | .18 | .75  | .55 | 13.95                             |                              |
|        | 8                        | 500             | G 1/4                             | 5,5 | 3   | 38,5 | 24   | 14,5 | 4,5 | 19   | 17  | 6,16                              | FI-EMAD-08LR-V-W3-DKI-DKO    |
|        | .31                      | 7251            |                                   | .22 | .14 | 1.52 | .94  | .57  | .18 | .75  | .67 | 13.56                             |                              |
|        | 10                       | 500             | G 1/4                             | 5,5 | 3,5 | 39,5 | 25   | 14,5 | 4,5 | 19   | 19  | 7,22                              | FI-EMAD-10LR-V-W3-DKI-DKO    |
|        | .39                      | 7251            |                                   | .22 | .14 | 1.56 | .98  | .57  | .18 | .75  | .75 | 15.88                             |                              |
|        | 12                       | 315             | G 1/4                             | 5,5 | 3,5 | 41   | 26,5 | 14,5 | 4,5 | 19   | 22  | 8,48                              | FI-EMAD-12LR-V-W3-DKI-DKO    |
|        | .47                      | 4568            |                                   | .22 | .14 | 1.61 | 1.04 | .57  | .18 | .75  | .87 | 18.66                             |                              |
|        | 12                       | 315             | G 1/2                             | 7   | 3,5 | 44,5 | 24,5 | 20   | 5   | 27   | 22  | 12,8                              | FI-EMAD-12LR1/2-V-W3-DKI-DKO |
|        | .47                      | 4568            |                                   | .28 | .14 | 1.75 | .96  | .79  | .2  | 1.06 | .87 | 28,15                             |                              |
|        | 6                        | 630             | G 1/4                             | 5,5 | 3,0 | 38   | 23,5 | 14,5 | 4,5 | 19   | 17  | 6,08                              | FI-EMAD-06SR1/4-V-W3-DKI-DKO |
|        | .24                      | 9135            |                                   | .22 | .12 | 1.50 | .93  | .57  | .18 | .75  | .67 | 13.38                             |                              |
| S      | 6                        | 630             | G 1/2                             | 7   | 3   | 45   | 25   | 20   | 5   | 27   | 17  | 11,49                             | FI-EMAD-06SR-V-W3-DKI-DKO    |
|        | .24                      | 9135            |                                   | .28 | .12 | 1.77 | .98  | .79  | .20 | 1.06 | .67 | 25.29                             |                              |
|        | 8                        | 630             | G 1/4                             | 5,5 | 3,5 | 38   | 24   | 14,5 | 4,5 | 19   | 19  | 6,55                              | FI-EMAD-08SR1/4-V-W3-DKI-DKO |
|        | .31                      | 9135            |                                   | .22 | .14 | 1.50 | .94  | .57  | .18 | .75  | .75 | 14.41                             |                              |
|        | 8                        | 630             | G 1/2                             | 7   | 3,5 | 43,5 | 23,5 | 20   | 5   | 27   | 19  | 10,87                             | FI-EMAD-08SR-V-W3-DKI-DKO    |
|        | .31                      | 9135            |                                   | .28 | .14 | 1.71 | .93  | .79  | .20 | 1.06 | .75 | 23.92                             |                              |
|        | 10                       | 630             | G 1/4                             | 5,5 | 3,5 | 39,5 | 25   | 14,5 | 4,5 | 19   | 22  | 7,66                              | FI-EMAD-10SR1/4-V-W3-DKI-DKO |
|        | .39                      | 9135            |                                   | .22 | .14 | 1.56 | .98  | .57  | .18 | .75  | .87 | 16.86                             |                              |
|        | 10                       | 630             | G 1/2                             | 7   | 3,5 | 44   | 24   | 20   | 5   | 27   | 22  | 12,19                             | FI-EMAD-10SR-V-W3-DKI-DKO    |
|        | .39                      | 9135            |                                   | .28 | .14 | 1.73 | .94  | .79  | .20 | 1.06 | .87 | 26.83                             |                              |
|        | 12                       | 630             | G 1/4                             | 5,5 | 3,5 | 40   | 25,5 | 14,5 | 4,5 | 19   | 24  | 9,40                              | FI-EMAD-12SR1/4-V-W3-DKI-DKO |
|        | .47                      | 9135            |                                   | .22 | .14 | 1.57 | 1.00 | .57  | .18 | .75  | .94 | 20.69                             |                              |
|        | 12                       | 630             | G 1/2                             | 7   | 3,5 | 45,5 | 25,5 | 20   | 5   | 27   | 24  | 13,98                             | FI-EMAD-12SR-V-W3-DKI-DKO    |
|        | .47                      | 9135            |                                   | .28 | .14 | 1.79 | 1.00 | .79  | .20 | 1.06 | .94 | 30.76                             |                              |

Standard seal material is FKM (Viton®).



## Gauge Standpipe Fitting Type FI-EMA-...-R ■ Series L / S



### Internal Metallic Sealing Ring

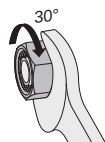
### Female Whitworth Parallel Pipe Thread (BSPP)

| Series | Tube OD              | PN                     | Dimensions           |        |     |     |      |      |      |      |      |     | Weight<br>( <sup>kg</sup> /lbs) ca.<br>per 100 <sup>1</sup> | Ordering Codes |                          |
|--------|----------------------|------------------------|----------------------|--------|-----|-----|------|------|------|------|------|-----|-------------------------------------------------------------|----------------|--------------------------|
|        | ( <sup>mm</sup> /in) | ( <sup>bar</sup> /PSI) | ( <sup>mm</sup> /in) | Thread | T   | D2  | D3   | L1   | L2   | L3   | L4   | S1  |                                                             |                | S2                       |
| L      | 6                    | 315                    | G 1/4                |        |     | 5,5 | 3,3  | 38   | 23,5 | 14,5 | 4,5  | 19  | 14                                                          | 4,65           | FI-EMA-06LR-W3-DKI-SV    |
|        | .24                  | 4568                   |                      |        | .22 | .13 | 1.5  | .93  | .57  | .18  | .75  | .55 | 10.23                                                       |                |                          |
|        | 8                    | 315                    | G 1/4                |        |     | 5,5 | 3,5  | 38   | 23,5 | 14,5 | 4,5  | 19  | 17                                                          | 5,53           | FI-EMA-08LR-W3-DKI-SV    |
|        | .31                  | 4568                   |                      |        | .22 | .14 | 1.5  | .93  | .57  | .18  | .75  | .67 | 12.16                                                       |                |                          |
|        | 10                   | 315                    | G 1/4                |        |     | 5,5 | 3,5  | 39,5 | 25   | 14,5 | 4,5  | 19  | 19                                                          | 6,40           | FI-EMA-10LR-W3-DKI-SV    |
|        | .39                  | 4568                   |                      |        | .22 | .14 | 1.56 | .98  | .57  | .18  | .75  | .75 | 14.08                                                       |                |                          |
|        | 12                   | 315                    | G 1/4                |        |     | 5,5 | 3,5  | 40,5 | 26   | 14,5 | 4,5  | 19  | 22                                                          | 8,01           | FI-EMA-12LR-W3-DKI-SV    |
|        | .47                  | 4568                   |                      |        | .22 | .14 | 1.59 | 1.02 | .57  | .18  | .75  | .87 | 17.63                                                       |                |                          |
|        | 12                   | 315                    | G 1/2                |        |     | 12  | 5,5  | 46,5 | 26,5 | 20   | 5    | 27  | 22                                                          | 11,89          | FI-EMA-12LR1/2-W3-DKI-SV |
|        | .47                  | 4568                   |                      |        | .47 | .22 | 1.83 | 1.04 | .79  | .2   | 1.06 | .87 | 26.21                                                       |                |                          |
| S      | 6                    | 630                    | G 1/2                |        |     | 7   | 3,5  | 45   | 25   | 20   | 5    | 27  | 17                                                          | 10,73          | FI-EMA-06SR-W3-DKI-SV    |
|        | .24                  | 9135                   |                      |        | .28 | .14 | 1.77 | .98  | .79  | .2   | 1.06 | .67 | 23.61                                                       |                |                          |
|        | 8                    | 630                    | G 1/2                |        |     | 7   | 3,5  | 45   | 25   | 20   | 5    | 27  | 19                                                          | 10,95          | FI-EMA-08SR-W3-DKI-SV    |
|        | .31                  | 9135                   |                      |        | .28 | .14 | 1.77 | .98  | .79  | .2   | 1.06 | .75 | 24.09                                                       |                |                          |
|        | 10                   | 630                    | G 1/2                |        |     | 7   | 3,5  | 47   | 27   | 20   | 5    | 27  | 22                                                          | 12,15          | FI-EMA-10SR-W3-DKI-SV    |
|        | .39                  | 9135                   |                      |        | .28 | .14 | 1.85 | 1.06 | .79  | .2   | 1.06 | .87 | 26.73                                                       |                |                          |
|        | 12                   | 630                    | G 1/4                |        |     | 5,5 | 3,5  | 40,2 | 25,7 | 14,5 | 4,5  | 19  | 24                                                          | 8,78           | FI-EMA-12SR1/4-W3-DKI-SV |
|        | .47                  | 9135                   |                      |        | .22 | .14 | 1.58 | 1.01 | .57  | .18  | .75  | .94 | 19.36                                                       |                |                          |
|        | 12                   | 630                    | G 1/2                |        |     | 7   | 3,5  | 47,5 | 27,5 | 20   | 5    | 27  | 24                                                          | 13,43          | FI-EMA-12SR-W3-DKI-SV    |
|        | .47                  | 9135                   |                      |        | .28 | .14 | 1.87 | 1.08 | .79  | .2   | 1.06 | .94 | 29.55                                                       |                |                          |

<sup>1</sup> Weight including cutting ring and union nut.

Please note: Standpipes are always factory-assembled with cutting rings and union nuts.

The union nut assembled on the standpipe has to be tightened by only 1/12 a turn (equivalent to 30°) beyond the fixed point.



### Ordering Codes

**\*FI-EMA\*-10\*L\*R\*-W3\*-DKI-SV**

\* Gauge Standpipe Fitting **FI-EMA**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Female Whitworth Parallel Pipe Thread (BSPP) **R**

If required, please indicate special sizes, e.g. R1/2!

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Internal Seal Type Internal metallic sealing ring **-DKI**

\* Assembling / Kitting Standpipe factory-assembled with cutting ring and union nut **-SV**

### Spare Parts / Accessories



Internal Metallic Sealing Ring  
Type **FI-DKI**

Page 246



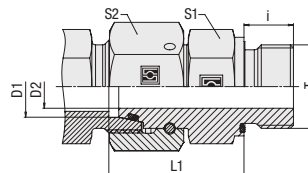




|                                                                                     |                                                                                          |         |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------|
|                                                                                     | <b>Straight Male Stud Fitting with 24° Taper / O-Ring</b><br>FI-EGED                     | 134-137 |
|    | <b>Whitworth Parallel Pipe Thread (BSPP) / Profile Sealing Ring</b><br>FI-EGED-....-R-WD | 134     |
|    | <b>Metric Parallel Thread / Profile Sealing Ring</b><br>FI-EGED-....-M-WD                | 136     |
|    | <b>NPT Thread</b><br>FI-EGED-....-N                                                      | 137     |
|    | <b>Straight Fitting with 24° Taper / O-Ring</b><br>FI-SNV                                | 138     |
|    | <b>Straight Reducer with 24° Taper / O-Ring</b><br>FI-SNV                                | 140     |
|    | <b>Straight Reducer for Tube Ends with 24° Taper / O-Ring</b><br>FI-REDSO                | 144     |
|    | <b>Distance Adaptors with 24° Taper / O-Ring</b><br>FI-REDSO                             | 148     |
|  | <b>Adjustable Elbow (90°) with 24° Taper / O-Ring</b><br>FI-EWD                          | 150     |
|  | <b>Adjustable Elbow (45°) with 24° Taper / O-Ring</b><br>FI-EVD                          | 151     |
|  | <b>Adjustable Branch Tee with 24° Taper / O-Ring</b><br>FI-ETD                           | 152     |
|  | <b>Adjustable Barrel Tee with 24° Taper / O-Ring</b><br>FI-ELD                           | 153     |



## Straight Male Stud Fitting with 24° Taper / O-Ring Type FI-EGED-...-R-WD • Series L



### Whitworth Parallel Pipe Thread (BSPP)

### Profile Sealing Ring

#### Ordering Codes

**\*FI-EGED\*-10\*L\*R\*-WD\*-BV\*-W3\*-DKO**

\* Straight Male Stud Fitting with 24° Taper / O-Ring (DKO) **FI-EGED**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series (page 134) **L**  
Heavy Series (page 135) **S**

\* Thread Type Whitworth Parallel Pipe Thread (BSPP) **R**

If required, please indicate special sizes, e.g. R3/8!

\* Seal Type Profile Sealing Ring **-WD**

\* Seal Material Male Stud: NBR (Buna-N®) **-BV**  
24° Taper: FKM (Viton®)  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body supplied with swivel nut and O-ring **-DKO**

#### Spare Parts / Accessories



O-Ring  
Type **O-RING** Page 239



Profile Sealing Ring  
Type **WDG** Page 238

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in)<br>Thread T | D2   | i   | L1   | S1   | S2   | Torque<br>(N·m/ft·lb)<br>Thread T | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes                 |
|--------|--------------------------|-----------------|-----------------------------------|------|-----|------|------|------|-----------------------------------|-----------------------------------|--------------------------------|
| L      | 6                        | 500             | G 1/8                             | 2,5  | 8   | 24,5 | 14   | 14   | 18                                | 3,74                              | FI-EGED-06LR-WD-BV-W3-DKO      |
|        | .24                      | 7250            |                                   | .10  | .31 | .96  | .55  | .55  | 13.3                              | 8.22                              |                                |
|        | 6                        | 500             | G 1/4                             | 2,5  | 12  | 27,5 | 19   | 14   | 35                                | 5,42                              | FI-EGED-06LR1/4-WD-BV-W3-DKO   |
|        | .24                      | 7250            |                                   | .1   | .47 | 1.08 | .75  | .55  | 25.9                              | 11.95                             |                                |
|        | 8                        | 500             | G 1/8                             | 4    | 8   | 25,5 | 14   | 17   | 18                                | 3,96                              | FI-EGED-08LR1/8-WD-BV-W3-DKO   |
|        | .31                      | 7250            |                                   | .16  | .31 | 1.0  | .55  | .67  | 13.3                              | 8.73                              |                                |
|        | 8                        | 500             | G 1/4                             | 4    | 12  | 29,5 | 19   | 17   | 35                                | 5,23                              | FI-EGED-08LR-WD-BV-W3-DKO      |
|        | .31                      | 7250            |                                   | .16  | .47 | 1.16 | .75  | .67  | 25.9                              | 11.50                             |                                |
|        | 8                        | 400             | G 3/8                             | 5    | 12  | 28,5 | 22   | 17   | 70                                | 7,16                              | FI-EGED-08LR3/8-WD-BV-W3-DKO   |
|        | .31                      | 5800            |                                   | .2   | .47 | 1.12 | .87  | .67  | 51.8                              | 15.79                             |                                |
|        | 10                       | 500             | G 1/4                             | 6    | 12  | 27,5 | 19   | 19   | 35                                | 5,68                              | FI-EGED-10LR-WD-BV-W3-DKO      |
|        | .39                      | 7250            |                                   | .24  | .47 | 1.08 | .75  | .75  | 25.9                              | 12.49                             |                                |
|        | 10                       | 400             | G 3/8                             | 6,5  | 12  | 34,5 | 22   | 19   | 70                                | 7,69                              | FI-EGED-10LR3/8-WD-BV-W3-DKO   |
|        | .39                      | 5800            |                                   | .26  | .47 | 1.36 | .87  | .75  | 51.8                              | 16.95                             |                                |
|        | 10                       | 400             | G 1/2                             | 6,5  | 14  | 36   | 27   | 19   | 90                                | 13,5                              | FI-EGED-10LR1/2-WD-BV-W3-DKO   |
|        | .39                      | 5800            |                                   | .26  | .55 | 1.42 | 1.06 | .75  | 66.6                              | 29.76                             |                                |
|        | 12                       | 500             | G 1/4                             | 6    | 12  | 28   | 19   | 22   | 35                                | 7,02                              | FI-EGED-12LR1/4-WD-BV-W3-DKO   |
|        | .47                      | 7250            |                                   | .24  | .47 | 1.1  | .75  | .87  | 25.9                              | 15.48                             |                                |
|        | 12                       | 400             | G 3/8                             | 8    | 12  | 34   | 22   | 22   | 70                                | 9,78                              | FI-EGED-12LR-WD-BV-W3-DKO      |
|        | .47                      | 5800            |                                   | .31  | .47 | 1.34 | .87  | .87  | 51.8                              | 21.52                             |                                |
|        | 12                       | 400             | G 1/2                             | 8    | 14  | 29,5 | 27   | 22   | 90                                | 11,71                             | FI-EGED-12LR1/2-WD-BV-W3-DKO   |
|        | .47                      | 5800            |                                   | .31  | .55 | 1.16 | 1.06 | .87  | 66.6                              | 25.76                             |                                |
|        | 15                       | 400             | G 3/8                             | 9    | 12  | 31,5 | 22   | 27   | 70                                | 10,74                             | FI-EGED-15LR3/8-WD-BV-W3-DKO   |
|        | .59                      | 5800            |                                   | .35  | .47 | 1.24 | .87  | 1.06 | 51.8                              | 23.68                             |                                |
|        | 15                       | 400             | G 1/2                             | 10   | 14  | 32   | 27   | 27   | 90                                | 13,70                             | FI-EGED-15LR-WD-BV-W3-DKO      |
|        | .59                      | 5800            |                                   | .39  | .55 | 1.26 | 1.06 | 1.06 | 66.6                              | 30.14                             |                                |
|        | 15                       | 250             | G 3/4                             | 11   | 16  | 31   | 32   | 27   | 180                               | 14,89                             | FI-EGED-15LR3/4-WD-BV-W3-DKO   |
|        | .59                      | 3625            |                                   | .43  | .63 | 1.22 | 1.26 | 1.06 | 133.2                             | 32.83                             |                                |
|        | 18                       | 400             | G 1/2                             | 13   | 14  | 31,5 | 27   | 32   | 90                                | 14,86                             | FI-EGED-18LR-WD-BV-W3-DKO      |
|        | .71                      | 5800            |                                   | .51  | .55 | 1.24 | 1.06 | 1.26 | 66.6                              | 32.69                             |                                |
|        | 18                       | 250             | G 3/4                             | 13   | 16  | 31   | 32   | 32   | 180                               | 17,92                             | FI-EGED-18LR3/4-WD-BV-W3-DKO   |
|        | .71                      | 3625            |                                   | .51  | .63 | 1.22 | 1.26 | 1.26 | 133.2                             | 39.51                             |                                |
|        | 22                       | 250             | G 1/2                             | 17   | 14  | 34,5 | 32   | 36   | 90                                | 19                                | FI-EGED-22LR1/2-WD-BV-W3-DKO   |
|        | .87                      | 3625            |                                   | .67  | .55 | 1.36 | 1.26 | 1.42 | 66.6                              | 41.89                             |                                |
|        | 22                       | 250             | G 3/4                             | 17   | 16  | 32,5 | 32   | 36   | 180                               | 20,98                             | FI-EGED-22LR-WD-BV-W3-DKO      |
|        | .87                      | 3625            |                                   | .67  | .63 | 1.28 | 1.26 | 1.42 | 133.2                             | 46.15                             |                                |
|        | 22                       | 250             | G 1                               | 17   | 18  | 34,5 | 41   | 36   | 310                               | 31,66                             | FI-EGED-22LR1-WD-BV-W3-DKO     |
|        | .87                      | 3625            |                                   | .67  | .71 | 1.36 | 1.61 | 1.42 | 229.4                             | 69.80                             |                                |
|        | 28                       | 250             | G 3/4                             | 23   | 16  | 35   | 36   | 41   | 180                               | 22,99                             | FI-EGED-28LR3/4-WD-BV-W3-DKO   |
|        | 1.10                     | 3625            |                                   | .91  | .63 | 1.38 | 1.42 | 1.61 | 133.2                             | 50.68                             |                                |
|        | 28                       | 250             | G 1                               | 22   | 18  | 35   | 41   | 41   | 310                               | 22,78                             | FI-EGED-28LR-WD-BV-W3-DKO      |
|        | 1.10                     | 3625            |                                   | .87  | .71 | 1.38 | 1.61 | 1.61 | 229.4                             | 50.12                             |                                |
|        | 35                       | 250             | G 1 1/4                           | 28   | 20  | 42,5 | 50   | 50   | 450                               | 51,00                             | FI-EGED-35LR-WD-BV-W3-DKO      |
|        | 1.38                     | 3625            |                                   | 1.10 | .79 | 1.67 | 1.97 | 1.97 | 333.0                             | 112.20                            |                                |
|        | 35                       | 250             | G 1 1/2                           | 28   | 22  | 46,5 | 55   | 50   | 540                               | 61,3                              | FI-EGED-35LR1-1/2-WD-BV-W3-DKO |
|        | 1.38                     | 3625            |                                   | 1.1  | .87 | 1.83 | 2.17 | 1.97 | 399.6                             | 135.14                            |                                |
|        | 42                       | 250             | G 1 1/4                           | 35   | 20  | 47   | 55   | 60   | 450                               | 62,8                              | FI-EGED-42LR1-1/4-WD-BV-W3-DKO |
|        | 1.65                     | 3625            |                                   | 1.38 | .79 | 1.85 | 2.17 | 2.36 | 333.0                             | 138.45                            |                                |
|        | 42                       | 250             | G 1 1/2                           | 34   | 22  | 46,5 | 55   | 60   | 540                               | 68,60                             | FI-EGED-42LR-WD-BV-W3-DKO      |
|        | 1.65                     | 3625            |                                   | 1.34 | .87 | 1.83 | 2.17 | 2.36 | 399.6                             | 150.92                            |                                |

Standard seal material: See Ordering Code BV.

Male stud acc. to ISO 1179-2 (Type E)

Port acc. to ISO 1179-1

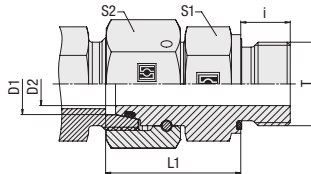
Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

Torque recommendations for Steel mating material.



## Straight Male Stud Fitting with 24° Taper / O-Ring Type FI-EGED-...-R-WD ■ Series S



### Whitworth Parallel Pipe Thread (BSPP)

### Profile Sealing Ring

| Series | Tube OD                           | PN                                  | Dimensions                        |      |     |      |      |      | Torque                                | Weight                                 | Ordering Codes                 |
|--------|-----------------------------------|-------------------------------------|-----------------------------------|------|-----|------|------|------|---------------------------------------|----------------------------------------|--------------------------------|
|        | ( <sup>mm</sup> / <sub>in</sub> ) | ( <sup>bar</sup> / <sub>PSI</sub> ) | ( <sup>mm</sup> / <sub>in</sub> ) |      |     |      |      |      | ( <sup>N·m</sup> / <sub>ft·lb</sub> ) | ( <sup>kg</sup> / <sub>lbs</sub> ) ca. |                                |
|        | D1                                |                                     | Thread T                          | D2   | i   | L1   | S1   | S2   | Thread T                              | per 100                                |                                |
| S      | 6                                 | 800                                 | G 1/4                             | 2,5  | 12  | 27   | 19   | 17   | 55                                    | 5,55                                   | FI-EGED-06SR-WD-BV-W3-DK0      |
|        | .24                               | 11600                               |                                   | .10  | .47 | 1.06 | .75  | .67  | 40.7                                  | 12.21                                  |                                |
|        | 8                                 | 800                                 | G 1/4                             | 4    | 12  | 29,5 | 19   | 19   | 55                                    | 6,52                                   | FI-EGED-08SR-WD-BV-W3-DK0      |
|        | .31                               | 11600                               |                                   | .16  | .47 | 1.16 | .75  | .75  | 40.7                                  | 14.34                                  |                                |
|        | 8                                 | 800                                 | G 3/8                             | 4    | 12  | 32   | 22   | 19   | 80                                    | 8,25                                   | FI-EGED-08SR3/8-WD-BV-W3-DK0   |
|        | .31                               | 11600                               |                                   | .16  | .47 | 1.26 | .87  | .75  | 59.2                                  | 18.19                                  |                                |
|        | 10                                | 800                                 | G 1/4                             | 6    | 12  | 29,5 | 19   | 22   | 55                                    | 7,19                                   | FI-EGED-10SR1/4-WD-BV-W3-DK0   |
|        | .39                               | 11600                               |                                   | .24  | .47 | 1.16 | .75  | .87  | 40.7                                  | 15.85                                  |                                |
|        | 10                                | 800                                 | G 3/8                             | 6    | 12  | 32   | 22   | 22   | 80                                    | 9,63                                   | FI-EGED-10SR-WD-BV-W3-DK0      |
|        | .39                               | 11600                               |                                   | .24  | .47 | 1.26 | .87  | .87  | 59.2                                  | 21.19                                  |                                |
|        | 12                                | 630                                 | G 1/4                             | 5    | 12  | 33   | 19   | 24   | 55                                    | 9,05                                   | FI-EGED-12SR1/4-WD-BV-W3-DK0   |
|        | .47                               | 9135                                |                                   | .2   | .47 | 1.3  | .75  | .94  | 40.7                                  | 19.95                                  |                                |
|        | 12                                | 630                                 | G 3/8                             | 8    | 12  | 34   | 22   | 24   | 80                                    | 7,03                                   | FI-EGED-12SR-WD-BV-W3-DK0      |
|        | .47                               | 9135                                |                                   | .31  | .47 | 1.34 | .87  | .94  | 59.2                                  | 15.46                                  |                                |
|        | 12                                | 630                                 | G 1/2                             | 8    | 14  | 36   | 27   | 24   | 115                                   | 6,36                                   | FI-EGED-12SR1/2-WD-BV-W3-DK0   |
|        | .47                               | 9135                                |                                   | .31  | .55 | 1.42 | 1.06 | .94  | 85.1                                  | 14.02                                  |                                |
|        | 14                                | 630                                 | G 1/2                             | 9    | 14  | 37   | 27   | 27   | 115                                   | 14,39                                  | FI-EGED-14SR-WD-BV-W3-DK0      |
|        | .55                               | 9135                                |                                   | .35  | .55 | 1.46 | 1.06 | 1.06 | 85.1                                  | 31.67                                  |                                |
|        | 16                                | 630                                 | G 3/8                             | 8    | 12  | 37,5 | 27   | 30   | 80                                    | 16,88                                  | FI-EGED-16SR3/8-WD-BV-W3-DK0   |
|        | .63                               | 9135                                |                                   | .31  | .47 | 1.48 | 1.06 | 1.18 | 59.2                                  | 37.21                                  |                                |
|        | 16                                | 630                                 | G 1/2                             | 11   | 14  | 37   | 27   | 30   | 115                                   | 17,03                                  | FI-EGED-16SR-WD-BV-W3-DK0      |
|        | .63                               | 9135                                |                                   | .43  | .55 | 1.46 | 1.06 | 1.18 | 85.1                                  | 37.46                                  |                                |
|        | 16                                | 420                                 | G 3/4                             | 11   | 16  | 39,5 | 32   | 30   | 180                                   | 23,9                                   | FI-EGED-16SR3/4-WD-BV-W3-DK0   |
|        | .63                               | 6091                                |                                   | .43  | .63 | 1.56 | 1.26 | 1.18 | 133.2                                 | 52.69                                  |                                |
|        | 20                                | 420                                 | G 1/2                             | 12   | 14  | 40,5 | 27   | 36   | 115                                   | 22,47                                  | FI-EGED-20SR1/2-WD-BV-W3-DK0   |
|        | .79                               | 6091                                |                                   | .47  | .55 | 1.59 | 1.06 | 1.42 | 85.1                                  | 49.54                                  |                                |
|        | 20                                | 420                                 | G 3/4                             | 14   | 16  | 43   | 32   | 36   | 180                                   | 27,34                                  | FI-EGED-20SR-WD-BV-W3-DK0      |
|        | .79                               | 6091                                |                                   | .55  | .63 | 1.69 | 1.26 | 1.42 | 133.2                                 | 60.15                                  |                                |
|        | 25                                | 420                                 | G 3/4                             | 17   | 16  | 49   | 36   | 46   | 180                                   | 42,11                                  | FI-EGED-25SR3/4-WD-BV-W3-DK0   |
|        | .98                               | 6091                                |                                   | .67  | .63 | 1.93 | 1.42 | 1.81 | 133.2                                 | 92.84                                  |                                |
|        | 25                                | 420                                 | G 1                               | 18   | 18  | 48   | 41   | 46   | 310                                   | 50,20                                  | FI-EGED-25SR-WD-BV-W3-DK0      |
|        | .98                               | 6091                                |                                   | .71  | .71 | 1.89 | 1.61 | 1.81 | 229.4                                 | 110.44                                 |                                |
|        | 30                                | 420                                 | G 1 1/4                           | 23   | 20  | 51   | 50   | 50   | 450                                   | 70,40                                  | FI-EGED-30SR-WD-BV-W3-DK0      |
|        | 1.18                              | 6091                                |                                   | .91  | .79 | 2.01 | 1.97 | 1.97 | 333.0                                 | 154.88                                 |                                |
|        | 30                                | 420                                 | G 1 1/2                           | 22   | 22  | 53,5 | 55   | 50   | 540                                   | 83,5                                   | FI-EGED-30SR1-1/2-WD-BV-W3-DK0 |
|        | 1.18                              | 6091                                |                                   | .87  | .87 | 2.11 | 2.17 | 1.97 | 399.6                                 | 184.09                                 |                                |
|        | 30                                | 420                                 | G 1                               | 20   | 18  | 50,5 | 41   | 50   | 310                                   | 54,7                                   | FI-EGED-30SR1-WD-BV-W3-DK0     |
|        | 1.18                              | 6091                                |                                   | .79  | .71 | 1.99 | 1.61 | 1.97 | 229.4                                 | 120.59                                 |                                |
|        | 38                                | 420                                 | G 1 1/4                           | 30   | 20  | 56   | 55   | 60   | 450                                   | 92,4                                   | FI-EGED-38SR1-1/4-WD-BV-W3-DK0 |
|        | 1.50                              | 6091                                |                                   | 1.18 | .79 | 2.2  | 2.17 | 2.36 | 333.0                                 | 203.71                                 |                                |
|        | 38                                | 420                                 | G 1 1/2                           | 30   | 22  | 60   | 55   | 60   | 540                                   | 93,50                                  | FI-EGED-38SR-WD-BV-W3-DK0      |
|        | 1.50                              | 6091                                |                                   | 1.18 | .87 | 2.36 | 2.17 | 2.36 | 399.6                                 | 205.70                                 |                                |

Standard seal material: See Ordering Code BV.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

Male stud acc. to ISO 1179-2 (Type E)  
Port acc. to ISO 1179-1

Torque recommendations for Steel mating material.

### Ordering Codes

**\*FI-EGED\*-10\*S\*R\*-WD\*-BV\*-W3\*-DK0**

\* Straight Male Stud Fitting with 24° Taper / O-Ring (DK0) **FI-EGED**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series (page 134) **L**  
Heavy Series (page 135) **S**

\* Thread Type Whitworth Parallel Pipe Thread (BSPP) **R**

If required, please indicate special sizes, e.g. R3/8!

\* Seal Type Profile Sealing Ring **-WD**

\* Seal Material Male Stud: NBR (Buna-N®) **-BV**  
24° Taper: FKM (Viton®)  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body supplied with swivel nut and O-ring **-DK0**

### Spare Parts / Accessories



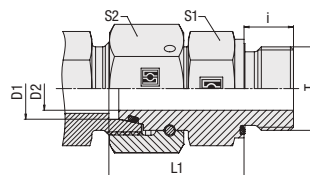
O-Ring  
Type **O-RING** Page 239



Profile Sealing Ring  
Type **WDG** Page 238



## Straight Male Stud Fitting with 24° Taper / O-Ring Type FI-EGED-...-M-WD ▪ Series L / S



### Ordering Codes

**\*FI-EGED\*-10\*L\*M\*-WD\*-BV\*-W3\*-DKO**

\* Straight Male Stud Fitting with 24° Taper / O-Ring (DKO) **FI-EGED**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Metric Parallel Thread **M**

If required, please indicate special sizes, e.g. M12x1.5!

\* Seal Type Profile Sealing Ring **-WD**

\* Seal Material Male Stud: NBR (Buna-N®) **-BV**  
24° Taper: FKM (Viton®) **-V**  
FKM (Viton®) **-E**  
EPDM

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body supplied with swivel nut and O-ring **-DKO**

### Spare Parts / Accessories



O-Ring  
Type **O-RING**

Page 239



Profile Sealing Ring  
Type **WDG**

Page 238

### Profile Sealing Ring

### Metric Parallel Thread

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/PSI) | Dimensions<br>(mm/in)<br>Thread T | D2   | i   | L1   | S1   | S2   | Torque<br>(Nm/ft-lb)<br>Thread T | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes                  |
|--------|--------------------------|-----------------|-----------------------------------|------|-----|------|------|------|----------------------------------|-----------------------------------|---------------------------------|
| L      | 6                        | 500             | M10x1                             | 2,5  | 8   | 24,5 | 14   | 14   | 18                               | 3,76                              | FI-EGED-06LM-WD-BV-W3-DKO       |
|        | .24                      | 7250            |                                   | .10  | .31 | .96  | .55  | .55  | 13.3                             | 8.27                              |                                 |
|        | 8                        | 500             | M12x1,5                           | 4    | 12  | 26,5 | 17   | 17   | 25                               | 4,64                              | FI-EGED-08LM-WD-BV-W3-DKO       |
|        | .31                      | 7250            |                                   | .16  | .47 | 1.04 | .67  | .67  | 18.5                             | 10.21                             |                                 |
|        | 10                       | 500             | M14x1,5                           | 6    | 12  | 27,5 | 19   | 19   | 45                               | 5,97                              | FI-EGED-10LM-WD-BV-W3-DKO       |
|        | .39                      | 7250            |                                   | .24  | .47 | 1.08 | .75  | .75  | 33.3                             | 13.14                             |                                 |
|        | 12                       | 400             | M16x1,5                           | 8    | 12  | 30,5 | 22   | 22   | 55                               | 9,58                              | FI-EGED-12LM-WD-BV-W3-DKO       |
|        | .47                      | 5800            |                                   | .31  | .47 | 1.20 | .87  | .87  | 40.7                             | 21.08                             |                                 |
|        | 12                       | 400             | M18x1,5                           | 8    | 12  | 31   | 24   | 22   | 90                               | 9,78                              | FI-EGED-12LM18x1.5-WD-BV-W3-DKO |
|        | .47                      | 5800            |                                   | .31  | .47 | 1.22 | .94  | .87  | 66.6                             | 21.56                             |                                 |
|        | 15                       | 400             | M18x1,5                           | 10   | 12  | 31,5 | 24   | 27   | 90                               | 12,62                             | FI-EGED-15LM-WD-BV-W3-DKO       |
|        | .59                      | 5800            |                                   | .39  | .47 | 1.24 | .94  | 1.06 | 66.6                             | 27.76                             |                                 |
|        | 15                       | 400             | M22x1,5                           | 11   | 14  | 34   | 27   | 27   | 125                              | 14,26                             | FI-EGED-15LM22x1.5-WD-BV-W3-DKO |
|        | .59                      | 5800            |                                   | .43  | .55 | 1.34 | 1.06 | 1.06 | 92.5                             | 31.44                             |                                 |
|        | 18                       | 400             | M22x1,5                           | 13   | 14  | 31,5 | 27   | 32   | 125                              | 15,28                             | FI-EGED-18LM-WD-BV-W3-DKO       |
|        | .71                      | 5800            |                                   | .51  | .55 | 1.24 | 1.06 | 1.26 | 92.5                             | 33.62                             |                                 |
|        | 22                       | 250             | M26x1,5                           | 17   | 16  | 32,5 | 32   | 36   | 180                              | 20,75                             | FI-EGED-22LM-WD-BV-W3-DKO       |
|        | .87                      | 3625            |                                   | .67  | .63 | 1.28 | 1.26 | 1.42 | 133.2                            | 45.64                             |                                 |
|        | 28                       | 250             | M33x2                             | 22   | 18  | 35   | 41   | 41   | 310                              | 28,61                             | FI-EGED-28LM-WD-BV-W3-DKO       |
|        | 1.10                     | 3625            |                                   | .87  | .71 | 1.38 | 1.61 | 1.61 | 229.4                            | 62.95                             |                                 |
|        | 35                       | 250             | M42x2                             | 28   | 20  | 42,5 | 50   | 50   | 450                              | 52,30                             | FI-EGED-35LM-WD-BV-W3-DKO       |
|        | 1.38                     | 3625            |                                   | 1.10 | .79 | 1.67 | 1.97 | 1.97 | 333.0                            | 115.06                            |                                 |
|        | 42                       | 250             | M48x2                             | 34   | 22  | 46,5 | 55   | 60   | 540                              | 72,56                             | FI-EGED-42LM-WD-BV-W3-DKO       |
|        | 1.65                     | 3625            |                                   | 1.34 | .87 | 1.83 | 2.17 | 2.36 | 399.6                            | 159.62                            |                                 |
| S      | 6                        | 800             | M12x1,5                           | 2,5  | 12  | 27   | 17   | 17   | 35                               | 4,88                              | FI-EGED-06SM-WD-BV-W3-DKO       |
|        | .24                      | 11600           |                                   | .10  | .47 | 1.06 | .67  | .67  | 25.9                             | 10.73                             |                                 |
|        | 8                        | 800             | M14x1,5                           | 4    | 12  | 29,5 | 19   | 19   | 55                               | 6,59                              | FI-EGED-08SM-WD-BV-W3-DKO       |
|        | .31                      | 11600           |                                   | .16  | .47 | 1.16 | .75  | .75  | 40.7                             | 14.49                             |                                 |
|        | 10                       | 800             | M16x1,5                           | 6    | 12  | 32   | 22   | 22   | 70                               | 9,34                              | FI-EGED-10SM-WD-BV-W3-DKO       |
|        | .39                      | 11600           |                                   | .24  | .47 | 1.26 | .87  | .87  | 51.80                            | 20.54                             |                                 |
|        | 12                       | 630             | M18x1,5                           | 8    | 12  | 34   | 24   | 24   | 90                               | 10,44                             | FI-EGED-12SM-WD-BV-W3-DKO       |
|        | .47                      | 9135            |                                   | .31  | .47 | 1.34 | .94  | .94  | 66.6                             | 22.97                             |                                 |
|        | 14                       | 630             | M20x1,5                           | 9    | 14  | 36,5 | 27   | 27   | 125                              | 16,00                             | FI-EGED-14SM-WD-BV-W3-DKO       |
|        | .55                      | 9135            |                                   | .35  | .55 | 1.44 | 1.06 | 1.06 | 92.5                             | 35.21                             |                                 |
|        | 16                       | 630             | M22x1,5                           | 11   | 14  | 37   | 27   | 30   | 135                              | 17,32                             | FI-EGED-16SM-WD-BV-W3-DKO       |
|        | .63                      | 9135            |                                   | .43  | .55 | 1.46 | 1.06 | 1.18 | 99.9                             | 38.11                             |                                 |
|        | 20                       | 420             | M27x2                             | 14   | 16  | 43   | 32   | 36   | 180                              | 27,99                             | FI-EGED-20SM-WD-BV-W3-DKO       |
|        | .79                      | 6091            |                                   | .55  | .63 | 1.69 | 1.26 | 1.42 | 133.2                            | 61.58                             |                                 |
|        | 25                       | 420             | M33x2                             | 18   | 18  | 48   | 41   | 46   | 310                              | 50,00                             | FI-EGED-25SM-WD-BV-W3-DKO       |
|        | .98                      | 6091            |                                   | .71  | .71 | 1.89 | 1.61 | 1.81 | 229.4                            | 110.00                            |                                 |
|        | 30                       | 420             | M42x2                             | 23   | 20  | 51   | 50   | 50   | 450                              | 70,30                             | FI-EGED-30SM-WD-BV-W3-DKO       |
|        | 1.18                     | 6091            |                                   | .91  | .79 | 2.01 | 1.97 | 1.97 | 333.0                            | 154.66                            |                                 |
|        | 38                       | 420             | M48x2                             | 30   | 22  | 60   | 55   | 60   | 540                              | 94,50                             | FI-EGED-38SM-WD-BV-W3-DKO       |
|        | 1.50                     | 6091            |                                   | 1.18 | .87 | 2.36 | 2.17 | 2.36 | 399.6                            | 207.90                            |                                 |

Standard seal material: See Ordering Code BV.

Male stud acc. to ISO 9974-2 (Type E)

Port acc. to ISO 9974-1

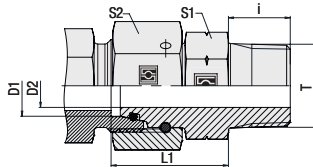
Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

Torque recommendations for Steel mating material.



## Straight Male Stud Fitting with 24° Taper / O-Ring Type FI-EGED-...-N • Series L / S



NPT Thread

| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in) |      |      |      |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes             |
|--------|--------------------|-----------------|-----------------------|------|------|------|------|------|-----------------------------------|----------------------------|
|        |                    |                 | Thread T              | D2   | i    | L1   | S1   | S2   |                                   |                            |
| L      | 6                  | 315             | 1/8 NPT               | 3    | 10   | 33   | 14   | 14   | 3,75                              | FI-EGED-06L1/8N-V-W3-DKO   |
|        | .24                | 4567            |                       | .12  | .39  | 1.3  | .55  | .55  | 8,27                              |                            |
|        | 8                  | 315             | 1/4 NPT               | 5    | 15   | 41,5 | 14   | 17   | 4,53                              | FI-EGED-08L1/4N-V-W3-DKO   |
|        | .31                | 4567            |                       | .2   | .59  | 1.63 | .55  | .67  | 9,99                              |                            |
|        | 10                 | 315             | 1/4 NPT               | 6,5  | 15   | 41,5 | 17   | 19   | 5,34                              | FI-EGED-10L1/4N-V-W3-DKO   |
|        | .39                | 4567            |                       | .26  | .59  | 1.63 | .67  | .75  | 11,77                             |                            |
|        | 12                 | 315             | 3/8 NPT               | 8    | 15   | 46   | 19   | 22   | 8,42                              | FI-EGED-12L3/8N-V-W3-DKO   |
|        | .47                | 4567            |                       | .31  | .59  | 1.81 | .75  | .87  | 18,56                             |                            |
|        | 15                 | 315             | 1/2 NPT               | 11   | 20   | 50   | 22   | 27   | 12,06                             | FI-EGED-15L1/2N-V-W3-DKO   |
|        | .59                | 4567            |                       | .43  | .79  | 1.97 | .87  | 1.06 | 26,59                             |                            |
|        | 18                 | 315             | 1/2 NPT               | 12   | 20   | 48   | 27   | 32   | 15,73                             | FI-EGED-18L1/2N-V-W3-DKO   |
|        | .71                | 4567            |                       | .47  | .79  | 1.89 | 1.06 | 1.26 | 34,68                             |                            |
|        | 22                 | 160             | 3/4 NPT               | 17   | 20   | 51   | 30   | 36   | 20,22                             | FI-EGED-22L3/4N-V-W3-DKO   |
|        | .87                | 2320            |                       | .67  | .79  | 2.01 | 1.18 | 1.42 | 44,58                             |                            |
|        | 28                 | 160             | 1 NPT                 | 23   | 25   | 60   | 41   | 41   | 29,5                              | FI-EGED-28L1N-V-W3-DKO     |
|        | 1.10               | 2320            |                       | .91  | .98  | 2.36 | 1.61 | 1.61 | 65,04                             |                            |
|        | 35                 | 160             | 1 1/4 NPT             | 28   | 26   | 66,5 | 50   | 50   | 53,2                              | FI-EGED-35L1-1/4N-V-W3-DKO |
|        | 1.38               | 2320            |                       | 1.1  | 1.02 | 2.62 | 1.97 | 1.97 | 117,29                            |                            |
|        | 42                 | 160             | 1 1/2 NPT             | 35   | 26   | 70   | 55   | 66   | 69,45                             | FI-EGED-42L1-1/2N-V-W3-DKO |
|        | 1.65               | 2320            |                       | 1.38 | 1.02 | 2.76 | 2.17 | 2.6  | 153,11                            |                            |
| S      | 6                  | 630             | 1/4 NPT               | 3    | 15   | 42   | 17   | 17   | 4,2                               | FI-EGED-06S1/4N-V-W3-DKO   |
|        | .24                | 9135            |                       | .12  | .59  | 1.65 | .67  | .67  | 9,25                              |                            |
|        | 8                  | 630             | 1/4 NPT               | 4    | 15   | 43   | 17   | 19   | 5,94                              | FI-EGED-08S1/4N-V-W3-DKO   |
|        | .31                | 9135            |                       | .16  | .59  | 1.69 | .67  | .75  | 13,1                              |                            |
|        | 10                 | 630             | 3/8 NPT               | 6,5  | 15   | 44,5 | 19   | 22   | 8,42                              | FI-EGED-10S3/8N-V-W3-DKO   |
|        | .39                | 9135            |                       | .26  | .59  | 1.75 | .75  | .87  | 18,56                             |                            |
|        | 12                 | 630             | 3/8 NPT               | 8    | 15   | 47   | 19   | 24   | 9,34                              | FI-EGED-12S3/8N-V-W3-DKO   |
|        | .47                | 9135            |                       | .31  | .59  | 1.85 | .75  | .94  | 20,59                             |                            |
|        | 14                 | 630             | 1/2 NPT               | 9    | 20   | 54   | 24   | 27   | 15,1                              | FI-EGED-14S1/2N-V-W3-DKO   |
|        | .55                | 9135            |                       | .35  | .79  | 2.13 | .94  | 1.06 | 33,29                             |                            |
|        | 16                 | 400             | 1/2 NPT               | 11   | 20   | 54   | 24   | 27   | 15,63                             | FI-EGED-16S1/2N-V-W3-DKO   |
|        | .63                | 5800            |                       | .43  | .79  | 2.13 | .94  | 1.06 | 34,46                             |                            |
|        | 20                 | 400             | 3/4 NPT               | 14   | 20   | 57   | 30   | 36   | 25,5                              | FI-EGED-20S3/4N-V-W3-DKO   |
|        | .79                | 5800            |                       | .55  | .79  | 2.24 | 1.18 | 1.42 | 56,22                             |                            |
|        | 25                 | 400             | 1 NPT                 | 18   | 25   | 67   | 36   | 46   | 44,71                             | FI-EGED-25S1N-V-W3-DKO     |
|        | .98                | 5800            |                       | .71  | .98  | 2.64 | 1.42 | 1.81 | 98,57                             |                            |
|        | 30                 | 400             | 1 1/4 NPT             | 22   | 26   | 71   | 50   | 50   | 72,11                             | FI-EGED-30S1-1/4N-V-W3-DKO |
|        | 1.18               | 5800            |                       | .87  | 1.02 | 2.80 | 1.97 | 1.97 | 158,98                            |                            |
|        | 38                 | 315             | 1 1/2 NPT             | 30   | 26   | 79   | 55   | 60   | 95                                | FI-EGED-38S1-1/2N-V-W3-DKO |
|        | 1.50               | 4568            |                       | 1.18 | 1.02 | 3.11 | 2.17 | 2.36 | 209,44                            |                            |

Standard seal material: See Ordering Code V.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

Male stud acc. to ANSI/ASME B1.20.1-1983

Port acc. to ANSI/ASME B1.20.1-1983

Suitable liquid / plastic sealant required.

Torque recommendations for Steel mating material.

### Ordering Codes

**\*FI-EGED\*-10\*L\*1/4\*N\*-V\*-W3\*-DKO**

\* Straight Male Stud Fitting with 24° Taper / O-Ring (DKO) **FI-EGED**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Size acc. to dimension table **1/4**

Please always indicate thread sizes, e.g. 1/4!

\* Thread Type NPT Thread **N**

\* Seal Material FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body supplied with swivel nut and O-ring **-DKO**

### Spare Parts / Accessories

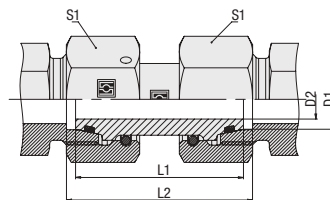


O-Ring  
Type **O-RING**

Page 239



## Straight Fitting with 24° Taper / O-Ring Type FI-SNV • Series L



### Ordering Codes

#### \*FI-SNV\*-10\*L\*-V\*-W3\*-DKO

|                                                                         |                                                                      |
|-------------------------------------------------------------------------|----------------------------------------------------------------------|
| * Straight Fitting<br>with 24° Taper / O-Ring (DKO)                     | <b>FI-SNV</b>                                                        |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                           |
| * Series                                                                | Light Series (page 138) <b>L</b><br>Heavy Series (page 139) <b>S</b> |
| * Seal Material                                                         | FKM (Viton®) <b>-V</b><br>EPDM <b>-E</b>                             |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                 |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                      |
| * Assembling / Kitting                                                  | Fitting body supplied with swivel nuts and O-rings <b>-DKO</b>       |
| * Total length                                                          | dimension see table <b>-GLA</b><br>dimension see table <b>-GLB</b>   |

### Spare Parts / Accessories



O-Ring  
Type **O-RING**

Page 239

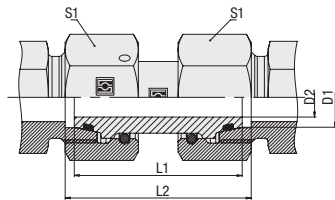
| Series | Tube OD                           | PN                                  | Dimensions                        |      |      |        | Weight                                 | Ordering Codes          |
|--------|-----------------------------------|-------------------------------------|-----------------------------------|------|------|--------|----------------------------------------|-------------------------|
|        | ( <sup>mm</sup> / <sub>in</sub> ) | ( <sup>bar</sup> / <sub>PSI</sub> ) | ( <sup>mm</sup> / <sub>in</sub> ) |      |      |        | ( <sup>kg</sup> / <sub>lbs</sub> ) ca. |                         |
|        | D1                                |                                     | D2                                | L1   | L2   | S1     | per 100                                |                         |
| L      | 6                                 | 500                                 | 3                                 | 30,8 | 33,5 | 14     | 2,81                                   | FI-SNV-06L-V-W3-DKO-GLB |
|        | .24                               | 7250                                | .12                               | 1.21 | 1.32 | .55    | 6.19                                   |                         |
|        | 6                                 | 500                                 | 3                                 | 34   | 36,7 | 14     | 3,82                                   | FI-SNV-06L-V-W3-DKO     |
|        | .24                               | 7250                                | .12                               | 1.34 | 1.44 | .55    | 8.42                                   |                         |
|        | 6                                 | 500                                 | 3                                 | 36,3 | 39   | 14     | 2,99                                   | FI-SNV-06L-V-W3-DKO-GLA |
|        | .24                               | 7250                                | .12                               | 1.43 | 1.54 | .55    | 6.59                                   |                         |
|        | 8                                 | 500                                 | 5                                 | 30,8 | 33,5 | 17     | 4,19                                   | FI-SNV-08L-V-W3-DKO-GLB |
|        | .31                               | 7250                                | .20                               | 1.21 | 1.32 | .67    | 9.24                                   |                         |
|        | 8                                 | 500                                 | 5                                 | 34   | 36,7 | 17     | 4,29                                   | FI-SNV-08L-V-W3-DKO     |
|        | .31                               | 7250                                | .20                               | 1.34 | 1.44 | .67    | 9.46                                   |                         |
|        | 8                                 | 500                                 | 5                                 | 36,8 | 39,5 | 17     | 4,45                                   | FI-SNV-08L-V-W3-DKO-GLA |
|        | .31                               | 7250                                | .20                               | 1.45 | 1.56 | .67    | 9.81                                   |                         |
|        | 10                                | 500                                 | 6                                 | 32,2 | 34   | 19     | 5,56                                   | FI-SNV-10L-V-W3-DKO-GLB |
|        | .39                               | 7250                                | .24                               | 1.27 | 1.34 | .75    | 12.26                                  |                         |
|        | 10                                | 500                                 | 6                                 | 36   | 37,8 | 19     | 5,78                                   | FI-SNV-10L-V-W3-DKO     |
|        | .39                               | 7250                                | .24                               | 1.42 | 1.49 | .75    | 12.74                                  |                         |
|        | 10                                | 500                                 | 6                                 | 37,7 | 39,5 | 19     | 6                                      | FI-SNV-10L-V-W3-DKO-GLA |
|        | .39                               | 7250                                | .24                               | 1.48 | 1.56 | .75    | 13.23                                  |                         |
|        | 12                                | 400                                 | 8                                 | 32,2 | 34   | 22     | 7,5                                    | FI-SNV-12L-V-W3-DKO-GLB |
|        | .47                               | 5800                                | .31                               | 1.27 | 1.34 | .87    | 16.53                                  |                         |
|        | 12                                | 400                                 | 8                                 | 36   | 37,8 | 22     | 7                                      | FI-SNV-12L-V-W3-DKO     |
|        | .47                               | 5800                                | .31                               | 1.42 | 1.49 | .87    | 15.40                                  |                         |
|        | 12                                | 400                                 | 8                                 | 39,5 | 41,3 | 22     | 8,04                                   | FI-SNV-12L-V-W3-DKO-GLA |
|        | .47                               | 5800                                | .31                               | 1.56 | 1.63 | .87    | 17.73                                  |                         |
|        | 15                                | 400                                 | 11                                | 39   | 40,8 | 27     | 12,58                                  | FI-SNV-15L-V-W3-DKO     |
|        | .59                               | 5800                                | .43                               | 1.54 | 1.61 | 1.06   | 27.68                                  |                         |
|        | 15                                | 400                                 | 11                                | 40,7 | 42,5 | 27     | 12,62                                  | FI-SNV-15L-V-W3-DKO-GLA |
|        | .59                               | 5800                                | .43                               | 1.60 | 1.67 | 1.06   | 27.82                                  |                         |
|        | 18                                | 400                                 | 13                                | 36,2 | 39   | 32     | 17                                     | FI-SNV-18L-V-W3-DKO-GLB |
|        | .71                               | 5800                                | .51                               | 1.43 | 1.54 | 1.26   | 37.48                                  |                         |
|        | 18                                | 400                                 | 13                                | 40,5 | 43,3 | 32     | 17,59                                  | FI-SNV-18L-V-W3-DKO     |
|        | .71                               | 5800                                | .51                               | 1.59 | 1.70 | 1.26   | 38.70                                  |                         |
|        | 18                                | 400                                 | 13                                | 42,2 | 45   | 32     | 18,16                                  | FI-SNV-18L-V-W3-DKO-GLA |
|        | .71                               | 5800                                | .51                               | 1.66 | 1.77 | 1.26   | 40.04                                  |                         |
|        | 22                                | 250                                 | 17                                | 41,2 | 44   | 36     | 24,12                                  | FI-SNV-22L-V-W3-DKO-GLB |
|        | .87                               | 3625                                | .67                               | 1.62 | 1.73 | 1.42   | 53.18                                  |                         |
|        | 22                                | 250                                 | 17                                | 45   | 47,8 | 36     | 24,91                                  | FI-SNV-22L-V-W3-DKO     |
|        | .87                               | 3625                                | .67                               | 1.77 | 1.88 | 1.42   | 54.80                                  |                         |
|        | 22                                | 250                                 | 17                                | 46,7 | 49,5 | 36     | 25,4                                   | FI-SNV-22L-V-W3-DKO-GLA |
|        | .87                               | 3625                                | .67                               | 1.84 | 1.95 | 1.42   | 56                                     |                         |
|        | 28                                | 250                                 | 23                                | 46   | 48,8 | 41     | 27,4                                   | FI-SNV-28L-V-W3-DKO     |
|        | 1.10                              | 3625                                | .91                               | 1.81 | 1.92 | 1.61   | 60.28                                  |                         |
|        | 28                                | 250                                 | 23                                | 48,7 | 51,5 | 41     | 28,57                                  | FI-SNV-28L-V-W3-DKO-GLA |
|        | 1.10                              | 3625                                | .91                               | 1.92 | 2.03 | 1.61   | 62.99                                  |                         |
|        | 35                                | 250                                 | 28                                | 46   | 52   | 50     | 43,36                                  | FI-SNV-35L-V-W3-DKO-GLB |
|        | 1.38                              | 3625                                | 1.10                              | 1.81 | 2.05 | 1.97   | 95.59                                  |                         |
|        | 35                                | 250                                 | 28                                | 53   | 59   | 50     | 45,98                                  | FI-SNV-35L-V-W3-DKO     |
|        | 1.38                              | 3625                                | 1.10                              | 2.09 | 2.32 | 1.97   | 101.15                                 |                         |
|        | 35                                | 250                                 | 28                                | 55   | 61   | 50     | 47,1                                   | FI-SNV-35L-V-W3-DKO-GLA |
|        | 1.38                              | 3625                                | 1.10                              | 2.17 | 2.40 | 1.97   | 103.84                                 |                         |
|        | 42                                | 250                                 | 35                                | 53   | 60   | 60     | 69,5                                   | FI-SNV-42L-V-W3-DKO     |
|        | 1.65                              | 3625                                | 1.38                              | 2.09 | 2.36 | 2.36   | 152.90                                 |                         |
| 42     | 250                               | 34                                  | 55,5                              | 62,5 | 60   | 71,5   | FI-SNV-42L-V-W3-DKO-GLA                |                         |
| 1.65   | 3625                              | 1.34                                | 2.19                              | 2.46 | 2.36 | 157.63 |                                        |                         |

Standard seal material is FKM (Viton®).





## Straight Fitting with 24° Taper / O-Ring Type FI-SNV - Series S



| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in) |      |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes          |
|--------|--------------------|-----------------|-----------------------|------|------|------|-----------------------------------|-------------------------|
|        | D1                 |                 | D2                    | L1   | L2   | S1   |                                   |                         |
| S      | 6                  | 800             | 3                     | 30,3 | 33   | 17   | 4,21                              | FI-SNV-06S-V-W3-DK0-GLB |
|        | .24                | 11600           | .12                   | 1.19 | 1.30 | .67  | 9.28                              |                         |
|        | 6                  | 800             | 3                     | 37   | 39,7 | 17   | 4,52                              | FI-SNV-06S-V-W3-DK0     |
|        | .24                | 11600           | .12                   | 1.46 | 1.56 | .67  | 9.96                              |                         |
|        | 6                  | 800             | 3                     | 37,8 | 40,5 | 17   | 0,46                              | FI-SNV-06S-V-W3-DK0-GLA |
|        | .24                | 11600           | .12                   | 1.49 | 1.59 | .67  | 1.01                              |                         |
|        | 8                  | 800             | 4                     | 31,3 | 34   | 19   | 5,63                              | FI-SNV-08S-V-W3-DK0-GLB |
|        | .31                | 11600           | .16                   | 1.23 | 1.34 | .75  | 12.41                             |                         |
|        | 8                  | 800             | 4                     | 37   | 39,7 | 19   | 6,03                              | FI-SNV-08S-V-W3-DK0     |
|        | .31                | 11600           | .16                   | 1.46 | 1.56 | .75  | 13.29                             |                         |
|        | 8                  | 800             | 4                     | 37,8 | 40,5 | 19   | 6,13                              | FI-SNV-08S-V-W3-DK0-GLA |
|        | .31                | 11600           | .16                   | 1.49 | 1.59 | .75  | 13.51                             |                         |
|        | 10                 | 800             | 6                     | 32,2 | 35   | 22   | 7,63                              | FI-SNV-10S-V-W3-DK0-GLB |
|        | .39                | 11600           | .24                   | 1.27 | 1.38 | .87  | 16.82                             |                         |
|        | 10                 | 800             | 6                     | 41   | 43,8 | 22   | 8,39                              | FI-SNV-10S-V-W3-DK0     |
|        | .39                | 11600           | .24                   | 1.61 | 1.72 | .87  | 18.5                              |                         |
|        | 12                 | 630             | 8                     | 35,2 | 38   | 24   | 6,52                              | FI-SNV-12S-V-W3-DK0-GLB |
|        | .47                | 9135            | .31                   | 1.39 | 1.50 | .94  | 14.37                             |                         |
|        | 12                 | 630             | 8                     | 42   | 44,8 | 24   | 10,51                             | FI-SNV-12S-V-W3-DK0     |
|        | .47                | 9135            | .31                   | 1.65 | 1.76 | .94  | 23.17                             |                         |
|        | 14                 | 630             | 9                     | 37,2 | 41   | 27   | 2,9                               | FI-SNV-14S-V-W3-DK0-GLB |
|        | .55                | 9135            | .35                   | 1.46 | 1.61 | 1.06 | 6.39                              |                         |
|        | 14                 | 630             | 9                     | 45   | 48,8 | 27   | 13,9                              | FI-SNV-14S-V-W3-DK0     |
|        | .55                | 9135            | .35                   | 1.77 | 1.92 | 1.06 | 30.64                             |                         |
|        | 16                 | 630             | 10                    | 37,2 | 42   | 30   | 16,09                             | FI-SNV-16S-V-W3-DK0-GLB |
|        | .63                | 9135            | .39                   | 1.46 | 1.65 | 1.18 | 35.47                             |                         |
|        | 16                 | 630             | 10                    | 46   | 50,8 | 30   | 17,57                             | FI-SNV-16S-V-W3-DK0     |
|        | .63                | 9135            | .39                   | 1.81 | 2.00 | 1.18 | 38.74                             |                         |
|        | 20                 | 420             | 13                    | 42   | 48   | 36   | 26,3                              | FI-SNV-20S-V-W3-DK0-GLB |
|        | .79                | 6091            | .51                   | 1.65 | 1.89 | 1.42 | 57.98                             |                         |
|        | 20                 | 420             | 13                    | 55   | 61   | 36   | 24,36                             | FI-SNV-20S-V-W3-DK0     |
|        | .79                | 6091            | .51                   | 2.17 | 2.40 | 1.42 | 53.7                              |                         |
|        | 25                 | 420             | 18                    | 45,5 | 54,4 | 46   | 45,05                             | FI-SNV-25S-V-W3-DK0-GLB |
|        | .98                | 6091            | .71                   | 1.79 | 2.14 | 1.81 | 99.32                             |                         |
|        | 25                 | 420             | 18                    | 56,5 | 65,4 | 46   | 50,1                              | FI-SNV-25S-V-W3-DK0-GLA |
|        | .98                | 6091            | .71                   | 2.22 | 2.57 | 1.81 | 110.45                            |                         |
|        | 25                 | 420             | 18                    | 58   | 67   | 46   | 49,45                             | FI-SNV-25S-V-W3-DK0     |
|        | .98                | 6091            | .71                   | 2.28 | 2.64 | 1.81 | 109.02                            |                         |
|        | 30                 | 420             | 20                    | 50   | 62   | 50   | 57,2                              | FI-SNV-30S-V-W3-DK0-GLB |
|        | 1.18               | 6091            | .79                   | 1.97 | 2.44 | 1.97 | 126.1                             |                         |
|        | 30                 | 420             | 20                    | 62   | 74   | 50   | 61,4                              | FI-SNV-30S-V-W3-DK0     |
|        | 1.18               | 6091            | .79                   | 2.44 | 2.91 | 1.97 | 135.36                            |                         |
|        | 38                 | 420             | 30                    | 50   | 67   | 60   | 74,2                              | FI-SNV-38S-V-W3-DK0-GLB |
|        | 1.50               | 6091            | 1.18                  | 1.97 | 2.64 | 2.36 | 163.58                            |                         |
|        | 38                 | 420             | 30                    | 67   | 84   | 60   | 86,7                              | FI-SNV-38S-V-W3-DK0     |
|        | 1.50               | 6091            | 1.18                  | 2.64 | 3.31 | 2.36 | 191.14                            |                         |

Standard seal material is FKM (Viton®).

### Ordering Codes

#### \*FI-SNV\*-10\*S\*-V\*-W3\*-DKO

|                                                                         |                                                    |
|-------------------------------------------------------------------------|----------------------------------------------------|
| * Straight Fitting<br>with 24° Taper / O-Ring (DKO)                     | FI-SNV                                             |
| * Outside Tube Diameter D1 (in mm)                                      | -10                                                |
| * Series                                                                | Light Series (page 138)<br>Heavy Series (page 139) |
|                                                                         | L<br>S                                             |
| * Seal Material                                                         | FKM (Viton®)<br>EPDM                               |
|                                                                         | -V<br>-E                                           |
| * Material Code                                                         | Steel, zinc/nickel-plated                          |
|                                                                         | -W3                                                |
| Please contact STAUFF for alternative materials and surface finishings. |                                                    |
| * Assembling / Kitting                                                  | Fitting body supplied with swivel nuts and O-rings |
|                                                                         | -DKO                                               |
| * Total length                                                          | dimension see table                                |
|                                                                         | -GLA                                               |
|                                                                         | -GLB                                               |

### Spare Parts / Accessories

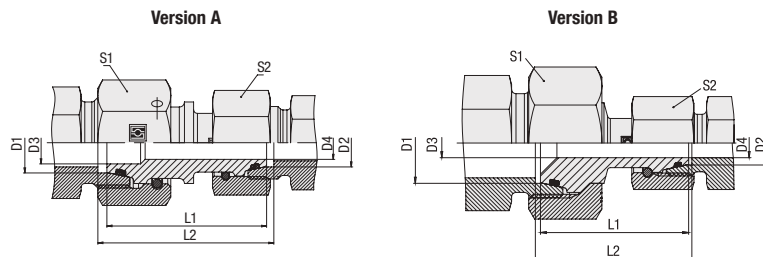


O-Ring  
Type **O-RING**

Page 239



## Straight Reducer with 24° Taper / O-Ring Type FI-SNV • Series L



### Ordering Codes

**\*FI-SNV\*-10/\*08\*L\*-V\*-W3\*-DK0**

|                                                                         |                                                                           |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------|
| * Straight Reducer<br>with 24° Taper / O-Ring (DK0)                     | <b>FI-SNV</b>                                                             |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                |
| * Outside Tube Diameter D2 (in mm)                                      | <b>08</b>                                                                 |
| * Series                                                                | Light Series (pages 140/141) <b>L</b><br>Heavy Series (page 142) <b>S</b> |
| * Seal Material                                                         | FKM (Viton®) <b>-V</b><br>EPDM <b>-E</b>                                  |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                      |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                           |
| * Assembling / Kitting                                                  | Fitting body supplied with swivel nuts and O-rings <b>-DK0</b>            |
| * Total length                                                          | dimension see table <b>-GLB</b>                                           |

### Spare Parts / Accessories



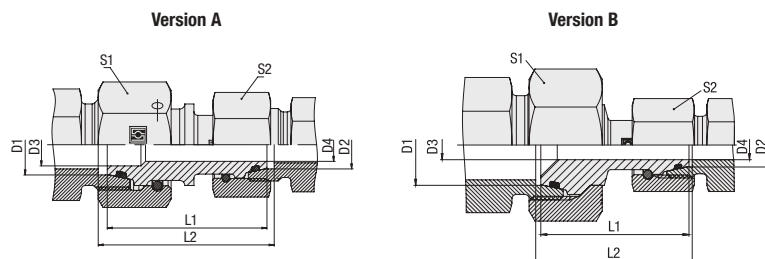
O-Ring  
Type **O-RING**

Page 239

| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in) |            |            |              |              |            |            |   | Version        | Weight<br>(kg/lbs) Ca.<br>per 100 | Ordering Codes             |
|--------|--------------------|-----------------|-----------------------|------------|------------|--------------|--------------|------------|------------|---|----------------|-----------------------------------|----------------------------|
|        | D1                 | D2              | D3                    | D4         | L1         | L2           | S1           | S2         |            |   |                |                                   |                            |
| L      | 8 L                | 6 L             | 500<br>7250           | 3<br>.12   | 3<br>.12   | 34<br>1.34   | 36,7<br>1.44 | 17<br>.67  | 14<br>.55  | A | 4,72<br>10.38  |                                   | FI-SNV-08/06L-V-W3-DK0     |
|        | 10 L               | 6 L             | 500<br>7250           | 3<br>.12   | 3<br>.12   | 35<br>1.38   | 37,3<br>1.47 | 19<br>.75  | 14<br>.55  | A | 5,50<br>12.10  |                                   | FI-SNV-10/06L-V-W3-DK0     |
|        | 10 L               | 8 L             | 500<br>7250           | 5<br>.20   | 5<br>.20   | 35<br>1.38   | 37,3<br>1.47 | 19<br>.75  | 17<br>.67  | A | 5,21<br>11.47  |                                   | FI-SNV-10/08L-V-W3-DK0     |
|        | 12 L               | 6 L             | 400<br>5800           | 3<br>.12   | 3<br>.12   | 35<br>1.38   | 37,3<br>1.47 | 22<br>.87  | 14<br>.55  | B | 18,04<br>39.68 |                                   | FI-SNV-12/06L-V-W3-DK0     |
|        | 12 L               | 8 L             | 400<br>5800           | 5<br>.20   | 5<br>.20   | 36<br>1.42   | 38,3<br>1.51 | 22<br>.87  | 17<br>.67  | B | 6,22<br>13.69  |                                   | FI-SNV-12/08L-V-W3-DK0     |
|        | 12 L               | 10 L            | 400<br>5800           | 6,5<br>.26 | 6,5<br>.26 | 36,5<br>1.44 | 38,3<br>1.51 | 22<br>.87  | 19<br>.75  | A | 6,96<br>15.31  |                                   | FI-SNV-12/10L-V-W3-DK0     |
|        | 12 L               | 12 S            | 400<br>5800           | 8<br>.31   | 8<br>.31   | 39<br>1.54   | 41,3<br>1.63 | 24<br>.94  | 22<br>.87  | B | 9,42<br>20.77  |                                   | FI-SNV-12L/12S-V-W3-DK0    |
|        | 15 L               | 8 L             | 400<br>5800           | 5<br>.20   | 5<br>.20   | 36,5<br>1.44 | 38,8<br>1.53 | 27<br>1.06 | 17<br>.67  | B | 1,96<br>4.30   |                                   | FI-SNV-15/08L-V-W3-DK0     |
|        | 15 L               | 10 L            | 400<br>5800           | 6,5<br>.26 | 6,5<br>.26 | 37,5<br>1.48 | 39,3<br>1.55 | 27<br>1.06 | 19<br>.75  | B | 4,40<br>9.69   |                                   | FI-SNV-15/10L-V-W3-DK0     |
|        | 15 L               | 12 L            | 400<br>5800           | 8<br>.31   | 8<br>.31   | 37<br>1.46   | 38,8<br>1.53 | 27<br>1.06 | 22<br>.87  | B | 11,06<br>24.38 |                                   | FI-SNV-15/12L-V-W3-DK0-GLB |
|        | 15 L               | 12 L            | 400<br>5800           | 8<br>.31   | 8<br>.31   | 44<br>1.73   | 45,8<br>1.80 | 27<br>1.06 | 22<br>.87  | A | 11,69<br>25.73 |                                   | FI-SNV-15/12L-V-W3-DK0     |
|        | 18 L               | 10 L            | 400<br>5800           | 6,5<br>.26 | 6,5<br>.26 | 38<br>1.50   | 40,3<br>1.59 | 32<br>1.26 | 19<br>.75  | B | 12,68<br>27.89 |                                   | FI-SNV-18/10L-V-W3-DK0     |
|        | 18 L               | 12 L            | 400<br>5800           | 8<br>.31   | 8<br>.31   | 38<br>1.50   | 40,3<br>1.59 | 32<br>1.26 | 22<br>.87  | B | 13,51<br>29.72 |                                   | FI-SNV-18/12L-V-W3-DK0     |
|        | 18 L               | 15 L            | 400<br>5800           | 11<br>.43  | 11<br>.43  | 42,5<br>1.67 | 44,8<br>1.76 | 32<br>1.26 | 27<br>1.06 | A | 15,38<br>33.91 |                                   | FI-SNV-18/15L-V-W3-DK0-GLB |
|        | 18 L               | 15 L            | 400<br>5800           | 11<br>.43  | 11<br>.43  | 45<br>1.77   | 47,3<br>1.86 | 32<br>1.26 | 27<br>1.06 | A | 16,60<br>36.51 |                                   | FI-SNV-18/15L-V-W3-DK0     |
|        | 18 L               | 16 S            | 400<br>5800           | 11<br>.43  | 11<br>.43  | 43,5<br>1.71 | 47,3<br>1.86 | 32<br>1.26 | 30<br>1.18 | A | 17,95<br>39.57 |                                   | FI-SNV-18L/16S-V-W3-DK0    |

Standard seal material is FKM (Viton®).





## Straight Reducer with 24° Taper / O-Ring Type FI-SNV - Series L



| Series | Tube OD<br>(mm/in) |      | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |      |      |      |      | Version | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes          |
|--------|--------------------|------|-----------------|-----------------------|------|------|------|------|------|---------|-----------------------------------|-------------------------|
|        | D1                 | D2   |                 | D3                    | D4   | L1   | L2   | S1   | S2   |         |                                   |                         |
| L      | 22 L               | 12 L | 250             | 8                     | 8    | 40,5 | 42,8 | 36   | 22   | B       | 17,52                             | FI-SNV-22/12L-V-W3-DK0  |
|        |                    |      | 3625            | .31                   | .31  | 1.59 | 1.69 | 1.42 | .87  |         | 38.55                             |                         |
|        | 22 L               | 15 L | 250             | 11                    | 11   | 42   | 44,3 | 36   | 27   | B       | 19,83                             | FI-SNV-22/15L-V-W3-DK0  |
|        |                    |      | 3625            | .43                   | .43  | 1.65 | 1.74 | 1.42 | 1.06 |         | 43.63                             |                         |
|        | 22 L               | 18 L | 250             | 13                    | 13   | 45   | 47,8 | 36   | 32   | A       | 23,35                             | FI-SNV-22/18L-V-W3-DK0  |
|        |                    |      | 3625            | .51                   | .51  | 1.77 | 1.88 | 1.42 | 1.26 |         | 51.37                             |                         |
|        | 22 L               | 20 S | 250             | 14                    | 14   | 50   | 54,4 | 36   | 32   | A       | 27,82                             | FI-SNV-22L/20S-V-W3-DK0 |
|        |                    |      | 3625            | .55                   | .55  | 1.97 | 2.14 | 1.42 | 1.26 |         | 61.33                             |                         |
|        | 28 L               | 15 L | 250             | 11                    | 11   | 43   | 45,3 | 41   | 27   | B       | 23,86                             | FI-SNV-28/15L-V-W3-DK0  |
|        |                    |      | 3625            | .43                   | .43  | 1.69 | 1.78 | 1.61 | 1.06 |         | 52.50                             |                         |
|        | 28 L               | 18 L | 250             | 13                    | 13   | 45   | 47,8 | 41   | 32   | B       | 26,44                             | FI-SNV-28/18L-V-W3-DK0  |
|        |                    |      | 3625            | .51                   | .51  | 1.77 | 1.88 | 1.61 | 1.26 |         | 58.16                             |                         |
|        | 28 L               | 22 L | 250             | 17                    | 17   | 46   | 48,8 | 41   | 36   | B       | 28,93                             | FI-SNV-28/22L-V-W3-DK0  |
|        |                    |      | 3625            | .67                   | .67  | 1.81 | 1.92 | 1.61 | 1.42 |         | 63.65                             |                         |
|        | 28 L               | 25 S | 250             | 18                    | 18   | 52,5 | 58,4 | 41   | 46   | A       | 41,48                             | FI-SNV-28L/25S-V-W3-DK0 |
|        |                    |      | 3625            | .71                   | .71  | 2.07 | 2.30 | 1.61 | 1.81 |         | 91.45                             |                         |
|        | 35 L               | 18 L | 250             | 13                    | 13   | 48   | 52,4 | 50   | 32   | B       | 39,52                             | FI-SNV-35/18L-V-W3-DK0  |
|        |                    |      | 3625            | .51                   | .51  | 1.89 | 2.06 | 1.97 | 1.26 |         | 86.94                             |                         |
|        | 35 L               | 22 L | 250             | 17                    | 17   | 49,5 | 53,9 | 50   | 36   | B       | 41,34                             | FI-SNV-35/22L-V-W3-DK0  |
|        |                    |      | 3625            | .67                   | .67  | 1.95 | 2.12 | 1.97 | 1.42 |         | 90.95                             |                         |
|        | 35 L               | 28 L | 250             | 23                    | 23   | 50   | 54,4 | 50   | 41   | B       | 40,71                             | FI-SNV-35/28L-V-W3-DK0  |
|        |                    |      | 3625            | .91                   | .91  | 1.97 | 2.14 | 1.97 | 1.61 |         | 89.57                             |                         |
|        | 35 L               | 30 S | 250             | 22                    | 22   | 61   | 70   | 50   | 50   | A       | 59,77                             | FI-SNV-35L/30S-V-W3-DK0 |
|        |                    |      | 3625            | .87                   | .87  | 2.40 | 2.76 | 1.97 | 1.97 |         | 131.77                            |                         |
|        | 42 L               | 22 L | 250             | 17                    | 17   | 49,5 | 54,4 | 60   | 36   | B       | 56,50                             | FI-SNV-42/22L-V-W3-DK0  |
|        |                    |      | 3625            | .67                   | .67  | 1.95 | 2.14 | 2.36 | 1.42 |         | 124,30                            |                         |
|        | 42 L               | 28 L | 250             | 23                    | 23   | 50   | 54,9 | 60   | 41   | B       | 56,10                             | FI-SNV-42/28L-V-W3-DK0  |
|        |                    |      | 3625            | .91                   | .91  | 1.97 | 2.16 | 2.36 | 1.61 |         | 123,42                            |                         |
|        | 42 L               | 35 L | 250             | 28                    | 28   | 53   | 59,5 | 60   | 50   | B       | 60,70                             | FI-SNV-42/35L-V-W3-DK0  |
|        |                    |      | 3625            | 1.10                  | 1.10 | 2.09 | 2.34 | 2.36 | 1.97 |         | 133,54                            |                         |
|        | 42 L               | 38 S | 250             | 30                    | 30   | 55   | 67   | 60   | 60   | A       | 78,2                              | FI-SNV-42L/38S-V-W3-DK0 |
|        |                    |      | 3625            | 1.18                  | 1.18 | 2.17 | 2.64 | 2.36 | 2.36 |         | 172,40                            |                         |

### Ordering Codes

**\*FI-SNV\*-10/\*08\*L\*-V\*-W3\*-DK0**

|                                                     |                                                             |
|-----------------------------------------------------|-------------------------------------------------------------|
| * Straight Reducer<br>with 24° Taper / O-Ring (DK0) | FI-SNV                                                      |
| * Outside Tube Diameter D1 (in mm)                  | -10                                                         |
| * Outside Tube Diameter D2 (in mm)                  | 08                                                          |
| * Series                                            | Light Series (pages 140/141) L<br>Heavy Series (page 142) S |
| * Seal Material                                     | FKM (Viton®) -V<br>EPDM -E                                  |
| * Material Code                                     | Steel, zinc/nickel-plated -W3                               |

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body supplied with swivel nuts and O-rings -DK0

### Spare Parts / Accessories



O-Ring  
Type O-RING

Page 239

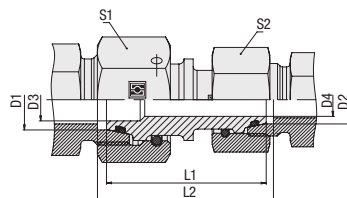
Standard seal material is FKM (Viton®).



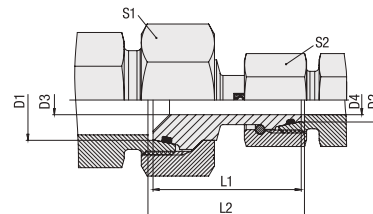
## Straight Reducer with 24° Taper / O-Ring Type FI-SNV ▪ Series S



Version A



Version B



### Ordering Codes

**\*FI-SNV\*-10/\*08\*S\*-V\*-W3\*-DKO**

|                                                                         |                                                                           |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------|
| * Straight Reducer<br>with 24° Taper / O-Ring (DKO)                     | <b>FI-SNV</b>                                                             |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                |
| * Outside Tube Diameter D2 (in mm)                                      | <b>08</b>                                                                 |
| * Series                                                                | Light Series (pages 140/141) <b>L</b><br>Heavy Series (page 142) <b>S</b> |
| * Seal Material                                                         | FKM (Viton®) <b>-V</b><br>EPDM <b>-E</b>                                  |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                      |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                           |
| * Assembling / Kitting                                                  | Fitting body supplied with swivel nuts and O-rings <b>-DKO</b>            |
| * Total length                                                          | dimension see table <b>-GLB</b>                                           |

### Spare Parts / Accessories



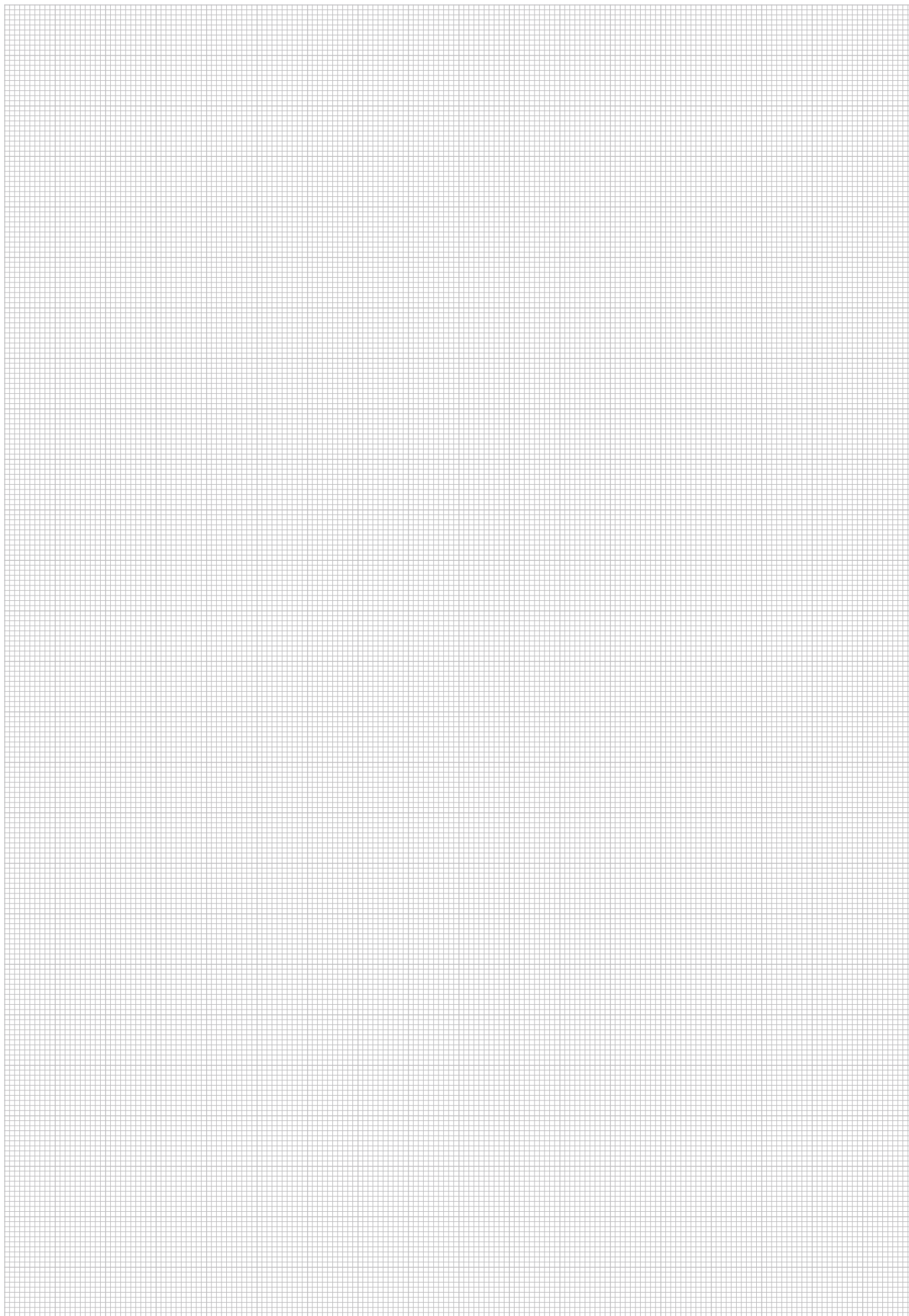
O-Ring  
Type **O-RING**

Page 239

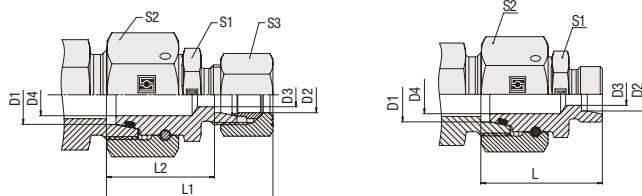
| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in) |            |            |              |              |            |            |   | Version         | Weight<br>(kg/lbs) Ca.<br>per 100 | Ordering Codes              |
|--------|--------------------|-----------------|-----------------------|------------|------------|--------------|--------------|------------|------------|---|-----------------|-----------------------------------|-----------------------------|
|        | D1                 | D2              | D3                    | D4         | L1         | L2           | S1           | S2         |            |   |                 |                                   |                             |
| S      | 6S                 | 6L              | 500<br>7250           | 3<br>.12   | 3<br>.12   | 35,5<br>1.40 | 38,2<br>1.50 | 17<br>.67  | 14<br>.55  | A | 3,70<br>8.14    |                                   | FI-SNV-06S/06L-V-W3-DKO     |
|        | 8 S                | 6S              | 800<br>11600          | 3<br>.12   | 3<br>.12   | 37<br>1.46   | 39,7<br>1.56 | 19<br>.75  | 17<br>.67  | A | 5,43<br>11.97   |                                   | FI-SNV-08/06S-V-W3-DKO      |
|        | 8 S                | 8 L             | 500<br>7250           | 4<br>.16   | 4<br>.16   | 35,5<br>1.40 | 38,2<br>1.50 | 17<br>.67  | 19<br>.75  | A | 5,27<br>11.60   |                                   | FI-SNV-08S/08L-V-W3-DKO     |
|        | 10 S               | 6 S             | 800<br>11600          | 3<br>.12   | 3<br>.12   | 40,5<br>1.59 | 43,2<br>1.70 | 22<br>.87  | 17<br>.67  | A | 6,30<br>13.86   |                                   | FI-SNV-10/06S-V-W3-DKO      |
|        | 10 S               | 8 S             | 800<br>11600          | 4<br>.16   | 4<br>.16   | 39<br>1.54   | 41,7<br>1.64 | 22<br>.87  | 19<br>.75  | A | 7,60<br>16.72   |                                   | FI-SNV-10/08S-V-W3-DKO      |
|        | 10 S               | 10 L            | 500<br>7250           | 6,5<br>.26 | 6,5<br>.26 | 38,5<br>1.52 | 40,8<br>1.61 | 22<br>.87  | 19<br>.75  | A | 6,98<br>15.39   |                                   | FI-SNV-10S/10L-V-W3-DKO     |
|        | 12 S               | 6 S             | 630<br>9135           | 3<br>.12   | 3<br>.12   | 39<br>1.54   | 41,7<br>1.64 | 24<br>.94  | 17<br>.67  | B | 7,79<br>17.13   |                                   | FI-SNV-12/06S-V-W3-DKO      |
|        | 12 S               | 8 S             | 630<br>9135           | 4<br>.16   | 4<br>.16   | 44<br>1.73   | 46,7<br>1.84 | 24<br>.94  | 19<br>.75  | A | 9,42<br>20.72   |                                   | FI-SNV-12/08S-V-W3-DKO      |
|        | 12 S               | 10 S            | 630<br>9135           | 6,5<br>.26 | 6,5<br>.26 | 41,5<br>1.63 | 44,3<br>1.74 | 24<br>.94  | 22<br>.87  | A | 9,73<br>21.40   |                                   | FI-SNV-12/10S-V-W3-DKO      |
|        | 16 S               | 10 S            | 630<br>9135           | 6,5<br>.26 | 6,5<br>.26 | 43,5<br>1.71 | 47,3<br>1.86 | 30<br>1.18 | 22<br>.87  | B | 14,11<br>31.03  |                                   | FI-SNV-16/10S-V-W3-DKO      |
|        | 16 S               | 12 S            | 630<br>9135           | 8<br>.31   | 8<br>.31   | 47,5<br>1.87 | 51,3<br>2.02 | 30<br>1.18 | 24<br>.94  | A | 15,32<br>33.70  |                                   | FI-SNV-16/12S-V-W3-DKO      |
|        | 16 S               | 15 L            | 400<br>5800           | 11<br>.43  | 11<br>.43  | 42,5<br>1.67 | 45,8<br>1.80 | 30<br>1.18 | 27<br>1.06 | A | 14,66<br>32.32  |                                   | FI-SNV-16S/15L-V-W3-DKO     |
|        | 20 S               | 12 S            | 400<br>5800           | 8<br>.31   | 8<br>.31   | 48,5<br>1.91 | 52,9<br>2.08 | 36<br>1.42 | 24<br>.94  | B | 21,90<br>48.18  |                                   | FI-SNV-20/12S-V-W3-DKO      |
|        | 20 S               | 16 S            | 400<br>5800           | 11<br>.43  | 11<br>.43  | 52,5<br>2.07 | 57,9<br>2.28 | 36<br>1.42 | 30<br>1.18 | A | 24,68<br>54.30  |                                   | FI-SNV-20/16S-V-W3-DKO      |
|        | 20 S               | 18 L            | 400<br>5800           | 13<br>.51  | 13<br>.51  | 47,5<br>1.87 | 51,9<br>2.04 | 36<br>1.42 | 32<br>1.26 | A | 23,43<br>51.65  |                                   | FI-SNV-20S/18L-V-W3-DKO     |
|        | 25 S               | 16 S            | 400<br>5800           | 11<br>.43  | 11<br>.43  | 52<br>2.05   | 58,9<br>2.32 | 46<br>1.81 | 30<br>1.18 | A | 34,02<br>74.84  |                                   | FI-SNV-25/16S-V-W3-DKO      |
|        | 25 S               | 18 L            | 400<br>5800           | 13<br>.51  | 13<br>.51  | 41,5<br>1.63 | 47,5<br>1.87 | 46<br>1.81 | 32<br>1.26 | B | 36,2<br>79.81   |                                   | FI-SNV-25S/18L-V-W3-DKO-GLB |
|        | 25 S               | 18 L            | 400<br>5800           | 13<br>.51  | 13<br>.51  | 50<br>1.97   | 56,3<br>2.22 | 46<br>1.81 | 32<br>1.26 |   | 38,4<br>84.66   |                                   | FI-SNV-25S/18L-V-W3-DKO     |
|        | 25 S               | 20 S            | 400<br>5800           | 14<br>.55  | 14<br>.55  | 58<br>2.28   | 65,5<br>2.58 | 46<br>1.81 | 36<br>1.42 | A | 39,77<br>87.49  |                                   | FI-SNV-25/20S-V-W3-DKO      |
|        | 25 S               | 22 L            | 250<br>3625           | 17<br>.67  | 17<br>.67  | 57<br>2.24   | 62,9<br>2.48 | 46<br>1.81 | 36<br>1.42 | A | 39,15<br>86.31  |                                   | FI-SNV-25S/22L-V-W3-DKO     |
|        | 30 S               | 16 S            | 400<br>5800           | 11<br>.43  | 11<br>.43  | 54<br>2.13   | 62,4<br>2.46 | 50<br>1.97 | 30<br>1.18 | B | 47,00<br>103.40 |                                   | FI-SNV-30/16S-V-W3-DKO      |
|        | 30 S               | 20 S            | 400<br>5800           | 14<br>.55  | 14<br>.55  | 58,5<br>2.30 | 67,5<br>2.66 | 50<br>1.97 | 36<br>1.42 | B | 51,00<br>112.20 |                                   | FI-SNV-30/20S-V-W3-DKO      |
|        | 30 S               | 25 S            | 400<br>5800           | 17<br>.67  | 17<br>.67  | 60<br>2.36   | 70,5<br>2.78 | 50<br>1.97 | 46<br>1.81 | A | 56,80<br>124.96 |                                   | FI-SNV-30/25S-V-W3-DKO      |
|        | 30 S               | 28 L            | 250<br>3625           | 22<br>.87  | 22<br>.87  | 59<br>2.32   | 66,4<br>2.61 | 50<br>1.97 | 41<br>1.61 | A | 45,5<br>100.31  |                                   | FI-SNV-30S/28L-V-W3-DKO     |
|        | 38 S               | 20 S            | 400<br>5800           | 14<br>.55  | 14<br>.55  | 61<br>2.40   | 72,5<br>2.85 | 60<br>2.36 | 36<br>1.42 | B | 71,30<br>156.86 |                                   | FI-SNV-38/20S-V-W3-DKO      |
|        | 38 S               | 25 S            | 400<br>5800           | 17<br>.67  | 17<br>.67  | 62,5<br>2.46 | 75,5<br>2.97 | 60<br>2.36 | 46<br>1.81 | B | 80,70<br>177.54 |                                   | FI-SNV-38/25S-V-W3-DKO      |
|        | 38 S               | 30 S            | 400<br>5800           | 22<br>.87  | 22<br>.87  | 64,5<br>2.54 | 79<br>3.11   | 60<br>2.36 | 50<br>1.97 | A | 76,90<br>169.18 |                                   | FI-SNV-38/30S-V-W3-DKO      |
|        | 38 S               | 35 L            | 250<br>3625           | 28<br>1.10 | 28<br>1.10 | 62<br>2.44   | 73,5<br>2.89 | 60<br>2.36 | 50<br>1.97 | A | 69,86<br>154.01 |                                   | FI-SNV-38S/35L-V-W3-DKO     |

Standard seal material is FKM (Viton®).





## Straight Reducer for Tube Ends with 24° Taper / O-Ring Type FI-REDSO • Series L



### Ordering Codes

#### \*FI-REDSO\*-10/\*08\*L\*-V\*-W3\*-DKO\*-MS

\* Straight Reducer for Tube Ends  
with 24° Taper / O-Ring (DKO)

FI-REDSO

\* Outside Tube Diameter D1 (in mm)

-10

\* Outside Tube Diameter D2 (in mm)

08

\* Series Light Series (pages 144/145)  
Heavy Series (pages 146/147)

L

S

\* Seal Material FKM (Viton®)  
EPDM

-V

-E

\* Material Code Steel, zinc/nickel-plated

-W3

Please contact STAUFF for alternative  
materials and surface finishings.

\* Assembling / Kitting Fitting body supplied with  
swivel nut and O-ring

-DKO

Fitting body supplied with  
cutting ring and union nut

-MS

Fitting body supplied with  
soft-sealing cutting ring  
and union nut

-MSV

### Connecting Parts



Cutting Ring  
Type FI-DS

Page 28



Soft-Sealing Cutting Ring  
Type FI-WDDS

Page 29



Support Sleeve  
Type FI-VH

Page 31



STAUFF Form EVO Sealing Ring  
Type FI-FD

Page 32



Union Nut  
Type FI-M

Page 33



37° Flared Tube Fitting Set  
Type FI-AB

Page 37

### Spare Parts / Accessories



O-Ring  
Type O-RING

Page 239

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is FKM (Viton®).

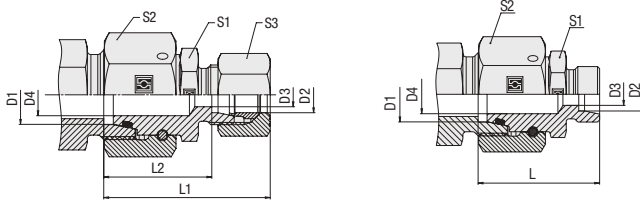
| Series | Tube OD<br>( <sup>mm</sup> / <sub>in</sub> ) |      | PN<br>( <sup>bar</sup> / <sub>psi</sub> ) | Dimensions<br>( <sup>mm</sup> / <sub>in</sub> ) |      |      |                |      |      |      | Weight<br>( <sup>kg</sup> / <sub>lbs</sub> ) ca.<br>per 100 | Ordering Codes <sup>3</sup> |                          |
|--------|----------------------------------------------|------|-------------------------------------------|-------------------------------------------------|------|------|----------------|------|------|------|-------------------------------------------------------------|-----------------------------|--------------------------|
|        | D1                                           | D2   |                                           | D3                                              | D4   | L    | L <sup>1</sup> | L2   | S1   | S2   |                                                             |                             | S3                       |
| L      | 8                                            | 6    | 500                                       | 4                                               | 4    | 30   | 38             | 23.5 | 12   | 17   | 14                                                          | 3,01                        | FI-RESD-08/06L-V-W3-DKO  |
|        | .31                                          | .24  | 7250                                      | .16                                             | .16  | 1.18 | 1.50           | .93  | .47  | .67  | .55                                                         | 6.61                        |                          |
|        | 10                                           | 6    | 500                                       | 4                                               | 4    | 32   | 40             | 25   | 14   | 19   | 14                                                          | 3,80                        | FI-RESD-10/06L-V-W3-DKO  |
|        | .39                                          | .24  | 7250                                      | .16                                             | .16  | 1.26 | 1.57           | .98  | .55  | .75  | .55                                                         | 8.36                        |                          |
|        | 10                                           | 8    | 500                                       | 6                                               | 6    | 32   | 40             | 25   | 14   | 19   | 17                                                          | 3,99                        | FI-RESD-10/08L-V-W3-DKO  |
|        | .39                                          | .31  | 7250                                      | .24                                             | .24  | 1.26 | 1.57           | .98  | .55  | .75  | .67                                                         | 8.78                        |                          |
|        | 10                                           | 12   | 400                                       | 10                                              | 6.5  | 35   | 45             | 28   | 19   | 19   | 22                                                          | 5,01                        | FI-RESD-10/12L-V-W3-DKO  |
|        | .39                                          | .47  | 5800                                      | .39                                             | .26  | 1.38 | 1.77           | 1.10 | .75  | .75  | .87                                                         | 11.04                       |                          |
|        | 12                                           | 6    | 400                                       | 4                                               | 4    | 32   | 40             | 25   | 17   | 22   | 14                                                          | 5,69                        | FI-RESD-12/06L-V-W3-DKO  |
|        | .47                                          | .24  | 5800                                      | .16                                             | .16  | 1.26 | 1.57           | .98  | .67  | .87  | .55                                                         | 12.52                       |                          |
|        | 12                                           | 8    | 400                                       | 6                                               | 6    | 32   | 40             | 25   | 17   | 22   | 17                                                          | 5,53                        | FI-RESD-12/08L-V-W3-DKO  |
|        | .47                                          | .31  | 5800                                      | .24                                             | .24  | 1.26 | 1.57           | .98  | .67  | .87  | .67                                                         | 12.17                       |                          |
|        | 12                                           | 10   | 400                                       | 8                                               | 8    | 33   | 41             | 26   | 17   | 22   | 19                                                          | 5,33                        | FI-RESD-12/10L-V-W3-DKO  |
|        | .47                                          | .39  | 5800                                      | .31                                             | .31  | 1.30 | 1.61           | 1.02 | .67  | .87  | .75                                                         | 11.72                       |                          |
|        | 12                                           | 15   | 400                                       | 12                                              | 8    | 34   | 45             | 28   | 24   | 22   | 27                                                          | 7,16                        | FI-RESD-12/15L-V-W3-DKO  |
|        | .47                                          | .59  | 5800                                      | .47                                             | .31  | 1.34 | 1.77           | 1.10 | .94  | .87  | 1.06                                                        | 15.79                       |                          |
|        | 15                                           | 6    | 400                                       | 4                                               | 11   | 35   | 43             | 29   | 22   | 27   | 14                                                          | 8,83                        | FI-RESD-15/06L-V-W3-DKO  |
|        | .59                                          | .24  | 5800                                      | .16                                             | .43  | 1.38 | 1.69           | 1.14 | .87  | 1.06 | .55                                                         | 19.43                       |                          |
|        | 15                                           | 8    | 400                                       | 6                                               | 11   | 35   | 43             | 29   | 22   | 27   | 17                                                          | 9,08                        | FI-RESD-15/08L-V-W3-DKO  |
|        | .59                                          | .31  | 5800                                      | .24                                             | .43  | 1.38 | 1.69           | 1.14 | .87  | 1.06 | .67                                                         | 19.98                       |                          |
|        | 15                                           | 10   | 400                                       | 8                                               | 8    | 35   | 43             | 30   | 22   | 27   | 19                                                          | 9,61                        | FI-RESD-15/10L-V-W3-DKO  |
|        | .59                                          | .39  | 5800                                      | .31                                             | .31  | 1.38 | 1.69           | 1.18 | .87  | 1.06 | .75                                                         | 21.14                       |                          |
|        | 15                                           | 12   | 400                                       | 10                                              | 10   | 36   | 44             | 30   | 22   | 27   | 22                                                          | 9,25                        | FI-RESD-15/12L-V-W3-DKO  |
|        | .59                                          | .47  | 5800                                      | .39                                             | .39  | 1.42 | 1.73           | 1.18 | .87  | 1.06 | .87                                                         | 20.35                       |                          |
|        | 18                                           | 6    | 400                                       | 4                                               | 13   | 35   | 43             | 28   | 24   | 32   | 14                                                          | 11,07                       | FI-RESD-18/06L-V-W3-DKO  |
|        | .71                                          | .24  | 5800                                      | .16                                             | .51  | 1.38 | 1.69           | 1.10 | .94  | 1.26 | .55                                                         | 24.36                       |                          |
|        | 18                                           | 8    | 400                                       | 6                                               | 13   | 35   | 43             | 28   | 24   | 32   | 17                                                          | 7,57                        | FI-RESD-18/08L-V-W3-DKO  |
|        | .71                                          | .31  | 5800                                      | .24                                             | .51  | 1.38 | 1.69           | 1.10 | .94  | 1.26 | .67                                                         | 16.66                       |                          |
|        | 18                                           | 10   | 400                                       | 8                                               | 8    | 36   | 44             | 29   | 24   | 32   | 19                                                          | 12,64                       | FI-RESD-18/10L-V-W3-DKO  |
|        | .71                                          | .39  | 5800                                      | .31                                             | .31  | 1.42 | 1.73           | 1.14 | .94  | 1.26 | .75                                                         | 27.81                       |                          |
|        | 18                                           | 12   | 400                                       | 10                                              | 10   | 36   | 44             | 29   | 24   | 32   | 22                                                          | 12,24                       | FI-RESD-18/12L-V-W3-DKO  |
|        | .71                                          | .47  | 5800                                      | .39                                             | .39  | 1.42 | 1.73           | 1.14 | .94  | 1.26 | .87                                                         | 26.93                       |                          |
|        | 18                                           | 15   | 400                                       | 12                                              | 12   | 37   | 45             | 30   | 24   | 32   | 27                                                          | 12,27                       | FI-RESD-18/15L-V-W3-DKO  |
|        | .71                                          | .59  | 5800                                      | .47                                             | .47  | 1.46 | 1.77           | 1.18 | .94  | 1.26 | 1.06                                                        | 26.99                       |                          |
|        | 22                                           | 6    | 250                                       | 4                                               | 17   | 38   | 47             | 32   | 27   | 36   | 14                                                          | 16,34                       | FI-RESD-22/06L-V-W3-DKO  |
|        | .87                                          | .24  | 3625                                      | .16                                             | .67  | 1.50 | 1.85           | 1.26 | 1.06 | 1.42 | .55                                                         | 35.96                       |                          |
|        | 22                                           | 8    | 250                                       | 6                                               | 17   | 38   | 47             | 32   | 27   | 36   | 17                                                          | 16,27                       | FI-RESD-22/08L-V-W3-DKO  |
|        | .87                                          | .31  | 3625                                      | .24                                             | .67  | 1.50 | 1.85           | 1.26 | 1.06 | 1.42 | .67                                                         | 35.80                       |                          |
|        | 22                                           | 10   | 250                                       | 8                                               | 17   | 39   | 48             | 33   | 27   | 36   | 19                                                          | 16,33                       | FI-RESD-22/10L-V-W3-DKO  |
|        | .87                                          | .39  | 3625                                      | .31                                             | .67  | 1.54 | 1.89           | 1.30 | 1.06 | 1.42 | .75                                                         | 35.92                       |                          |
|        | 22                                           | 12   | 250                                       | 10                                              | 17   | 39   | 48             | 33   | 27   | 36   | 22                                                          | 16,30                       | FI-RESD-22/12L-V-W3-DKO  |
|        | .87                                          | .47  | 3625                                      | .39                                             | .67  | 1.54 | 1.89           | 1.30 | 1.06 | 1.42 | .87                                                         | 35.87                       |                          |
| 22     | 15                                           | 250  | 12                                        | 12                                              | 40   | 49   | 34             | 27   | 36   | 27   | 19,01                                                       | FI-RESD-22/15L-V-W3-DKO     |                          |
| .87    | .59                                          | 3625 | .47                                       | .47                                             | 1.57 | 1.93 | 1.34           | 1.06 | 1.42 | 1.06 | 41.82                                                       |                             |                          |
| 22     | 18                                           | 250  | 15                                        | 15                                              | 41   | 50   | 34             | 27   | 36   | 32   | 18,13                                                       | FI-RESD-22/18L-V-W3-DKO     |                          |
| .87    | .71                                          | 3625 | .59                                       | .59                                             | 1.61 | 1.97 | 1.34           | 1.06 | 1.42 | 1.26 | 39.89                                                       |                             |                          |
| L / S  | 22                                           | 20   | 250                                       | 16                                              | 16   | 50   | 63             | 39   | 36   | 32   | 36                                                          | 22,22                       | FI-RESD-22L/20S-V-W3-DKO |
|        | .87                                          | .79  | 3625                                      | .63                                             | .63  | 1.97 | 2.48           | 1.54 | 1.42 | 1.26 | 1.42                                                        | 48.99                       |                          |
|        | 28                                           | 6    | 250                                       | 4                                               | 23   | 40   | 49             | 34   | 36   | 41   | 14                                                          | 22,90                       | FI-RESD-28/06L-V-W3-DKO  |
|        | 1.10                                         | .24  | 3625                                      | .16                                             | .91  | 1.57 | 1.93           | 1.34 | 1.42 | 1.61 | .55                                                         | 50.37                       |                          |
|        | 28                                           | 8    | 250                                       | 6                                               | 23   | 40   | 49             | 34   | 36   | 41   | 17                                                          | 20,95                       | FI-RESD-28/08L-V-W3-DKO  |
|        | 1.10                                         | .31  | 3625                                      | .24                                             | .91  | 1.57 | 1.93           | 1.34 | 1.42 | 1.61 | .67                                                         | 46.09                       |                          |
|        | 28                                           | 10   | 250                                       | 8                                               | 23   | 41   | 50             | 35   | 36   | 41   | 19                                                          | 21,74                       | FI-RESD-28/10L-V-W3-DKO  |
|        | 1.10                                         | .39  | 3625                                      | .31                                             | .91  | 1.61 | 1.97           | 1.38 | 1.42 | 1.61 | .75                                                         | 47.83                       |                          |
|        | 28                                           | 12   | 250                                       | 10                                              | 23   | 41   | 50             | 35   | 36   | 41   | 22                                                          | 10,22                       | FI-RESD-28/12L-V-W3-DKO  |
|        | 1.10                                         | .47  | 3625                                      | .39                                             | .91  | 1.61 | 1.97           | 1.38 | 1.42 | 1.61 | .87                                                         | 22.49                       |                          |
|        | 28                                           | 15   | 250                                       | 12                                              | 23   | 42   | 51             | 36   | 36   | 41   | 27                                                          | 18,85                       | FI-RESD-28/15L-V-W3-DKO  |
|        | 1.10                                         | .59  | 3625                                      | .47                                             | .91  | 1.65 | 2.01           | 1.42 | 1.42 | 1.61 | 1.06                                                        | 41.47                       |                          |
|        | 28                                           | 18   | 250                                       | 15                                              | 23   | 43   | 52             | 36   | 36   | 41   | 32                                                          | 22,50                       | FI-RESD-28/18L-V-W3-DKO  |
|        | 1.10                                         | .71  | 3625                                      | .59                                             | .91  | 1.69 | 2.05           | 1.42 | 1.42 | 1.61 | 1.26                                                        | 49.50                       |                          |
|        | 28                                           | 22   | 250                                       | 19                                              | 23   | 45   | 54             | 38   | 36   | 41   | 36                                                          | 22,80                       | FI-RESD-28/22L-V-W3-DKO  |
|        | 1.10                                         | .87  | 3625                                      | .75                                             | .91  | 1.77 | 2.13           | 1.50 | 1.42 | 1.61 | 1.42                                                        | 50.16                       |                          |

L / S





## Straight Reducer for Tube Ends with 24° Taper / O-Ring Type FI-RESDS • Series L



| Series | Tube OD<br>(mm/in) |      | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |      |                 |      |      |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|------|-----------------|-----------------------|------|------|-----------------|------|------|------|------|-----------------------------------|-----------------------------|
|        | D1                 | D2   |                 | D3                    | D4   | L    | L1 <sup>1</sup> | L2   | S1   | S2   | S3   |                                   |                             |
| L      | 35                 | 6    | 250             | 4                     | 28   | 41   | 52              | 37   | 46   | 50   | 14   | 7,82                              | FI-RESDS-35/06L-V-W3-DKO    |
|        | 1.38               | .24  | 3625            | .16                   | 1.10 | 1.61 | 2.05            | 1.46 | 1.81 | 1.97 | .55  | 17.20                             |                             |
|        | 35                 | 8    | 250             | 6                     | 28   | 41   | 52              | 37   | 46   | 50   | 17   | 35,43                             | FI-RESDS-35/08L-V-W3-DKO    |
|        | 1.38               | .31  | 3625            | .24                   | 1.10 | 1.61 | 2.05            | 1.46 | 1.81 | 1.97 | .67  | 77.95                             |                             |
|        | 35                 | 10   | 250             | 8                     | 28   | 42   | 53              | 38   | 46   | 50   | 19   | 35,35                             | FI-RESDS-35/10L-V-W3-DKO    |
|        | 1.38               | .39  | 3625            | .31                   | 1.10 | 1.65 | 2.09            | 1.50 | 1.81 | 1.97 | .75  | 77.77                             |                             |
|        | 35                 | 12   | 250             | 10                    | 28   | 42   | 53              | 38   | 46   | 50   | 22   | 33,34                             | FI-RESDS-35/12L-V-W3-DKO    |
|        | 1.38               | .47  | 3625            | .39                   | 1.10 | 1.65 | 2.09            | 1.50 | 1.81 | 1.97 | .87  | 73.34                             |                             |
|        | 35                 | 15   | 250             | 12                    | 28   | 43   | 54              | 39   | 46   | 50   | 27   | 15,22                             | FI-RESDS-35/15L-V-W3-DKO    |
|        | 1.38               | .59  | 3625            | .47                   | 1.10 | 1.69 | 2.13            | 1.54 | 1.81 | 1.97 | 1.06 | 33.49                             |                             |
|        | 35                 | 18   | 250             | 15                    | 28   | 44   | 55              | 39   | 46   | 50   | 32   | 34,32                             | FI-RESDS-35/18L-V-W3-DKO    |
|        | 1.38               | .71  | 3625            | .59                   | 1.10 | 1.73 | 2.17            | 1.54 | 1.81 | 1.97 | 1.26 | 75.50                             |                             |
|        | 35                 | 22   | 250             | 19                    | 28   | 46   | 57              | 41   | 46   | 50   | 36   | 34,80                             | FI-RESDS-35/22L-V-W3-DKO    |
|        | 1.38               | .87  | 3625            | .75                   | 1.10 | 1.81 | 2.24            | 1.61 | 1.81 | 1.97 | 1.42 | 76.57                             |                             |
|        | 35                 | 28   | 250             | 24                    | 24   | 46   | 57              | 41   | 46   | 50   | 41   | 38,10                             | FI-RESDS-35/28L-V-W3-DKO    |
|        | 1.38               | 1.10 | 3625            | .94                   | .94  | 1.81 | 2.24            | 1.61 | 1.81 | 1.97 | 1.61 | 83.82                             |                             |
|        | 42                 | 6    | 250             | 4                     | 35   | 36   | 48              | 41   | 50   | 60   | 14   | 52,66                             | FI-RESDS-42/06L-V-W3-DKO    |
|        | 1.65               | .24  | 3625            | .16                   | 1.38 | 1.42 | 1.89            | 1.61 | 1.97 | 2.36 | .55  | 115.85                            |                             |
|        | 42                 | 8    | 250             | 6                     | 35   | 36   | 48              | 41   | 50   | 60   | 17   | 52,58                             | FI-RESDS-42/08L-V-W3-DKO    |
|        | 1.65               | .31  | 3625            | .24                   | 1.38 | 1.42 | 1.89            | 1.61 | 1.97 | 2.36 | .67  | 115.67                            |                             |
|        | 42                 | 10   | 250             | 8                     | 35   | 44   | 56              | 42   | 50   | 60   | 19   | 52,58                             | FI-RESDS-42/10L-V-W3-DKO    |
|        | 1.65               | .39  | 3625            | .31                   | 1.38 | 1.73 | 2.20            | 1.65 | 1.97 | 2.36 | .75  | 115.68                            |                             |
|        | 42                 | 12   | 250             | 10                    | 35   | 44   | 56              | 42   | 50   | 60   | 22   | 52,60                             | FI-RESDS-42/12L-V-W3-DKO    |
|        | 1.65               | .47  | 3625            | .39                   | 1.38 | 1.73 | 2.20            | 1.65 | 1.97 | 2.36 | .87  | 115.72                            |                             |
|        | 42                 | 15   | 250             | 12                    | 35   | 46   | 58              | 43   | 50   | 60   | 27   | 52,30                             | FI-RESDS-42/15L-V-W3-DKO    |
|        | 1.65               | .59  | 3625            | .47                   | 1.38 | 1.81 | 2.28            | 1.69 | 1.97 | 2.36 | 1.06 | 115.06                            |                             |
|        | 42                 | 18   | 250             | 15                    | 35   | 46   | 58              | 42   | 50   | 60   | 32   | 52,00                             | FI-RESDS-42/18L-V-W3-DKO    |
|        | 1.65               | .71  | 3625            | .59                   | 1.38 | 1.81 | 2.28            | 1.65 | 1.97 | 2.36 | 1.26 | 114.40                            |                             |
|        | 42                 | 22   | 250             | 19                    | 35   | 48   | 60              | 44   | 50   | 60   | 36   | 50,10                             | FI-RESDS-42/22L-V-W3-DKO    |
|        | 1.65               | .87  | 3625            | .75                   | 1.38 | 1.89 | 2.36            | 1.73 | 1.97 | 2.36 | 1.42 | 110.21                            |                             |
|        | 42                 | 28   | 250             | 24                    | 35   | 49   | 61              | 44   | 50   | 60   | 41   | 50,19                             | FI-RESDS-42/28L-V-W3-DKO    |
|        | 1.65               | 1.10 | 3625            | .94                   | 1.38 | 1.93 | 2.40            | 1.73 | 1.97 | 2.36 | 1.61 | 110.43                            |                             |
|        | 42                 | 35   | 250             | 30                    | 30   | 53   | 65              | 43   | 50   | 60   | 50   | 55,90                             | FI-RESDS-42/35L-V-W3-DKO    |
|        | 1.65               | 1.38 | 3625            | 1.18                  | 1.18 | 2.09 | 2.56            | 1.69 | 1.97 | 2.36 | 1.97 | 122.98                            |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is FKM (Viton®).

### Ordering Codes

**\*FI-RESDS\*-10/\*08\*L\*-V\*-W3\*-DKO\*-MS**

\* Straight Reducer for Tube Ends with 24° Taper / O-Ring (DKO) **FI-RESDS**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Outside Tube Diameter D2 (in mm) **08**

\* Series Light Series (pages 144/145) **L**  
Heavy Series (pages 146/147) **S**

\* Seal Material FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body supplied with swivel nut and O-ring **-DKO**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts

Cutting Ring Type **FI-DS** Page 28

Soft-Sealing Cutting Ring Type **FI-WDDS** Page 29

Support Sleeve Type **FI-VH** Page 31

STAUFF Form EVO Sealing Ring Type **FI-FD** Page 32

Union Nut Type **FI-M** Page 33

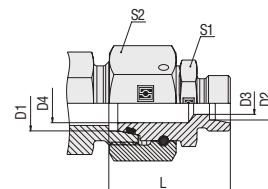
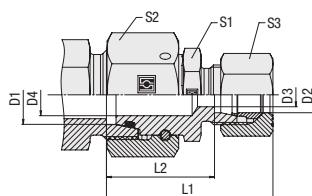
37° Flared Tube Fitting Set Type **FI-AB** Page 37

### Spare Parts / Accessories

O-Ring Type **O-RING** Page 239



## Straight Reducer for Tube Ends with 24° Taper / O-Ring Type FI-REDSD • Series S



### Ordering Codes

**\*FI-REDSD\*-10/\*08\*S\*-V\*-W3\*-DKO\*-MS**

\* Straight Reducer for Tube Ends  
with 24° Taper / O-Ring (DKO)

**FI-REDSD**

\* Outside Tube Diameter D1 (in mm)

**-10**

\* Outside Tube Diameter D2 (in mm)

**08**

\* Series Light Series (pages 144/145)  
Heavy Series (pages 146/147)

**L**  
**S**

\* Seal Material FKM (Viton®)  
EPDM

**-V**  
**-E**

\* Material Code Steel, zinc/nickel-plated

**-W3**

Please contact STAUFF for alternative  
materials and surface finishings.

\* Assembling / Kitting Fitting body supplied with  
swivel nut and O-ring

**-DKO**

Fitting body supplied with  
cutting ring and union nut

**-MS**

Fitting body supplied with  
soft-sealing cutting ring  
and union nut

**-MSV**

### Connecting Parts



Cutting Ring  
Type **FI-DS**

Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS**

Page 29



Support Sleeve  
Type **FI-VH**

Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD**

Page 32



Union Nut  
Type **FI-M**

Page 33



37° Flared Tube Fitting Set  
Type **FI-AB**

Page 37

### Spare Parts / Accessories



O-Ring  
Type **O-RING**

Page 239

| Series | Tube OD<br>(mm/in) |     | PN<br>(bar/psi) | Dimensions<br>(mm/in) |     |      |                 |      |      |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----|-----------------|-----------------------|-----|------|-----------------|------|------|------|------|-----------------------------------|-----------------------------|
|        | D1                 | D2  |                 | D3                    | D4  | L    | L1 <sup>1</sup> | L2   | S1   | S2   | S3   |                                   |                             |
| S      | 8                  | 6   | 800             | 4                     | 4   | 34   | 42              | 27   | 14   | 19   | 17   | 4,46                              | FI-REDSD-08/06S-V-W3-DKO    |
|        | .31                | .24 | 11600           | .16                   | .16 | 1.34 | 1.65            | 1.06 | .55  | .75  | .67  | 9.80                              |                             |
|        | 10                 | 6   | 800             | 4                     | 4   | 33   | 42              | 27,5 | 17   | 22   | 17   | 5,93                              | FI-REDSD-10/06S-V-W3-DKO    |
|        | .39                | .24 | 11600           | .16                   | .16 | 1.30 | 1.65            | 1.08 | .67  | .87  | .67  | 13.05                             |                             |
|        | 10                 | 8   | 800             | 5                     | 5   | 33   | 42              | 27,5 | 17   | 22   | 19   | 6,07                              | FI-REDSD-10/08S-V-W3-DKO    |
|        | .39                | .31 | 11600           | .20                   | .20 | 1.30 | 1.65            | 1.08 | .67  | .87  | .75  | 13.35                             |                             |
|        | 12                 | 6   | 630             | 4                     | 4   | 33   | 44              | 29   | 19   | 24   | 17   | 7,96                              | FI-REDSD-12/06S-V-W3-DKO    |
|        | .47                | .24 | 9135            | .16                   | .16 | 1.30 | 1.73            | 1.14 | .75  | .94  | .67  | 17.52                             |                             |
|        | 12                 | 8   | 630             | 5                     | 5   | 33   | 44              | 29   | 19   | 24   | 19   | 8,04                              | FI-REDSD-12/08S-V-W3-DKO    |
|        | .47                | .31 | 9135            | .20                   | .20 | 1.30 | 1.73            | 1.14 | .75  | .94  | .75  | 17.68                             |                             |
|        | 12                 | 10  | 630             | 7                     | 7   | 35   | 46              | 29,5 | 19   | 24   | 22   | 7,90                              | FI-REDSD-12/10S-V-W3-DKO    |
|        | .47                | .39 | 9135            | .28                   | .28 | 1.38 | 1.81            | 1.16 | .75  | .94  | .87  | 17.38                             |                             |
|        | 14                 | 6   | 630             | 4                     | 4   | 36   | 46              | 32   | 22   | 27   | 17   | 10,46                             | FI-REDSD-14/06S-V-W3-DKO    |
|        | .55                | .24 | 9135            | .16                   | .16 | 1.42 | 1.81            | 1.26 | .87  | 1.06 | .67  | 23.02                             |                             |
|        | 14                 | 8   | 630             | 5                     | 5   | 36   | 46              | 32   | 22   | 27   | 19   | 10,53                             | FI-REDSD-14/08S-V-W3-DKO    |
|        | .55                | .31 | 9135            | .20                   | .20 | 1.42 | 1.81            | 1.26 | .87  | 1.06 | .75  | 23.16                             |                             |
|        | 14                 | 10  | 630             | 7                     | 7   | 37   | 47              | 31   | 22   | 27   | 22   | 10,12                             | FI-REDSD-14/10S-V-W3-DKO    |
|        | .55                | .39 | 9135            | .28                   | .28 | 1.46 | 1.85            | 1.22 | .87  | 1.06 | .87  | 22.27                             |                             |
|        | 14                 | 12  | 630             | 8                     | 8   | 37   | 47              | 31   | 22   | 27   | 24   | 10,44                             | FI-REDSD-14/12S-V-W3-DKO    |
|        | .55                | .47 | 9135            | .31                   | .31 | 1.46 | 1.85            | 1.22 | .87  | 1.06 | .94  | 22.97                             |                             |
|        | 16                 | 6   | 630             | 4                     | 11  | 37   | 47              | 32   | 22   | 30   | 17   | 10,79                             | FI-REDSD-16/06S-V-W3-DKO    |
|        | .63                | .24 | 9135            | .16                   | .43 | 1.46 | 1.85            | 1.26 | .87  | 1.18 | .67  | 23.74                             |                             |
|        | 16                 | 8   | 630             | 5                     | 11  | 37   | 47              | 32   | 22   | 30   | 19   | 11,04                             | FI-REDSD-16/08S-V-W3-DKO    |
|        | .63                | .31 | 9135            | .20                   | .43 | 1.46 | 1.85            | 1.26 | .87  | 1.18 | .75  | 24.29                             |                             |
|        | 16                 | 10  | 630             | 7                     | 7   | 38   | 48              | 31,5 | 22   | 30   | 22   | 7,67                              | FI-REDSD-16/10S-V-W3-DKO    |
|        | .63                | .39 | 9135            | .28                   | .28 | 1.50 | 1.89            | 1.24 | .87  | 1.18 | .87  | 16.87                             |                             |
| S / L  | 16                 | 12  | 630             | 8                     | 8   | 38   | 48              | 31,5 | 22   | 30   | 24   | 12,07                             | FI-REDSD-16/12S-V-W3-DKO    |
|        | .63                | .47 | 9135            | .31                   | .31 | 1.50 | 1.89            | 1.24 | .87  | 1.18 | .94  | 26.55                             |                             |
|        | 16                 | 14  | 630             | 10                    | 10  | 41   | 51              | 33   | 24   | 30   | 27   | 12,64                             | FI-REDSD-16/14S-V-W3-DKO    |
|        | .63                | .55 | 9135            | .39                   | .39 | 1.61 | 2.01            | 1.30 | .94  | 1.18 | 1.06 | 27.80                             |                             |
|        | 16                 | 15  | 400             | 11                    | 11  | 40   | 47              | 32   | 24   | 30   | 27   | 11,66                             | FI-REDSD-16S/15L-V-W3-DKO   |
|        | .63                | .59 | 5800            | .43                   | .43 | 1.57 | 1.85            | 1.26 | .94  | 1.18 | 1.06 | 25.71                             |                             |
| S / L  | 20                 | 6   | 420             | 4                     | 14  | 40   | 51              | 36   | 27   | 36   | 17   | 17,16                             | FI-REDSD-20/06S-V-W3-DKO    |
|        | .79                | .24 | 6091            | .16                   | .55 | 1.57 | 2.01            | 1.42 | 1.06 | 1.42 | .67  | 37.75                             |                             |
|        | 20                 | 8   | 420             | 5                     | 14  | 40   | 51              | 36   | 27   | 36   | 19   | 17,61                             | FI-REDSD-20/08S-V-W3-DKO    |
|        | .79                | .31 | 6091            | .20                   | .55 | 1.57 | 2.01            | 1.42 | 1.06 | 1.42 | .75  | 38.74                             |                             |
|        | 20                 | 10  | 420             | 7                     | 14  | 41   | 52              | 35,5 | 27   | 36   | 22   | 17,49                             | FI-REDSD-20/10S-V-W3-DKO    |
|        | .79                | .39 | 6091            | .28                   | .55 | 1.61 | 2.05            | 1.40 | 1.06 | 1.42 | .87  | 38.48                             |                             |
| S / L  | 20                 | 12  | 420             | 8                     | 14  | 41   | 52              | 35,5 | 27   | 36   | 24   | 17,76                             | FI-REDSD-20/12S-V-W3-DKO    |
|        | .79                | .47 | 6091            | .31                   | .55 | 1.61 | 2.05            | 1.40 | 1.06 | 1.42 | .94  | 39.08                             |                             |
|        | 20                 | 14  | 420             | 10                    | 14  | 44   | 55              | 37   | 27   | 36   | 27   | 19,83                             | FI-REDSD-20/14S-V-W3-DKO    |
|        | .79                | .55 | 6091            | .39                   | .55 | 1.73 | 2.17            | 1.46 | 1.06 | 1.42 | 1.06 | 43.62                             |                             |
|        | 20                 | 15  | 400             | 12                    | 12  | 43   | 51              | 35   | 27   | 36   | 30   | 18,38                             | FI-REDSD-20S/15L-V-W3-DKO   |
|        | .79                | .59 | 5800            | .47                   | .47 | 1.69 | 2.01            | 1.38 | 1.06 | 1.42 | 1.18 | 40.52                             |                             |
| S / L  | 20                 | 16  | 420             | 12                    | 12  | 44   | 55              | 36,5 | 27   | 36   | 30   | 19,34                             | FI-REDSD-20/16S-V-W3-DKO    |
|        | .79                | .63 | 6091            | .47                   | .47 | 1.73 | 2.17            | 1.44 | 1.06 | 1.42 | 1.18 | 42.56                             |                             |
| S / L  | 20                 | 18  | 400             | 14                    | 14  | 43   | 54              | 35   | 27   | 36   | 32   | 18,10                             | FI-REDSD-20S/18L-V-W3-DKO   |
|        | .79                | .71 | 5800            | .55                   | .55 | 1.69 | 2.13            | 1.38 | 1.06 | 1.42 | 1.26 | 39.90                             |                             |

<sup>1</sup> Approximate dimension in assembled condition.

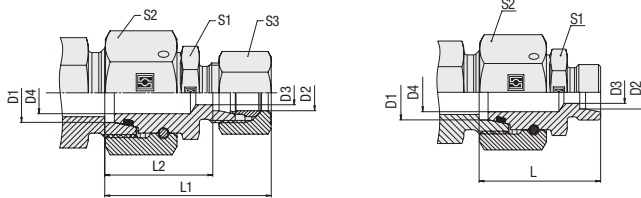
<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is FKM (Viton®).



## Straight Reducer for Tube Ends with 24° Taper / O-Ring Type FI-REDSO - Series S



| Series | Tube OD<br>(mm/in) |      | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |      |                 |      |      |      |        | Weight<br>( <sup>kg</sup> /lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|------|-----------------|-----------------------|------|------|-----------------|------|------|------|--------|------------------------------------------------|-----------------------------|
|        | D1                 | D2   |                 | D3                    | D4   | L    | L1 <sup>1</sup> | L2   | S1   | S2   | S3     |                                                |                             |
| S      | 25                 | 6    | 420             | 4                     | 18   | 41   | 53              | 38,5 | 36   | 46   | 17     | 29,87                                          | FI-RESDS-25/06S-V-W3-DKO    |
|        | .98                | .24  | 6091            | .16                   | .71  | 1.61 | 2.09            | 1.52 | 1.42 | 1.81 | .67    | 65.72                                          |                             |
|        | 25                 | 8    | 420             | 5                     | 18   | 41   | 53              | 38,5 | 36   | 46   | 19     | 30,39                                          | FI-RESDS-25/08S-V-W3-DKO    |
|        | .98                | .31  | 6091            | .20                   | .71  | 1.61 | 2.09            | 1.52 | 1.42 | 1.81 | .75    | 66.85                                          |                             |
|        | 25                 | 10   | 420             | 7                     | 18   | 42   | 54              | 38   | 36   | 46   | 22     | 16,95                                          | FI-RESDS-25/10S-V-W3-DKO    |
|        | .98                | .39  | 6091            | .28                   | .71  | 1.65 | 2.13            | 1.50 | 1.42 | 1.81 | .87    | 37.29                                          |                             |
|        | 25                 | 12   | 420             | 8                     | 18   | 42   | 54              | 38   | 36   | 46   | 24     | 30,41                                          | FI-RESDS-25/12S-V-W3-DKO    |
|        | .98                | .47  | 6091            | .31                   | .71  | 1.65 | 2.13            | 1.50 | 1.42 | 1.81 | .94    | 66.91                                          |                             |
|        | 25                 | 14   | 420             | 10                    | 18   | 45   | 57              | 40   | 36   | 46   | 27     | 30,95                                          | FI-RESDS-25/14S-V-W3-DKO    |
|        | .98                | .55  | 6091            | .39                   | .71  | 1.77 | 2.24            | 1.57 | 1.42 | 1.81 | 1.06   | 68.09                                          |                             |
| S / L  | 25                 | 16   | 420             | 12                    | 18   | 45   | 57              | 39   | 36   | 46   | 30     | 30,29                                          | FI-RESDS-25/16S-V-W3-DKO    |
|        | .98                | .63  | 6091            | .47                   | .71  | 1.77 | 2.24            | 1.54 | 1.42 | 1.81 | 1.18   | 66.65                                          |                             |
|        | 25                 | 18   | 400             | 15                    | 18   | 45   | 53              | 37   | 36   | 46   | 32     | 30,54                                          | FI-RESDS-25S/18L-V-W3-DKO   |
|        | .98                | .71  | 5800            | .59                   | .71  | 1.77 | 2.09            | 1.46 | 1.42 | 1.81 | 1.26   | 67.33                                          |                             |
|        | 25                 | 20   | 420             | 16                    | 16   | 49   | 61              | 39   | 36   | 46   | 36     | 32,97                                          | FI-RESDS-25/20S-V-W3-DKO    |
|        | .98                | .79  | 6091            | .63                   | .63  | 1.93 | 2.40            | 1.54 | 1.42 | 1.81 | 1.42   | 72.53                                          |                             |
|        | 30                 | 6    | 420             | 4                     | 22   | 46   | 59              | 44   | 41   | 50   | 17     | 37,93                                          | FI-RESDS-30/06S-V-W3-DKO    |
|        | 1.18               | .24  | 6091            | .16                   | .87  | 1.81 | 2.32            | 1.73 | 1.61 | 1.97 | .67    | 83.45                                          |                             |
|        | 30                 | 8    | 420             | 5                     | 22   | 46   | 59              | 44   | 41   | 50   | 19     | 31,17                                          | FI-RESDS-30/08S-V-W3-DKO    |
|        | 1.18               | .31  | 6091            | .20                   | .87  | 1.81 | 2.32            | 1.73 | 1.61 | 1.97 | .75    | 68.57                                          |                             |
|        | 30                 | 10   | 420             | 7                     | 22   | 47   | 60              | 43,5 | 41   | 50   | 22     | 38,28                                          | FI-RESDS-30/10S-V-W3-DKO    |
|        | 1.18               | .39  | 6091            | .28                   | .87  | 1.85 | 2.36            | 1.71 | 1.61 | 1.97 | .87    | 84.22                                          |                             |
|        | 30                 | 12   | 420             | 8                     | 22   | 47   | 60              | 43,5 | 41   | 50   | 24     | 38,65                                          | FI-RESDS-30/12S-V-W3-DKO    |
|        | 1.18               | .47  | 6091            | .31                   | .87  | 1.85 | 2.36            | 1.71 | 1.61 | 1.97 | .94    | 85.03                                          |                             |
|        | 30                 | 14   | 420             | 10                    | 22   | 50   | 63              | 45   | 41   | 50   | 27     | 38,88                                          | FI-RESDS-30/14S-V-W3-DKO    |
|        | 1.18               | .55  | 6091            | .39                   | .87  | 1.97 | 2.48            | 1.77 | 1.61 | 1.97 | 1.06   | 85.53                                          |                             |
|        | 30                 | 16   | 420             | 12                    | 22   | 50   | 63              | 44,5 | 41   | 50   | 30     | 38,59                                          | FI-RESDS-30/16S-V-W3-DKO    |
|        | 1.18               | .63  | 6091            | .47                   | .87  | 1.97 | 2.48            | 1.75 | 1.61 | 1.97 | 1.18   | 84.89                                          |                             |
|        | 30                 | 20   | 420             | 16                    | 22   | 53   | 66              | 44,5 | 41   | 50   | 36     | 39,86                                          | FI-RESDS-30/20S-V-W3-DKO    |
|        | 1.18               | .79  | 6091            | .63                   | .87  | 2.09 | 2.60            | 1.75 | 1.61 | 1.97 | 1.42   | 87.69                                          |                             |
|        | 30                 | 25   | 420             | 20                    | 20   | 56   | 69              | 45   | 41   | 50   | 46     | 42,96                                          | FI-RESDS-30/25S-V-W3-DKO    |
|        | 1.18               | .98  | 6091            | .79                   | .79  | 2.20 | 2.72            | 1.77 | 1.61 | 1.97 | 1.81   | 94.51                                          |                             |
|        | 38                 | 6    | 420             | 4                     | 30   | 47   | 62              | 47,5 | 50   | 60   | 17     | 55,50                                          | FI-RESDS-38/06S-V-W3-DKO    |
|        | 1.50               | .24  | 6091            | .16                   | 1.18 | 1.85 | 2.44            | 1.87 | 1.97 | 2.36 | .67    | 122.10                                         |                             |
|        | 38                 | 8    | 420             | 5                     | 30   | 47   | 62              | 47,5 | 50   | 60   | 19     | 55,50                                          | FI-RESDS-38/08S-V-W3-DKO    |
|        | 1.50               | .31  | 6091            | .20                   | 1.18 | 1.85 | 2.44            | 1.87 | 1.97 | 2.36 | .75    | 122.10                                         |                             |
|        | 38                 | 10   | 420             | 7                     | 30   | 48   | 63              | 47   | 50   | 60   | 22     | 56,40                                          | FI-RESDS-38/10S-V-W3-DKO    |
|        | 1.50               | .39  | 6091            | .28                   | 1.18 | 1.89 | 2.48            | 1.85 | 1.97 | 2.36 | .87    | 124.08                                         |                             |
|        | 38                 | 12   | 420             | 8                     | 30   | 48   | 63              | 47   | 50   | 60   | 24     | 55,50                                          | FI-RESDS-38/12S-V-W3-DKO    |
|        | 1.50               | .47  | 6091            | .31                   | 1.18 | 1.89 | 2.48            | 1.85 | 1.97 | 2.36 | .94    | 122.10                                         |                             |
|        | 38                 | 14   | 420             | 10                    | 30   | 51   | 66              | 49   | 50   | 60   | 27     | 62,87                                          | FI-RESDS-38/14S-V-W3-DKO    |
|        | 1.50               | .55  | 6091            | .39                   | 1.18 | 2.01 | 2.60            | 1.93 | 1.97 | 2.36 | 1.06   | 138.32                                         |                             |
|        | 38                 | 16   | 420             | 12                    | 30   | 51   | 66              | 48   | 50   | 60   | 30     | 55,80                                          | FI-RESDS-38/16S-V-W3-DKO    |
|        | 1.50               | .63  | 6091            | .47                   | 1.18 | 2.01 | 2.60            | 1.89 | 1.97 | 2.36 | 1.18   | 122.76                                         |                             |
|        | 38                 | 20   | 420             | 16                    | 30   | 55   | 70              | 48   | 50   | 60   | 36     | 57,40                                          | FI-RESDS-38/20S-V-W3-DKO    |
|        | 1.50               | .79  | 6091            | .63                   | 1.18 | 2.17 | 2.76            | 1.89 | 1.97 | 2.36 | 1.42   | 126.28                                         |                             |
|        | 38                 | 25   | 420             | 20                    | 30   | 58   | 73              | 48,5 | 50   | 60   | 46     | 59,30                                          | FI-RESDS-38/25S-V-W3-DKO    |
| 1.50   | .98                | 6091 | .79             | 1.18                  | 2.28 | 2.87 | 1.91            | 1.97 | 2.36 | 1.81 | 130.46 |                                                |                             |
| 38     | 30                 | 420  | 25              | 25                    | 61   | 76   | 49              | 50   | 60   | 50   | 63,70  | FI-RESDS-38/30S-V-W3-DKO                       |                             |
| 1.50   | 1.18               | 6091 | .98             | .98                   | 2.40 | 2.99 | 1.93            | 1.97 | 2.36 | 1.97 | 140.14 |                                                |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is FKM (Viton®).

### Ordering Codes

**\*FI-REDSO\*-10/\*08\*S\*-V\*-W3\*-DKO\*-MS**

\* Straight Reducer for Tube Ends with 24° Taper / O-Ring (DKO) **FI-REDSO**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Outside Tube Diameter D2 (in mm) **08**

\* Series Light Series (pages 144/145) **L**  
Heavy Series (pages 146/147) **S**

\* Seal Material FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body supplied with swivel nut and O-ring **-DKO**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts


Cutting Ring  
Type **FI-DS** Page 28

Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29

Support Sleeve  
Type **FI-VH** Page 31

STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32

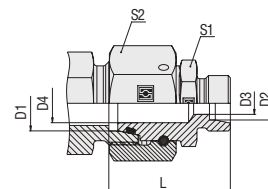
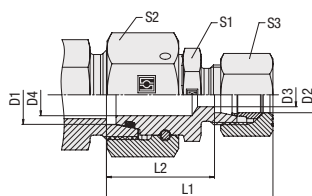
Union Nut  
Type **FI-M** Page 33

37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

### Spare Parts / Accessories


O-Ring  
Type **O-RING** Page 239


## Distance Adaptors with 24° Taper / O-Ring Type FI-REDSO • Series L / S



### Ordering Codes

#### \*FI-REDSO\*-08\*L\*-V\*-W3\*-DKO\*-MS

\* Distance Adaptors with 24° Taper /  
O-Ring (DKO)

FI-REDSO

\* Outside Tube Diameter D1/D2 (in mm)

-08

\* Series

Light Series

L

Heavy Series

S

\* Seal Material

FKM (Viton®)

-V

EPDM

-E

\* Material Code

Steel, zinc/nickel-plated

-W3

Please contact STAUFF for alternative  
materials and surface finishings.

\* Assembling / Kitting Fitting body supplied with  
swivel nut and O-ring

-DKO

Fitting body supplied with  
cutting ring and union nut

-MS

Fitting body supplied with  
soft-sealing cutting ring  
and union nut

-MSV

### Connecting Parts



Cutting Ring  
Type FI-DS

Page 28



Soft-Sealing Cutting Ring  
Type FI-WDDSD

Page 29



Support Sleeve  
Type FI-VH

Page 31



STAUFF Form EVO Sealing Ring  
Type FI-FD

Page 32



Union Nut  
Type FI-M

Page 33



37° Flared Tube Fitting Set  
Type FI-AB

Page 37

### Spare Parts / Accessories



O-Ring  
Type O-RING

Page 239

| Series | Tube OD<br>(mm/in) |      | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |      |                 |      |      |      |      | Weight<br>(kg/lbs) ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|------|-----------------|-----------------------|------|------|-----------------|------|------|------|------|------------------------|-----------------------------|
|        | D1                 | D2   |                 | D3                    | D4   | L    | L1 <sup>1</sup> | L2   | S1   | S2   | S3   | per 100                |                             |
| L      | 6                  | 6    | 500             | 3                     | 3    | 43   | 52              | 36   | 12   | 14   | 14   | 4,33                   | FI-REDSO-06L-V-W3-DKO       |
|        | .24                | .24  | 7250            | .12                   | .12  | 1.69 | 2.05            | 1.42 | .47  | .55  | .55  | 9.55                   |                             |
|        | 8                  | 8    | 500             | 5                     | 5    | 43   | 51              | 36   | 14   | 17   | 17   | 4,63                   | FI-REDSO-08L-V-W3-DKO       |
|        | .31                | .31  | 7250            | .2                    | .2   | 1.69 | 2.01            | 1.42 | .55  | .67  | .67  | 10.21                  |                             |
|        | 10                 | 10   | 500             | 6,5                   | 6,5  | 44   | 51              | 37   | 17   | 19   | 19   | 6,15                   | FI-REDSO-10L-V-W3-DKO       |
|        | .39                | .39  | 7250            | .26                   | .26  | 1.73 | 2.01            | 1.46 | .67  | .75  | .75  | 13.56                  |                             |
|        | 12                 | 12   | 400             | 8                     | 8    | 43,5 | 52              | 36,5 | 19   | 22   | 22   | 7,85                   | FI-REDSO-12L-V-W3-DKO       |
|        | .47                | .47  | 5800            | .31                   | .31  | 1.71 | 2.05            | 1.44 | .75  | .87  | .87  | 17.31                  |                             |
|        | 15                 | 15   | 400             | 11                    | 11   | 38   | 55              | 38   | 24   | 27   | 27   | 12,05                  | FI-REDSO-15L-V-W3-DKO       |
|        | .59                | .59  | 5800            | .43                   | .43  | 1.50 | 2.17            | 1.50 | .94  | 1.06 | 1.06 | 26.57                  |                             |
|        | 18                 | 18   | 400             | 13                    | 13   | 43   | 53              | 36   | 27   | 32   | 32   | 15,61                  | FI-REDSO-18L-V-W3-DKO       |
|        | .71                | .71  | 5800            | .51                   | .51  | 1.69 | 2.09            | 1.42 | 1.06 | 1.26 | 1.26 | 34.41                  |                             |
|        | 22                 | 22   | 250             | 17                    | 17   | 50   | 59              | 42   | 32   | 36   | 36   | 21,63                  | FI-REDSO-22L-V-W3-DKO       |
|        | .87                | .87  | 3625            | .67                   | .67  | 1.97 | 2.32            | 1.65 | 1.26 | 1.42 | 1.42 | 47.69                  |                             |
|        | 28                 | 28   | 250             | 23                    | 23   | 51   | 61              | 43   | 41   | 41   | 41   | 27,45                  | FI-REDSO-28L-V-W3-DKO       |
|        | 1.10               | 1.10 | 3625            | .91                   | .91  | 2.01 | 2.40            | 1.69 | 1.61 | 1.61 | 1.61 | 60.52                  |                             |
|        | 35                 | 35   | 250             | 24                    | 24   | 62   | 74              | 51   | 46   | 50   | 50   | 53,4                   | FI-REDSO-35L-V-W3-DKO       |
|        | 1.38               | 1.38 | 3625            | .94                   | .94  | 2.44 | 2.91            | 2.01 | 1.81 | 1.97 | 1.97 | 117.73                 |                             |
|        | 42                 | 42   | 250             | 35                    | 35   | 72   | 83              | 61   | 55   | 60   | 60   | 77,7                   | FI-REDSO-42L-V-W3-DKO       |
|        | 1.65               | 1.65 | 3625            | 1.38                  | 1.38 | 2.83 | 3.27            | 2.40 | 2.17 | 2.36 | 2.36 | 171.3                  |                             |
| S      | 6                  | 6    | 800             | 3                     | 3    | 44   | 50              | 37   | 14   | 17   | 17   | 4,91                   | FI-REDSO-06S-V-W3-DKO       |
|        | .24                | .24  | 11600           | .12                   | .12  | 1.73 | 1.97            | 1.46 | .55  | .67  | .67  | 10.82                  |                             |
|        | 8                  | 8    | 800             | 4                     | 4    | 44   | 51              | 37   | 17   | 19   | 19   | 6,64                   | FI-REDSO-08S-V-W3-DKO       |
|        | .31                | .31  | 11600           | .16                   | .16  | 1.73 | 2.01            | 1.46 | .67  | .75  | .75  | 14.64                  |                             |
|        | 10                 | 10   | 800             | 6,5                   | 6,5  | 44   | 52              | 36   | 19   | 22   | 22   | 8,18                   | FI-REDSO-10S-V-W3-DKO       |
|        | .39                | .39  | 11600           | .26                   | .26  | 1.73 | 2.05            | 1.42 | .75  | .87  | .87  | 18.03                  |                             |
|        | 12                 | 12   | 630             | 8                     | 8    | 45   | 54              | 38   | 22   | 24   | 24   | 10,28                  | FI-REDSO-12S-V-W3-DKO       |
|        | .47                | .47  | 9135            | .31                   | .31  | 1.77 | 2.13            | 1.50 | .87  | .94  | .94  | 22.66                  |                             |
|        | 14                 | 14   | 630             | 9                     | 9    | 49   | 58              | 41   | 24   | 27   | 27   | 13,75                  | FI-REDSO-14S-V-W3-DKO       |
|        | .55                | .55  | 9135            | .35                   | .35  | 1.93 | 2.28            | 1.61 | .94  | 1.06 | 1.06 | 30.31                  |                             |
|        | 16                 | 16   | 630             | 11                    | 11   | 49   | 58              | 41   | 27   | 30   | 30   | 16,53                  | FI-REDSO-16S-V-W3-DKO       |
|        | .63                | .63  | 9135            | .43                   | .43  | 1.93 | 2.28            | 1.61 | 1.06 | 1.18 | 1.18 | 36.44                  |                             |
|        | 20                 | 20   | 420             | 14                    | 14   | 56   | 67              | 46   | 32   | 36   | 36   | 26,97                  | FI-REDSO-20S-V-W3-DKO       |
|        | .79                | .79  | 6091            | .55                   | .55  | 2.20 | 2.64            | 1.81 | 1.26 | 1.42 | 1.42 | 59.46                  |                             |
|        | 25                 | 25   | 420             | 18                    | 18   | 61   | 73              | 49   | 41   | 46   | 46   | 46,37                  | FI-REDSO-25S-V-W3-DKO       |
|        | .98                | .98  | 6091            | .71                   | .71  | 2.40 | 2.87            | 1.93 | 1.61 | 1.81 | 1.81 | 102.23                 |                             |
|        | 30                 | 30   | 420             | 22                    | 22   | 67   | 80              | 54   | 46   | 50   | 50   | 60                     | FI-REDSO-30S-V-W3-DKO       |
|        | 1.18               | 1.18 | 6091            | .87                   | .87  | 2.64 | 3.15            | 2.13 | 1.81 | 1.97 | 1.97 | 132.28                 |                             |
|        | 38                 | 38   | 420             | 32                    | 32   | 72   | 87              | 56   | 55   | 60   | 60   | 82,5                   | FI-REDSO-38S-V-W3-DKO       |
|        | 1.50               | 1.50 | 6091            | 1.26                  | 1.26 | 2.83 | 3.43            | 2.20 | 2.17 | 2.36 | 2.36 | 181.88                 |                             |

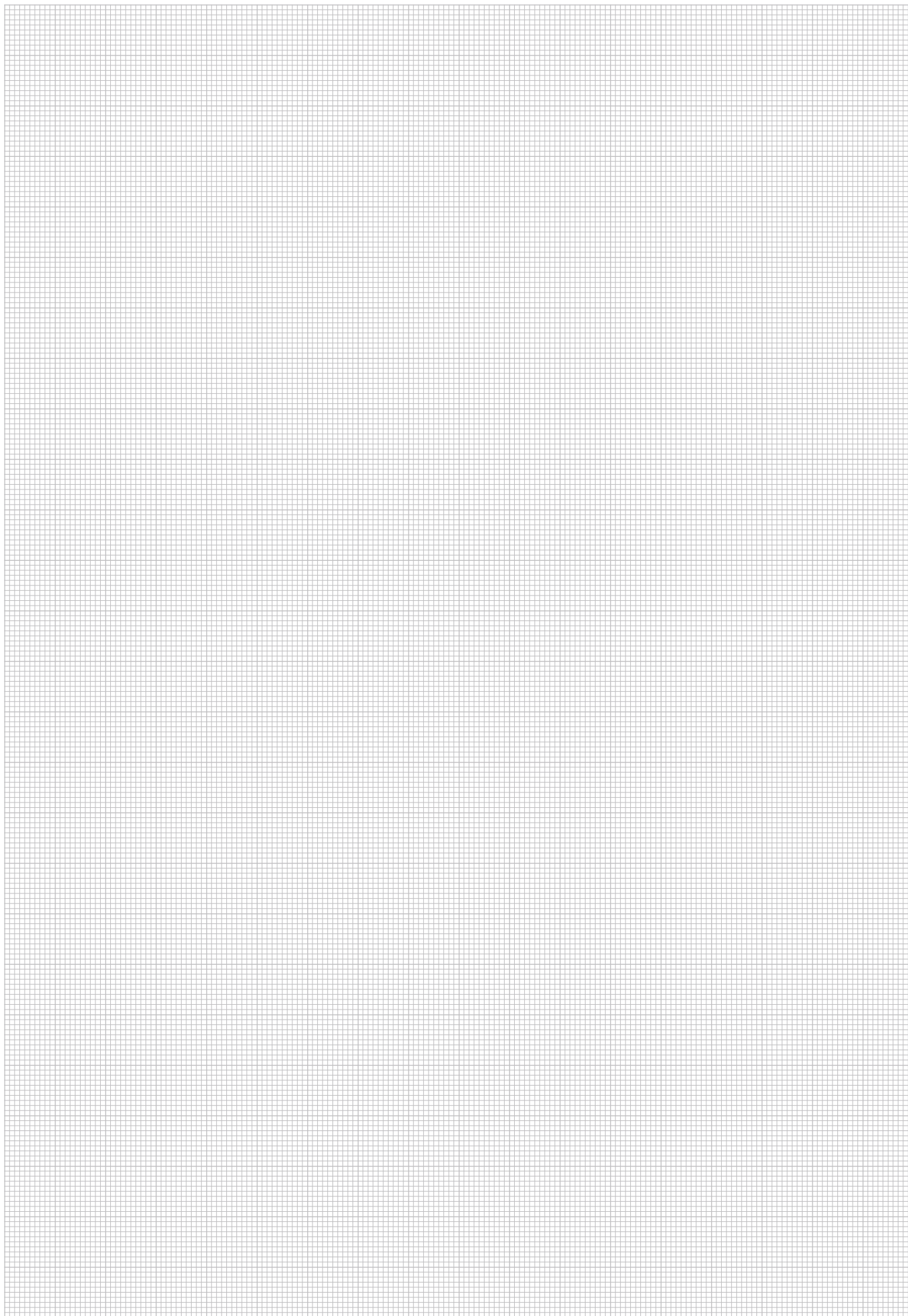
<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

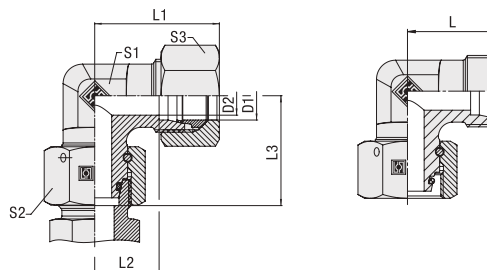
Standard seal material is FKM (Viton®).







## Adjustable Elbow (90°) with 24° Taper / O-Ring Type FI-EWD ▪ Series L / S



### Ordering Codes

#### \*FI-EWD\*-10\*L\*-V\*-W3\*-DKO\*-MS

\* Adjustable Elbow (90°)  
with 24° Taper / O-Ring (DKO) **FI-EWD**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series **L**  
Light Series  
Heavy Series **S**

\* Seal Material **-V**  
FKM (Viton®)  
EPDM **-E**

\* Material Code **-W3**  
Steel, zinc/nickel-plated

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body supplied with swivel nut and O-ring **-DKO**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

### Spare Parts / Accessories



O-Ring  
Type **O-RING** Page 239

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |                 |      |      |      |      |      |        | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------|------|-----------------|------|------|------|------|------|--------|-----------------------------------|-----------------------------|
|        |                          |                 | D2                    | L    | L1 <sup>1</sup> | L2   | L3   | S1   | S2   | S3   |        |                                   |                             |
| L      | 6                        | 500             | 4                     | 19   | 27              | 12   | 26   | 12   | 14   | 14   | 4,00   |                                   | FI-EWD-06L-V-W3-DKO         |
|        | .24                      | 7250            | .16                   | .75  | 1.06            | .47  | 1.02 | .47  | .55  | .55  | 8.81   |                                   |                             |
|        | 8                        | 500             | 6                     | 21   | 29              | 14   | 27,5 | 12   | 17   | 17   | 4,03   |                                   | FI-EWD-08L-V-W3-DKO         |
|        | .31                      | 7250            | .24                   | .83  | 1.14            | .55  | 1.08 | .47  | .67  | .67  | 8.86   |                                   |                             |
|        | 10                       | 500             | 8                     | 22   | 30              | 15   | 29   | 14   | 19   | 19   | 5,36   |                                   | FI-EWD-10L-V-W3-DKO         |
|        | .39                      | 7250            | .31                   | .87  | 1.18            | .59  | 1.14 | .55  | .75  | .75  | 11.78  |                                   |                             |
|        | 12                       | 400             | 10                    | 24   | 32              | 17   | 29,5 | 17   | 22   | 22   | 7,60   |                                   | FI-EWD-12L-V-W3-DKO         |
|        | .47                      | 5800            | .39                   | .94  | 1.26            | .67  | 1.16 | .67  | .87  | .87  | 16.72  |                                   |                             |
|        | 15                       | 400             | 12                    | 28   | 36              | 21   | 32,5 | 19   | 27   | 27   | 12,50  |                                   | FI-EWD-15L-V-W3-DKO         |
|        | .59                      | 5800            | .47                   | 1.10 | 1.42            | .83  | 1.28 | .75  | 1.06 | 1.06 | 27.50  |                                   |                             |
|        | 18                       | 400             | 15                    | 31   | 40              | 23,5 | 35,5 | 24   | 32   | 32   | 18,23  |                                   | FI-EWD-18L-V-W3-DKO         |
|        | .71                      | 5800            | .59                   | 1.22 | 1.57            | .93  | 1.40 | .94  | 1.26 | 1.26 | 40.11  |                                   |                             |
|        | 22                       | 400             | 19                    | 35   | 44              | 27,5 | 38,5 | 27   | 36   | 36   | 24,57  |                                   | FI-EWD-22L-V-W3-DKO         |
|        | .87                      | 5800            | .75                   | 1.38 | 1.73            | 1.08 | 1.52 | 1.06 | 1.42 | 1.42 | 54.05  |                                   |                             |
|        | 28                       | 250             | 24                    | 38   | 47              | 30,5 | 41,5 | 36   | 41   | 41   | 34,95  |                                   | FI-EWD-28L-V-W3-DKO         |
|        | 1.10                     | 3625            | .94                   | 1.50 | 1.85            | 1.20 | 1.63 | 1.42 | 1.61 | 1.61 | 76.89  |                                   |                             |
|        | 35                       | 250             | 30                    | 45   | 56              | 34,5 | 51   | 41   | 50   | 50   | 56,50  |                                   | FI-EWD-35L-V-W3-DKO         |
|        | 1.38                     | 3625            | 1.18                  | 1.77 | 2.20            | 1.36 | 2.01 | 1.61 | 1.97 | 1.97 | 124.30 |                                   |                             |
|        | 42                       | 250             | 36                    | 51   | 63              | 40   | 56   | 50   | 60   | 60   | 85,10  |                                   | FI-EWD-42L-V-W3-DKO         |
|        | 1.65                     | 3625            | 1.42                  | 2.01 | 2.48            | 1.57 | 2.20 | 1.97 | 2.36 | 2.36 | 187.22 |                                   |                             |
| S      | 6                        | 800             | 4                     | 23   | 31              | 16   | 27   | 12   | 17   | 17   | 4,67   |                                   | FI-EWD-06S-V-W3-DKO         |
|        | .24                      | 11600           | .16                   | .91  | 1.22            | .63  | 1.06 | .47  | .67  | .67  | 10.27  |                                   |                             |
|        | 8                        | 800             | 5                     | 24   | 32              | 17   | 27,5 | 14   | 19   | 19   | 6,29   |                                   | FI-EWD-08S-V-W3-DKO         |
|        | .31                      | 11600           | .20                   | .94  | 1.26            | .67  | 1.08 | .55  | .75  | .75  | 13.84  |                                   |                             |
|        | 10                       | 800             | 7                     | 25   | 34              | 17,5 | 30   | 17   | 22   | 22   | 8,58   |                                   | FI-EWD-10S-V-W3-DKO         |
|        | .39                      | 11600           | .28                   | .98  | 1.34            | .69  | 1.18 | .67  | .87  | .87  | 18.87  |                                   |                             |
|        | 12                       | 630             | 8                     | 29   | 38              | 21,5 | 31   | 17   | 24   | 24   | 11,02  |                                   | FI-EWD-12S-V-W3-DKO         |
|        | .47                      | 9135            | .31                   | 1.14 | 1.50            | .85  | 1.22 | .67  | .94  | .94  | 24.24  |                                   |                             |
|        | 14                       | 630             | 10                    | 30   | 40              | 22   | 35   | 19   | 27   | 27   | 14,34  |                                   | FI-EWD-14S-V-W3-DKO         |
|        | .55                      | 9135            | .39                   | 1.18 | 1.57            | .87  | 1.38 | .75  | 1.06 | 1.06 | 31.54  |                                   |                             |
|        | 16                       | 630             | 12                    | 33   | 43              | 24,5 | 36,5 | 24   | 30   | 30   | 19,26  |                                   | FI-EWD-16S-V-W3-DKO         |
|        | .63                      | 9135            | .47                   | 1.30 | 1.69            | .96  | 1.44 | .94  | 1.18 | 1.18 | 42.38  |                                   |                             |
|        | 20                       | 420             | 16                    | 37   | 48              | 26,5 | 44,5 | 27   | 36   | 36   | 29,86  |                                   | FI-EWD-20S-V-W3-DKO         |
|        | .79                      | 6091            | .63                   | 1.46 | 1.89            | 1.04 | 1.75 | 1.06 | 1.42 | 1.42 | 65.70  |                                   |                             |
|        | 25                       | 420             | 20                    | 42   | 54              | 30   | 50   | 36   | 46   | 46   | 53,20  |                                   | FI-EWD-25S-V-W3-DKO         |
|        | .98                      | 6091            | .79                   | 1.65 | 2.13            | 1.18 | 1.97 | 1.42 | 1.81 | 1.81 | 117.04 |                                   |                             |
|        | 30                       | 420             | 25                    | 49   | 62              | 35,5 | 55   | 41   | 50   | 50   | 72,50  |                                   | FI-EWD-30S-V-W3-DKO         |
|        | 1.18                     | 6091            | .98                   | 1.93 | 2.44            | 1.40 | 2.17 | 1.61 | 1.97 | 1.97 | 159.50 |                                   |                             |
|        | 38                       | 420             | 32                    | 57   | 72              | 41   | 63   | 50   | 60   | 60   | 109,40 |                                   | FI-EWD-38S-V-W3-DKO         |
|        | 1.50                     | 6091            | 1.26                  | 2.24 | 2.83            | 1.61 | 2.48 | 1.97 | 2.36 | 2.36 | 240.68 |                                   |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is FKM (Viton®).

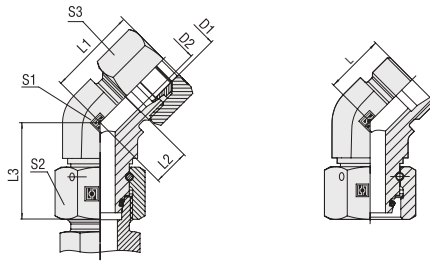


Typical application with a  
Straight Male Stud Fitting FI-GE-...





## Adjustable Elbow (45°) with 24° Taper / O-Ring Type FI-EVD • Series L / S



| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in) |      |                 |      |      |      |      |      |        | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------|-----------------|------|------|------|------|------|--------|-----------------------------------|-----------------------------|
|        | D1                 |                 | D2                    | L    | L1 <sup>1</sup> | L2   | L3   | S1   | S2   | S3   |        |                                   |                             |
| L      | 6                  | 500             | 4                     | 16   | 24              | 9    | 26   | 14   | 14   | 14   | 4,63   |                                   | FI-EVD-06L-V-W3-DKO         |
|        | .24                | 7250            | .16                   | .63  | .94             | .35  | 1.02 | .55  | .55  | .55  | 10.19  |                                   |                             |
|        | 8                  | 500             | 6                     | 19   | 27              | 12   | 27,5 | 14   | 17   | 17   | 4,72   |                                   | FI-EVD-08L-V-W3-DKO         |
|        | .31                | 7250            | .24                   | .75  | 1.06            | .47  | 1.08 | .55  | .67  | .67  | 10.37  |                                   |                             |
|        | 10                 | 500             | 8                     | 19   | 27              | 12   | 29   | 19   | 19   | 19   | 7,56   |                                   | FI-EVD-10L-V-W3-DKO         |
|        | .39                | 7250            | .31                   | .75  | 1.06            | .47  | 1.14 | .75  | .75  | .75  | 16.63  |                                   |                             |
|        | 12                 | 400             | 10                    | 21   | 29              | 14   | 29,5 | 19   | 22   | 22   | 8,66   |                                   | FI-EVD-12L-V-W3-DKO         |
|        | .47                | 5800            | .39                   | .83  | 1.14            | .55  | 1.16 | .75  | .87  | .87  | 19.06  |                                   |                             |
|        | 15                 | 400             | 12                    | 24   | 32              | 17   | 32,5 | 22   | 27   | 27   | 12,96  |                                   | FI-EVD-15L-V-W3-DKO         |
|        | .59                | 5800            | .47                   | .94  | 1.26            | .67  | 1.28 | .87  | 1.06 | 1.06 | 28.52  |                                   |                             |
|        | 18                 | 400             | 15                    | 24   | 33              | 17   | 35,5 | 27   | 32   | 32   | 20,64  |                                   | FI-EVD-18L-V-W3-DKO         |
|        | .71                | 5800            | .59                   | .94  | 1.30            | .67  | 1.40 | 1.06 | 1.26 | 1.26 | 45.42  |                                   |                             |
|        | 22                 | 400             | 19                    | 26   | 35              | 19   | 38,5 | 30   | 36   | 36   | 26,41  |                                   | FI-EVD-22L-V-W3-DKO         |
|        | .87                | 5800            | .75                   | 1.02 | 1.38            | .75  | 1.52 | 1.18 | 1.42 | 1.42 | 58.11  |                                   |                             |
|        | 28                 | 250             | 24                    | 30,5 | 40              | 23   | 41,5 | 36   | 41   | 41   | 34,69  |                                   | FI-EVD-28L-V-W3-DKO         |
|        | 1.10               | 3625            | .94                   | 1.20 | 1.57            | .91  | 1.63 | 1.42 | 1.61 | 1.61 | 76.32  |                                   |                             |
|        | 35                 | 250             | 30                    | 37   | 48              | 27   | 51   | 50   | 50   | 50   | 79,60  |                                   | FI-EVD-35L-V-W3-DKO         |
|        | 1.38               | 3625            | 1.18                  | 1.46 | 1.89            | 1.06 | 2.01 | 1.97 | 1.97 | 1.97 | 175.12 |                                   |                             |
|        | 42                 | 250             | 36                    | 37   | 49              | 26   | 56   | 50   | 60   | 60   | 83,20  |                                   | FI-EVD-42L-V-W3-DKO         |
|        | 1.65               | 3625            | 1.42                  | 1.46 | 1.93            | 1.02 | 2.20 | 1.97 | 2.36 | 2.36 | 183.04 |                                   |                             |
| S      | 6                  | 630             | 4                     | 16   | 24              | 9    | 27   | 14   | 17   | 17   | 4,90   |                                   | FI-EVD-06S-V-W3-DKO         |
|        | .24                | 9135            | .16                   | .63  | .94             | .35  | 1.06 | .55  | .67  | .67  | 10.77  |                                   |                             |
|        | 8                  | 630             | 5                     | 19   | 27              | 12   | 27,5 | 19   | 19   | 19   | 5,17   |                                   | FI-EVD-08S-V-W3-DKO         |
|        | .31                | 9135            | .20                   | .75  | 1.06            | .47  | 1.08 | .75  | .75  | .75  | 11.37  |                                   |                             |
|        | 10                 | 630             | 7                     | 21   | 30              | 13   | 30   | 19   | 22   | 22   | 9,44   |                                   | FI-EVD-10S-V-W3-DKO         |
|        | .39                | 9135            | .28                   | .83  | 1.18            | .51  | 1.18 | .75  | .87  | .87  | 20.76  |                                   |                             |
|        | 12                 | 630             | 8                     | 24   | 33              | 17   | 31   | 19   | 24   | 24   | 12,90  |                                   | FI-EVD-12S-V-W3-DKO         |
|        | .47                | 9135            | .31                   | .94  | 1.30            | .67  | 1.22 | .75  | .94  | .94  | 28.38  |                                   |                             |
|        | 14                 | 400             | 10                    | 24   | 34              | 16   | 33,5 | 22   | 27   | 27   | 14,4   |                                   | FI-EVD-14S-V-W3-DKO         |
|        | .55                | 5800            | .39                   | .94  | 1.34            | .63  | 1.32 | .87  | 1.06 | 1.06 | 31.68  |                                   |                             |
|        | 16                 | 400             | 12                    | 24   | 34              | 16   | 36,5 | 19   | 30   | 30   | 16,76  |                                   | FI-EVD-16S-V-W3-DKO         |
|        | .63                | 5800            | .47                   | .94  | 1.34            | .63  | 1.44 | .75  | 1.18 | 1.18 | 36.87  |                                   |                             |
|        | 20                 | 400             | 16                    | 26,5 | 37,5            | 16   | 44,5 | 27   | 36   | 36   | 30,72  |                                   | FI-EVD-20S-V-W3-DKO         |
|        | .79                | 5800            | .63                   | 1.04 | 1.48            | .63  | 1.75 | 1.06 | 1.42 | 1.42 | 67.58  |                                   |                             |
|        | 25                 | 400             | 20                    | 30,5 | 42,5            | 19   | 50   | 36   | 46   | 46   | 50,10  |                                   | FI-EVD-25S-V-W3-DKO         |
|        | .98                | 5800            | .79                   | 1.20 | 1.67            | .75  | 1.97 | 1.42 | 1.81 | 1.81 | 110.22 |                                   |                             |
|        | 30                 | 400             | 25                    | 37   | 50              | 24   | 55   | 50   | 50   | 50   | 92,90  |                                   | FI-EVD-30S-V-W3-DKO         |
|        | 1.18               | 5800            | .98                   | 1.46 | 1.97            | .94  | 2.17 | 1.97 | 1.97 | 1.97 | 204.38 |                                   |                             |
|        | 38                 | 315             | 32                    | 37   | 52              | 21   | 63   | 50   | 60   | 60   | 98,50  |                                   | FI-EVD-38S-V-W3-DKO         |
|        | 1.50               | 4568            | 1.26                  | 1.46 | 2.05            | .83  | 2.48 | 1.97 | 2.36 | 2.36 | 216.70 |                                   |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is FKM (Viton®).


Typical application with a  
Straight Male Stud Fitting FI-GE-...

### Ordering Codes

**\*FI-EVD\*-10\*L\*-V\*-W3\*-DKO\*-MS**

\* Adjustable Elbow (45°)  
with 24° Taper / O-Ring (DKO) **FI-EVD**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Seal Material FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative  
materials and surface finishings.

\* Assembling / Kitting Fitting body supplied with  
swivel nut and O-ring **-DKO**

Fitting body supplied with  
cutting ring and union nut **-MS**

Fitting body supplied with  
soft-sealing cutting ring  
and union nut **-MSV**

### Connecting Parts


Cutting Ring  
Type **FI-DS** Page 28

Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29

Support Sleeve  
Type **FI-VH** Page 31

STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32

Union Nut  
Type **FI-M** Page 33

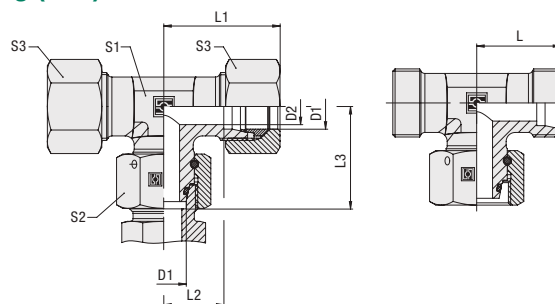
37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

### Spare Parts / Accessories


O-Ring  
Type **O-RING** Page 239


## Adjustable Branch Tee with 24° Taper / O-Ring (DKO)

### Type FI-ETD ▪ Series L / S



#### Ordering Codes

##### \*FI-ETD\*-10\*L\*-V\*-W3\*-DKO\*-MS

\* Adjustable Branch Tee with 24° Taper / O-Ring (DKO) **FI-ETD**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Seal Material FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body supplied with swivel nut and O-ring **-DKO**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

#### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

#### Spare Parts / Accessories



O-Ring  
Type **O-RING** Page 239

| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |                 |      |      |      |      |      |        | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------|-----------------|------|------|------|------|------|--------|-----------------------------------|-----------------------------|
|        | D1                 |                 | D2                    | L    | L1 <sup>1</sup> | L2   | L3   | S1   | S2   | S3   |        |                                   |                             |
| L      | 6                  | 500             | 4                     | 19   | 27              | 12   | 26   | 12   | 14   | 14   | 3,02   |                                   | FI-ETD-06L-V-W3-DKO         |
|        | .24                | 7250            | .16                   | .75  | 1.06            | .47  | 1.02 | .47  | .55  | .55  | 6.64   |                                   |                             |
|        | 8                  | 500             | 6                     | 21   | 29              | 14   | 27,5 | 12   | 17   | 17   | 4,82   |                                   | FI-ETD-08L-V-W3-DKO         |
|        | .31                | 7250            | .24                   | .83  | 1.14            | .55  | 1.08 | .47  | .67  | .67  | 10.61  |                                   |                             |
|        | 10                 | 500             | 8                     | 22   | 30              | 15   | 29   | 14   | 19   | 19   | 6,27   |                                   | FI-ETD-10L-V-W3-DKO         |
|        | .39                | 7250            | .31                   | .87  | 1.18            | .59  | 1.14 | .55  | .75  | .75  | 13.79  |                                   |                             |
|        | 12                 | 400             | 10                    | 24   | 32              | 17   | 29,5 | 17   | 22   | 22   | 8,73   |                                   | FI-ETD-12L-V-W3-DKO         |
|        | .47                | 5800            | .39                   | .94  | 1.26            | .67  | 1.16 | .67  | .87  | .87  | 19.21  |                                   |                             |
|        | 15                 | 400             | 12                    | 28   | 36              | 21   | 32,5 | 19   | 27   | 27   | 14,55  |                                   | FI-ETD-15L-V-W3-DKO         |
|        | .59                | 5800            | .47                   | 1.10 | 1.42            | .83  | 1.28 | .75  | 1.06 | 1.06 | 32.01  |                                   |                             |
|        | 18                 | 400             | 15                    | 31   | 40              | 23,5 | 35,5 | 24   | 32   | 32   | 20,89  |                                   | FI-ETD-18L-V-W3-DKO         |
|        | .71                | 5800            | .59                   | 1.22 | 1.57            | .93  | 1.40 | .94  | 1.26 | 1.26 | 45.95  |                                   |                             |
|        | 22                 | 400             | 19                    | 35   | 44              | 27,5 | 38,5 | 27   | 36   | 36   | 28,27  |                                   | FI-ETD-22L-V-W3-DKO         |
|        | .87                | 5800            | .75                   | 1.38 | 1.73            | 1.08 | 1.52 | 1.06 | 1.42 | 1.42 | 62.20  |                                   |                             |
|        | 28                 | 250             | 24                    | 38   | 47              | 30,5 | 41,5 | 36   | 41   | 41   | 39,85  |                                   | FI-ETD-28L-V-W3-DKO         |
|        | 1.10               | 3625            | .94                   | 1.50 | 1.85            | 1.20 | 1.63 | 1.42 | 1.61 | 1.61 | 87.67  |                                   |                             |
|        | 35                 | 250             | 30                    | 45   | 56              | 34,5 | 51   | 41   | 50   | 50   | 64,20  |                                   | FI-ETD-35L-V-W3-DKO         |
|        | 1.38               | 3625            | 1.18                  | 1.77 | 2.20            | 1.36 | 2.01 | 1.61 | 1.97 | 1.97 | 141.24 |                                   |                             |
|        | 42                 | 250             | 36                    | 51   | 63              | 40   | 56   | 50   | 60   | 60   | 94,90  |                                   | FI-ETD-42L-V-W3-DKO         |
|        | 1.65               | 3625            | 1.42                  | 2.01 | 2.48            | 1.57 | 2.20 | 1.97 | 2.36 | 2.36 | 208.78 |                                   |                             |
| S      | 6                  | 800             | 4                     | 23   | 31              | 16   | 27   | 12   | 17   | 17   | 5,99   |                                   | FI-ETD-06S-V-W3-DKO         |
|        | .24                | 11600           | .16                   | .91  | 1.22            | .63  | 1.06 | .47  | .67  | .67  | 13.18  |                                   |                             |
|        | 8                  | 800             | 5                     | 24   | 32              | 17   | 27,5 | 14   | 19   | 19   | 7,80   |                                   | FI-ETD-08S-V-W3-DKO         |
|        | .31                | 11600           | .20                   | .94  | 1.26            | .67  | 1.08 | .55  | .75  | .75  | 17.15  |                                   |                             |
|        | 10                 | 800             | 7                     | 25   | 34              | 17,5 | 30   | 17   | 22   | 22   | 10,60  |                                   | FI-ETD-10S-V-W3-DKO         |
|        | .39                | 11600           | .28                   | .98  | 1.34            | .69  | 1.18 | .67  | .87  | .87  | 23.32  |                                   |                             |
|        | 12                 | 630             | 8                     | 29   | 38              | 21,5 | 31   | 17   | 24   | 24   | 13,63  |                                   | FI-ETD-12S-V-W3-DKO         |
|        | .47                | 9135            | .31                   | 1.14 | 1.50            | .85  | 1.22 | .67  | .94  | .94  | 29.98  |                                   |                             |
|        | 14                 | 630             | 10                    | 30   | 40              | 22   | 35   | 19   | 27   | 27   | 17,37  |                                   | FI-ETD-14S-V-W3-DKO         |
|        | .55                | 9135            | .39                   | 1.18 | 1.57            | .87  | 1.38 | .75  | 1.06 | 1.06 | 38.21  |                                   |                             |
|        | 16                 | 630             | 12                    | 33   | 43              | 24,5 | 36,5 | 24   | 30   | 30   | 22,95  |                                   | FI-ETD-16S-V-W3-DKO         |
|        | .63                | 9135            | .47                   | 1.30 | 1.69            | .96  | 1.44 | .94  | 1.18 | 1.18 | 50.49  |                                   |                             |
|        | 20                 | 420             | 16                    | 37   | 48              | 26,5 | 44,5 | 27   | 36   | 36   | 35,51  |                                   | FI-ETD-20S-V-W3-DKO         |
|        | .79                | 6091            | .63                   | 1.46 | 1.89            | 1.04 | 1.75 | 1.06 | 1.42 | 1.42 | 78.13  |                                   |                             |
|        | 25                 | 420             | 20                    | 42   | 54              | 30   | 50   | 36   | 46   | 46   | 62,40  |                                   | FI-ETD-25S-V-W3-DKO         |
|        | .98                | 6091            | .79                   | 1.65 | 2.13            | 1.18 | 1.97 | 1.42 | 1.81 | 1.81 | 137.28 |                                   |                             |
|        | 30                 | 420             | 25                    | 49   | 62              | 35,5 | 55   | 41   | 50   | 50   | 85,60  |                                   | FI-ETD-30S-V-W3-DKO         |
|        | 1.18               | 6091            | .98                   | 1.93 | 2.44            | 1.40 | 2.17 | 1.61 | 1.97 | 1.97 | 188.32 |                                   |                             |
|        | 38                 | 420             | 32                    | 57   | 72              | 41   | 63   | 50   | 60   | 60   | 128,10 |                                   | FI-ETD-38S-V-W3-DKO         |
|        | 1.50               | 6091            | 1.26                  | 2.24 | 2.83            | 1.61 | 2.48 | 1.97 | 2.36 | 2.36 | 281.82 |                                   |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

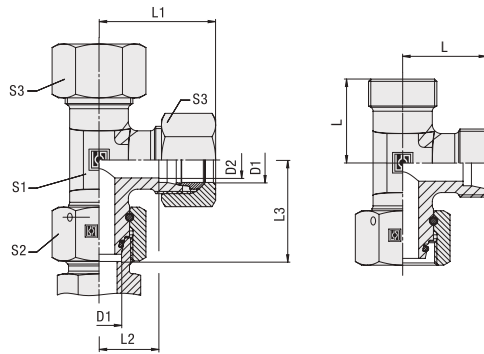
<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is FKM (Viton®).



Typical application with a  
Straight Male Stud Fitting FI-GE-...





## Adjustable Barrel Tee with 24° Taper / O-Ring (DKO) Type FI-ELD - Series L / S



| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in) |      |                 |      |      |      |      |      |        | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------|-----------------|------|------|------|------|------|--------|-----------------------------------|-----------------------------|
|        | D1                 |                 | D2                    | L    | L1 <sup>1</sup> | L2   | L3   | S1   | S2   | S3   |        |                                   |                             |
| L      | 6                  | 500             | 4                     | 19   | 27              | 12   | 26   | 12   | 14   | 14   | 4,79   |                                   | FI-ELD-06L-V-W3-DKO         |
|        | .24                | 7250            | .16                   | .75  | 1.06            | .47  | 1.02 | .47  | .55  | .55  | 10.53  |                                   |                             |
|        | 8                  | 500             | 6                     | 21   | 29              | 14   | 27,5 | 12   | 17   | 17   | 4,88   |                                   | FI-ELD-08L-V-W3-DKO         |
|        | .31                | 7250            | .24                   | .83  | 1.14            | .55  | 1.08 | .47  | .67  | .67  | 10.74  |                                   |                             |
|        | 10                 | 500             | 8                     | 22   | 30              | 15   | 29   | 14   | 19   | 19   | 6,45   |                                   | FI-ELD-10L-V-W3-DKO         |
|        | .39                | 7250            | .31                   | .87  | 1.18            | .59  | 1.14 | .55  | .75  | .75  | 14.19  |                                   |                             |
|        | 12                 | 400             | 10                    | 24   | 32              | 17   | 29,5 | 17   | 22   | 22   | 8,58   |                                   | FI-ELD-12L-V-W3-DKO         |
|        | .47                | 5800            | .39                   | .94  | 1.26            | .67  | 1.16 | .67  | .87  | .87  | 18.88  |                                   |                             |
|        | 15                 | 400             | 12                    | 28   | 36              | 21   | 32,5 | 19   | 27   | 27   | 14,60  |                                   | FI-ELD-15L-V-W3-DKO         |
|        | .59                | 5800            | .47                   | 1.10 | 1.42            | .83  | 1.28 | .75  | 1.06 | 1.06 | 32.12  |                                   |                             |
|        | 18                 | 400             | 15                    | 31   | 40              | 23,5 | 35,5 | 24   | 32   | 32   | 20,83  |                                   | FI-ELD-18L-V-W3-DKO         |
|        | .71                | 5800            | .59                   | 1.22 | 1.57            | .93  | 1.40 | .94  | 1.26 | 1.26 | 45.82  |                                   |                             |
|        | 22                 | 400             | 19                    | 35   | 44              | 27,5 | 38,5 | 27   | 36   | 36   | 28,02  |                                   | FI-ELD-22L-V-W3-DKO         |
|        | .87                | 5800            | .75                   | 1.38 | 1.73            | 1.08 | 1.52 | 1.06 | 1.42 | 1.42 | 61.64  |                                   |                             |
|        | 28                 | 250             | 24                    | 38   | 47              | 30,5 | 41,5 | 36   | 41   | 41   | 39,66  |                                   | FI-ELD-28L-V-W3-DKO         |
|        | 1.10               | 3625            | .94                   | 1.50 | 1.85            | 1.20 | 1.63 | 1.42 | 1.61 | 1.61 | 87.25  |                                   |                             |
|        | 35                 | 250             | 30                    | 45   | 56              | 34,5 | 51   | 41   | 50   | 50   | 64,60  |                                   | FI-ELD-35L-V-W3-DKO         |
|        | 1.38               | 3625            | 1.18                  | 1.77 | 2.20            | 1.36 | 2.01 | 1.61 | 1.97 | 1.97 | 142.12 |                                   |                             |
|        | 42                 | 250             | 36                    | 51   | 63              | 40   | 56   | 50   | 60   | 60   | 94,70  |                                   | FI-ELD-42L-V-W3-DKO         |
|        | 1.65               | 3625            | 1.42                  | 2.01 | 2.48            | 1.57 | 2.20 | 1.97 | 2.36 | 2.36 | 208.34 |                                   |                             |
| S      | 6                  | 800             | 4                     | 23   | 31              | 16   | 27   | 12   | 17   | 17   | 6,04   |                                   | FI-ELD-06S-V-W3-DKO         |
|        | .24                | 11600           | .16                   | .91  | 1.22            | .63  | 1.06 | .47  | .67  | .67  | 13.30  |                                   |                             |
|        | 8                  | 800             | 5                     | 24   | 32              | 17   | 27,5 | 14   | 19   | 19   | 8,14   |                                   | FI-ELD-08S-V-W3-DKO         |
|        | .31                | 11600           | .20                   | .94  | 1.26            | .67  | 1.08 | .55  | .75  | .75  | 17.90  |                                   |                             |
|        | 10                 | 800             | 7                     | 25   | 34              | 17,5 | 30   | 17   | 22   | 22   | 10,53  |                                   | FI-ELD-10S-V-W3-DKO         |
|        | .39                | 11600           | .28                   | .98  | 1.34            | .69  | 1.18 | .67  | .87  | .87  | 23.16  |                                   |                             |
|        | 12                 | 630             | 8                     | 29   | 38              | 21,5 | 31   | 17   | 24   | 24   | 13,80  |                                   | FI-ELD-12S-V-W3-DKO         |
|        | .47                | 9135            | .31                   | 1.14 | 1.50            | .85  | 1.22 | .67  | .94  | .94  | 30.36  |                                   |                             |
|        | 14                 | 630             | 10                    | 30   | 40              | 22   | 35   | 19   | 27   | 27   | 20,27  |                                   | FI-ELD-14S-V-W3-DKO         |
|        | .55                | 9135            | .39                   | 1.18 | 1.57            | .87  | 1.38 | .75  | 1.06 | 1.06 | 44.59  |                                   |                             |
|        | 16                 | 630             | 12                    | 33   | 43              | 24,5 | 36,5 | 24   | 30   | 30   | 23,13  |                                   | FI-ELD-16S-V-W3-DKO         |
|        | .63                | 9135            | .47                   | 1.30 | 1.69            | .96  | 1.44 | .94  | 1.18 | 1.18 | 50.88  |                                   |                             |
|        | 20                 | 420             | 16                    | 37   | 48              | 26,5 | 44,5 | 27   | 36   | 36   | 35,53  |                                   | FI-ELD-20S-V-W3-DKO         |
|        | .79                | 6091            | .63                   | 1.46 | 1.89            | 1.04 | 1.75 | 1.06 | 1.42 | 1.42 | 78.17  |                                   |                             |
|        | 25                 | 420             | 20                    | 42   | 54              | 30   | 50   | 36   | 46   | 46   | 61,90  |                                   | FI-ELD-25S-V-W3-DKO         |
|        | .98                | 6091            | .79                   | 1.65 | 2.13            | 1.18 | 1.97 | 1.42 | 1.81 | 1.81 | 136.18 |                                   |                             |
|        | 30                 | 420             | 25                    | 49   | 62              | 35,5 | 55   | 41   | 50   | 50   | 85,10  |                                   | FI-ELD-30S-V-W3-DKO         |
|        | 1.18               | 6091            | .98                   | 1.93 | 2.44            | 1.40 | 2.17 | 1.61 | 1.97 | 1.97 | 187.22 |                                   |                             |
|        | 38                 | 420             | 32                    | 57   | 72              | 41   | 63   | 50   | 60   | 60   | 128,00 |                                   | FI-ELD-38S-V-W3-DKO         |
|        | 1.50               | 6091            | 1.26                  | 2.24 | 2.83            | 1.61 | 2.48 | 1.97 | 2.36 | 2.36 | 281.60 |                                   |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is FKM (Viton®).


Typical application with a  
Straight Male Stud Fitting FI-GE-...

### Ordering Codes

#### \*FI-ELD\*-10\*L\*-V\*-W3\*-DKO\*-MS

\* Adjustable Barrel Tee  
with 24° Taper / O-Ring (DKO)

\* Outside Tube Diameter D1 (in mm)

\* Series

\* Seal Material

\* Material Code

Please contact STAUFF for alternative  
materials and surface finishings.

\* Assembling / Kitting

Fitting body supplied with  
swivel nut and O-ring

Fitting body supplied with  
cutting ring and union nut

Fitting body supplied with  
soft-sealing cutting ring  
and union nut

### Connecting Parts


Cutting Ring  
Type FI-DS

Soft-Sealing Cutting Ring  
Type FI-WDDS

Support Sleeve  
Type FI-VH

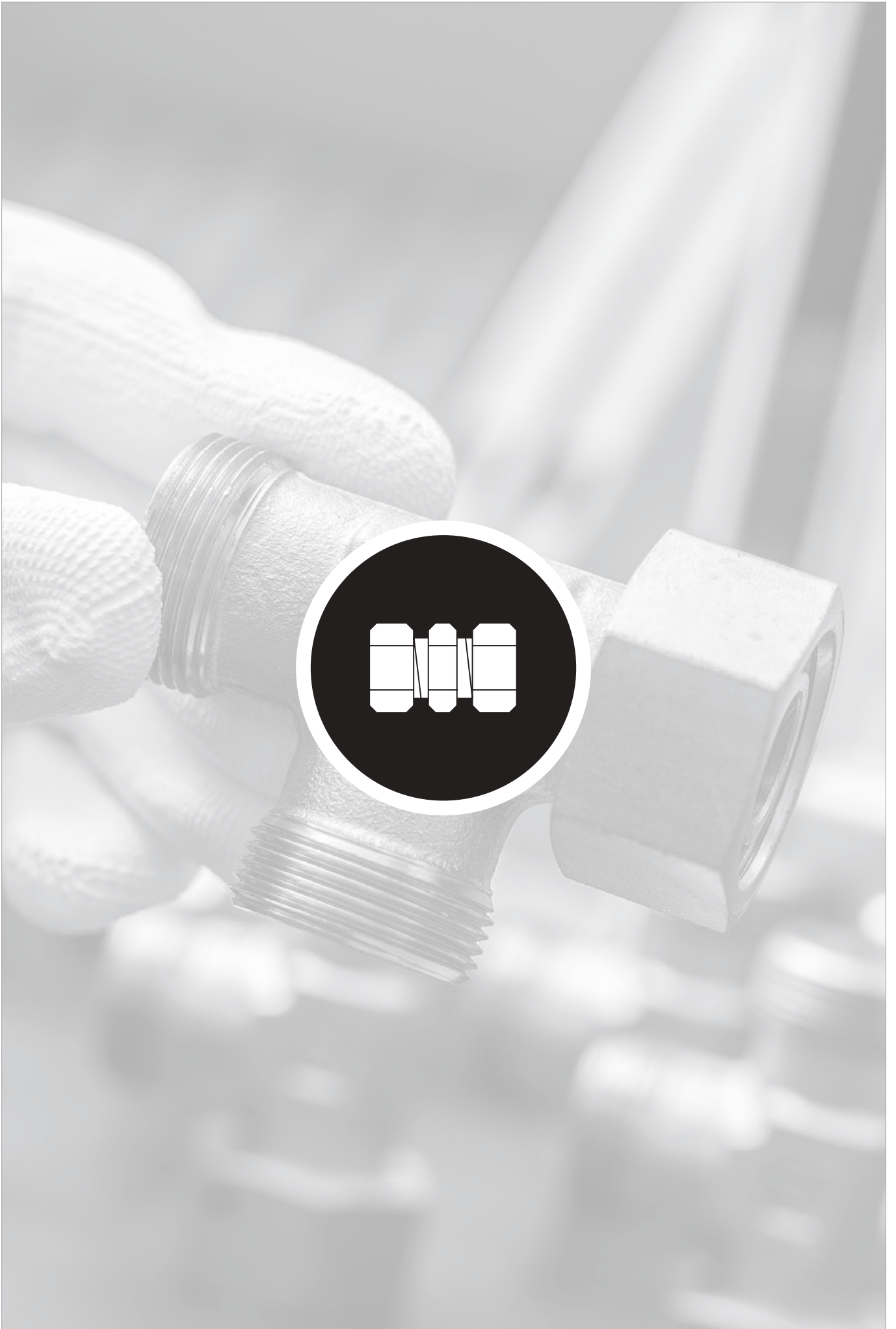
STAUFF Form EVO Sealing Ring  
Type FI-FD

Union Nut  
Type FI-M

37° Flared Tube Fitting Set  
Type FI-AB

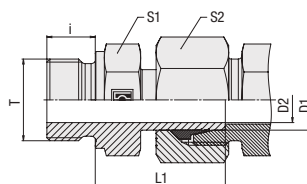
### Spare Parts / Accessories


O-Ring  
Type O-RING

|                                                                                     |                                                                                            |                |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|----------------|
| <b>Straight Male Stud Standpipe Fitting</b>                                         |                                                                                            | <b>156-161</b> |
|                                                                                     | FI-EGE                                                                                     |                |
|    | <b>Whitworth Parallel Pipe Thread (BSPP) /<br/>Metallic Sealing Edge</b><br>FI-EGE-...-R   | <b>156</b>     |
|    | <b>Metric Parallel Thread /<br/>Metallic Sealing Edge</b><br>FI-EGE-...-M                  | <b>157</b>     |
|    | <b>Whitworth Parallel Pipe Thread (BSPP) /<br/>Profile Sealing Ring</b><br>FI-EGE-...-R-WD | <b>158</b>     |
|    | <b>Metric Parallel Thread /<br/>Profile Sealing Ring</b><br>FI-EGE-...-M-WD                | <b>160</b>     |
|    | <b>NPT Thread</b><br>FI-EGE-...-N                                                          | <b>161</b>     |
|    | <b>Straight Standpipe Reducer</b><br>FI-REDS                                               | <b>162</b>     |
|    | <b>Adjustable Standpipe Elbow</b><br>FI-EW                                                 | <b>166</b>     |
|  | <b>Adjustable Standpipe Branch Tee</b><br>FI-ET                                            | <b>167</b>     |
|  | <b>Adjustable Standpipe Barrel Tee</b><br>FI-EL                                            | <b>168</b>     |

# Straight Male Stud Standpipe Fitting Type FI-EGE-...-R • Series L / S



## Ordering Codes

### \*FI-EGE\*-10\*L\*R\*-W3\*-SV

|                                                                         |                                                                                    |
|-------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| * Straight Male Stud Standpipe Fitting                                  | <b>FI-EGE</b>                                                                      |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                         |
| * Series                                                                | Light Series <b>L</b><br>Heavy Series <b>S</b>                                     |
| * Thread Type                                                           | Whitworth Parallel Pipe Thread (BSPP) <b>R</b>                                     |
| If required, please indicate special sizes, e.g. R1/8!                  |                                                                                    |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                               |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                    |
| * Assembling / Kitting                                                  | Fitting body assembled with cutting ring and union nut on the standpipe <b>-SV</b> |

## Whitworth Parallel Pipe Thread (BSPP)

## Metallic Sealing Edge

| Series | Tube OD<br>(mm/in)<br>D1 | PN (PB)<br>(bar/PSI) | Dimensions<br>(mm/in)<br>Thread T | D2   | L1   | i   | S1   | S2   | Torque<br>(N·m/ft·lb)<br>Thread T | Weight<br>(kg/lbs) ca.<br>per 100 <sup>1</sup> | Ordering Codes <sup>2</sup> |
|--------|--------------------------|----------------------|-----------------------------------|------|------|-----|------|------|-----------------------------------|------------------------------------------------|-----------------------------|
| L      | 6                        | 400                  | G 1/8                             | 3,5  | 24,5 | 8   | 14   | 14   | 25                                | 2,50                                           | FI-EGE-06LR-W3-SV           |
|        | .24                      | 5800                 |                                   | .14  | .96  | .31 | .55  | .55  | 18.4                              | 5.50                                           |                             |
|        | 8                        | 400                  | G 1/4                             | 4,5  | 29,5 | 12  | 19   | 17   | 55                                | 5,53                                           | FI-EGE-08LR-W3-SV           |
|        | .31                      | 5800                 |                                   | .18  | 1.16 | .47 | .75  | .67  | 40.7                              | 12.17                                          |                             |
|        | 10                       | 400                  | G 1/4                             | 7    | 27,5 | 12  | 19   | 19   | 55                                | 5,11                                           | FI-EGE-10LR-W3-SV           |
|        | .39                      | 5800                 |                                   | .28  | 1.08 | .47 | .75  | .75  | 40.7                              | 11.23                                          |                             |
|        | 12                       | 400                  | G 3/8                             | 7,5  | 34   | 12  | 22   | 22   | 95                                | 8,25                                           | FI-EGE-12LR-W3-SV           |
|        | .47                      | 5800                 |                                   | .30  | 1.34 | .47 | .87  | .87  | 70.1                              | 18.15                                          |                             |
|        | 15                       | 400                  | G 1/2                             | 11   | 32   | 14  | 27   | 27   | 185                               | 13,02                                          | FI-EGE-15LR-W3-SV           |
|        | .59                      | 5800                 |                                   | .43  | 1.26 | .55 | 1.06 | 1.06 | 136.5                             | 28.65                                          |                             |
|        | 18                       | 400                  | G 1/2                             | 14   | 31,5 | 14  | 27   | 32   | 185                               | 13,86                                          | FI-EGE-18LR-W3-SV           |
|        | .71                      | 5800                 |                                   | .55  | 1.24 | .55 | 1.06 | 1.26 | 136.5                             | 30.48                                          |                             |
|        | 22                       | 250                  | G 3/4                             | 18   | 32,5 | 16  | 32   | 36   | 250                               | 19,98                                          | FI-EGE-22LR-W3-SV           |
|        | .87                      | 3625                 |                                   | .71  | 1.28 | .63 | 1.26 | 1.42 | 184.4                             | 43.96                                          |                             |
|        | 28                       | 250                  | G 1                               | 23   | 35   | 18  | 41   | 41   | 400                               | 27,39                                          | FI-EGE-28LR-W3-SV           |
|        | 1.10                     | 3625                 |                                   | .91  | 1.38 | .71 | 1.61 | 1.61 | 295                               | 60.26                                          |                             |
|        | 35                       | 250                  | G 1 1/4                           | 29,5 | 42,5 | 20  | 50   | 50   | 670                               | 47,03                                          | FI-EGE-35LR-W3-SV           |
|        | 1.38                     | 3625                 |                                   | 1.16 | 1.67 | .79 | 1.97 | 1.97 | 494.2                             | 103.47                                         |                             |
|        | 42                       | 250                  | G 1 1/2                           | 35,5 | 46,5 | 22  | 55   | 60   | 800                               | 72,00                                          | FI-EGE-42LR-W3-SV           |
|        | 1.65                     | 3625                 |                                   | 1.40 | 1.83 | .87 | 2.17 | 2.36 | 590                               | 158.40                                         |                             |
| S      | 6                        | PB630                | G 1/4                             | 3,5  | 27   | 12  | 19   | 17   | 80                                | 4,98                                           | FI-EGE-06SR-W3-SV           |
|        | .24                      | PB9135               |                                   | .14  | 1.06 | .47 | .75  | .67  | 59                                | 10.96                                          |                             |
|        | 8                        | PB630                | G 1/4                             | 4,5  | 29,5 | 12  | 19   | 19   | 80                                | 5,98                                           | FI-EGE-08SR-W3-SV           |
|        | .31                      | PB9135               |                                   | .18  | 1.16 | .47 | .75  | .75  | 59                                | 13.16                                          |                             |
|        | 10                       | PB630                | G 3/8                             | 6,5  | 32   | 12  | 22   | 22   | 130                               | 8,81                                           | FI-EGE-10SR-W3-SV           |
|        | .39                      | PB9135               |                                   | .26  | 1.26 | .47 | .87  | .87  | 95.9                              | 19.39                                          |                             |
|        | 12                       | PB630                | G 3/8                             | 7,5  | 34   | 12  | 22   | 24   | 130                               | 10,01                                          | FI-EGE-12SR-W3-SV           |
|        | .47                      | PB9135               |                                   | .30  | 1.34 | .47 | .87  | .94  | 95.9                              | 22.01                                          |                             |
|        | 14                       | PB630                | G 1/2                             | 9,5  | 36,5 | 14  | 27   | 27   | 220                               | 13,95                                          | FI-EGE-14SR-W3-SV           |
|        | .55                      | PB9135               |                                   | .37  | 1.44 | .55 | 1.06 | 1.06 | 162.3                             | 30.69                                          |                             |
|        | 16                       | PB400                | G 1/2                             | 11,5 | 37   | 14  | 27   | 30   | 220                               | 16,94                                          | FI-EGE-16SR-W3-SV           |
|        | .63                      | PB5800               |                                   | .45  | 1.46 | .55 | 1.06 | 1.18 | 162.3                             | 37.28                                          |                             |
|        | 20                       | PB400                | G 3/4                             | 15,5 | 43   | 16  | 32   | 36   | 350                               | 26,98                                          | FI-EGE-20SR-W3-SV           |
|        | .79                      | PB5800               |                                   | .61  | 1.69 | .63 | 1.26 | 1.42 | 258.1                             | 59.36                                          |                             |
|        | 25                       | PB400                | G 1                               | 18   | 48   | 18  | 41   | 46   | 700                               | 49,03                                          | FI-EGE-25SR-W3-SV           |
|        | .98                      | PB5800               |                                   | .71  | 1.89 | .71 | 1.61 | 1.81 | 518                               | 107.87                                         |                             |
|        | 30                       | PB400                | G 1 1/4                           | 23,5 | 51   | 20  | 50   | 50   | 850                               | 69,13                                          | FI-EGE-30SR-W3-SV           |
|        | 1.18                     | PB5800               |                                   | .93  | 2.01 | .79 | 1.97 | 1.97 | 627                               | 152.08                                         |                             |
|        | 38                       | PB250                | G 1 1/2                           | 29   | 60   | 22  | 55   | 60   | 1000                              | 98,20                                          | FI-EGE-38SR-W3-SV           |
|        | 1.50                     | PB3625               |                                   | 1.14 | 2.36 | .87 | 2.17 | 2.36 | 737.5                             | 216.04                                         |                             |

<sup>1</sup> Weight including cutting ring and union nut on the standpipe.

<sup>2</sup> Standard scope of delivery: Fitting body assembled with cutting ring and union nut on the standpipe.

Please note: Standpipes are always factory-assembled with cutting rings and union nuts.

The union nut assembled on the standpipe has to be tightened by only 1/12 a turn (equivalent to 30°) beyond the fixed point.



Male stud acc. to DIN 3852-2 (Form B) / ISO 1179-4 (Type B)  
Port acc. to DIN 3852-2 (Form X) / ISO 1179-1

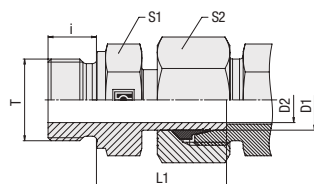
Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.  
Please contact STAUFF prior to the assembly for further information.





## Straight Male Stud Standpipe Fitting Type FI-EGE-...-M • Series L / S



### Metallic Sealing Edge

### Metric Parallel Thread

| Series | Tube OD<br>(mm/in) | PN (PB)<br>(bar/PSI) | Dimensions<br>(mm/in) |      |      |     |      |      | Torque<br>(N·m/ft·lb) | Weight<br>(kg/lbs) ca. | Ordering Codes <sup>2</sup> |
|--------|--------------------|----------------------|-----------------------|------|------|-----|------|------|-----------------------|------------------------|-----------------------------|
|        | D1                 |                      | Thread T              | D2   | L1   | i   | S1   | S2   | Thread T              | per 100 <sup>1</sup>   |                             |
| L      | 6                  | 315                  | M 10 x 1              | 3,5  | 24,5 | 8   | 14   | 14   | 950                   | 2,54                   | FI-EGE-06LM-W3-SV           |
|        | .24                | 4568                 |                       | .14  | .96  | .31 | .55  | .55  | 700.7                 | 5.59                   |                             |
|        | 8                  | 315                  | M 12 x 1,5            | 5,5  | 26,5 | 12  | 17   | 17   | 35                    | 4,34                   | FI-EGE-08LM-W3-SV           |
|        | .31                | 4568                 |                       | .22  | 1.04 | .47 | .67  | .67  | 25.8                  | 9.55                   |                             |
|        | 10                 | 315                  | M 14 x 1,5            | 7    | 27,5 | 12  | 19   | 19   | 55                    | 5,29                   | FI-EGE-10LM-W3-SV           |
|        | .39                | 4568                 |                       | .28  | 1.08 | .47 | .75  | .75  | 40.5                  | 11.63                  |                             |
|        | 12                 | 315                  | M 16 x 1,5            | 9    | 30,5 | 12  | 22   | 22   | 80                    | 7,95                   | FI-EGE-12LM-W3-SV           |
|        | .47                | 4568                 |                       | .35  | 1.20 | .47 | .87  | .87  | 59.2                  | 17.48                  |                             |
|        | 15                 | 315                  | M 18 x 1,5            | 11   | 31,5 | 12  | 24   | 27   | 100                   | 10,25                  | FI-EGE-15LM-W3-SV           |
|        | .59                | 4568                 |                       | .43  | 1.24 | .47 | .94  | 1.06 | 73.7                  | 22.55                  |                             |
|        | 18                 | 315                  | M 22 x 1,5            | 14   | 31,5 | 14  | 27   | 32   | 170                   | 14,82                  | FI-EGE-18LM-W3-SV           |
|        | .71                | 4568                 |                       | .55  | 1.24 | .55 | 1.06 | 1.26 | 125.8                 | 32.60                  |                             |
|        | 22                 | 160                  | M 26 x 1,5            | 18   | 32,5 | 16  | 32   | 36   | 230                   | 19,57                  | FI-EGE-22LM-W3-SV           |
|        | .87                | 2320                 |                       | .71  | 1.28 | .63 | 1.26 | 1.42 | 169.6                 | 43.06                  |                             |
|        | 28                 | 160                  | M 33 x 2              | 23   | 35   | 18  | 41   | 41   | 400                   | 28,94                  | FI-EGE-28LM-W3-SV           |
|        | 1.10               | 2320                 |                       | .91  | 1.38 | .71 | 1.61 | 1.61 | 295                   | 63.67                  |                             |
|        | 35                 | 160                  | M 42 x 2              | 29,5 | 42,5 | 20  | 50   | 50   | 700                   | 47,56                  | FI-EGE-35LM-W3-SV           |
|        | 1.38               | 2320                 |                       | 1.16 | 1.67 | .79 | 1.97 | 1.97 | 518                   | 104.63                 |                             |
|        | 42                 | 160                  | M 48 x 2              | 35,5 | 46,5 | 22  | 55   | 60   | 900                   | 67,00                  | FI-EGE-42LM-W3-SV           |
|        | 1.65               | 2320                 |                       | 1.40 | 1.83 | .87 | 2.17 | 2.36 | 663.8                 | 147.40                 |                             |
| S      | 6                  | PB630                | M 12 x 1,5            | 3,5  | 27   | 12  | 17   | 17   | 60                    | 4,51                   | FI-EGE-06SM-W3-SV           |
|        | .24                | PB9135               |                       | .14  | 1.06 | .47 | .67  | .67  | 44.2                  | 9.92                   |                             |
|        | 8                  | PB630                | M 14 x 1,5            | 4,5  | 29,5 | 12  | 19   | 19   | 90                    | 6,30                   | FI-EGE-08SM-W3-SV           |
|        | .31                | PB9135               |                       | .18  | 1.16 | .47 | .75  | .75  | 66.4                  | 13.85                  |                             |
|        | 10                 | PB630                | M 16 x 1,5            | 6,5  | 32   | 12  | 22   | 22   | 120                   | 8,79                   | FI-EGE-10SM-W3-SV           |
|        | .39                | PB9135               |                       | .26  | 1.26 | .47 | .87  | .87  | 88.5                  | 19.33                  |                             |
|        | 12                 | PB630                | M 18 x 1,5            | 7,5  | 34   | 12  | 24   | 24   | 190                   | 11,24                  | FI-EGE-12SM-W3-SV           |
|        | .47                | PB9135               |                       | .30  | 1.34 | .47 | .94  | .94  | 140.1                 | 24.73                  |                             |
|        | 14                 | PB630                | M 20 x 1,5            | 9,5  | 36,5 | 14  | 27   | 27   | 280                   | 15,53                  | FI-EGE-14SM-W3-SV           |
|        | .55                | PB9135               |                       | .37  | 1.44 | .55 | 1.06 | 1.06 | 206.5                 | 34.17                  |                             |
|        | 16                 | PB400                | M 22 x 1,5            | 11,5 | 37   | 14  | 27   | 30   | 300                   | 17,47                  | FI-EGE-16SM-W3-SV           |
|        | .63                | PB5800               |                       | .45  | 1.46 | .55 | 1.06 | 1.18 | 221.2                 | 38.43                  |                             |
|        | 20                 | PB400                | M 27 x 2              | 15,5 | 43   | 16  | 32   | 36   | 420                   | 27,28                  | FI-EGE-20SM-W3-SV           |
|        | .79                | PB5800               |                       | .61  | 1.69 | .63 | 1.26 | 1.42 | 309.8                 | 60.02                  |                             |
|        | 25                 | PB400                | M 33 x 2              | 18   | 48   | 18  | 41   | 46   | 600                   | 51,00                  | FI-EGE-25SM-W3-SV           |
|        | .98                | PB5800               |                       | .71  | 1.89 | .71 | 1.61 | 1.81 | 442.5                 | 112.20                 |                             |
|        | 30                 | PB400                | M 42 x 2              | 23,5 | 51   | 20  | 50   | 50   | 700                   | 69,54                  | FI-EGE-30SM-W3-SV           |
|        | 1.18               | PB5800               |                       | .93  | 2.01 | .79 | 1.97 | 1.97 | 518                   | 152.98                 |                             |
|        | 38                 | PB315                | M 48 x 2              | 29   | 60   | 22  | 55   | 60   | 900                   | 99,38                  | FI-EGE-38SM-W3-SV           |
|        | 1.50               | PB4568               |                       | 1.14 | 2.36 | .87 | 2.17 | 2.36 | 663.8                 | 218.64                 |                             |

### Ordering Codes

**\*FI-EGE\*-10\*L\*M\*-W3\*-SV**

\* Straight Male Stud Standpipe Fitting **FI-EGE**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Metric Parallel Thread **M**

If required, please indicate special sizes, e.g. M12x1.5!

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

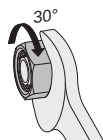
\* Assembling / Kitting Fitting body assembled with cutting ring and union nut on the standpipe **-SV**

<sup>1</sup> Weight including cutting ring and union nut on the standpipe.

<sup>2</sup> Standard scope of delivery: Fitting body assembled with cutting ring and union nut on the standpipe.

Please note: Standpipes are always factory-assembled with cutting rings and union nuts.

The union nut assembled on the standpipe has to be tightened by only 1/12 a turn (equivalent to 30°) beyond the fixed point.



Male stud acc. to DIN 3852-1 (Form B) / ISO 9974-3 (Type B)  
Port acc. to DIN 3852-1 (Form X) / ISO 9974-1

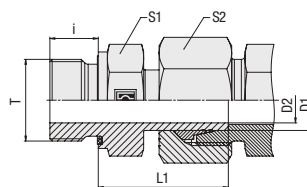
Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.



## Straight Male Stud Standpipe Fitting Type FI-EGE-...-R-WD • Series L / S



### Ordering Codes

#### \*FI-EGE\*-10\*L\*R\*-WD\*-B\*-W3\*-SV

|                                                                         |                                                                                    |
|-------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| * Straight Male Stud Standpipe Fitting                                  | <b>FI-EGE</b>                                                                      |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                         |
| * Series                                                                | Light Series (page 158) <b>L</b><br>Heavy Series (page 159) <b>S</b>               |
| * Thread Type                                                           | Whitworth Parallel Pipe Thread (BSPP) <b>R</b>                                     |
| If required, please indicate special sizes, e.g. R1/8!                  |                                                                                    |
| * Seal Type                                                             | Profile Sealing Ring <b>-WD</b>                                                    |
| * Seal Material                                                         | NBR (Buna-N®) <b>-B</b><br>FKM (Viton®) <b>-V</b><br>EPDM <b>-E</b>                |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                               |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                    |
| * Assembling / Kitting                                                  | Fitting body assembled with cutting ring and union nut on the standpipe <b>-SV</b> |

### Spare Parts / Accessories



Profile Sealing Ring  
Type **WDG**

Page 238

### Whitworth Parallel Pipe Thread (BSPP)

### Profile Sealing Ring

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in)<br>Thread T | D2   | L1   | i   | S1   | S2   | Torque<br>(Nm/lb-ft)<br>Thread T | Weight<br>(kg/lbs) ca.<br>per 100 <sup>1</sup> | Ordering Codes <sup>2</sup> |
|--------|--------------------------|-----------------|-----------------------------------|------|------|-----|------|------|----------------------------------|------------------------------------------------|-----------------------------|
| L      | 6                        | 315             | G 1/8                             | 3,5  | 24,5 | 8   | 14   | 14   | 18                               | 2,29                                           | FI-EGE-06LR-WD-B-W3-SV      |
|        | .24                      | 4568            |                                   | .14  | .96  | .31 | .55  | .55  | 13.3                             | 5.04                                           |                             |
|        | 8                        | 315             | G 1/4                             | 4,5  | 29,5 | 12  | 19   | 17   | 35                               | 4,43                                           | FI-EGE-08LR-WD-B-W3-SV      |
|        | .31                      | 4568            |                                   | .18  | 1.16 | .47 | .75  | .67  | 25.8                             | 9.75                                           |                             |
|        | 10                       | 315             | G 1/4                             | 7    | 27,5 | 12  | 19   | 19   | 35                               | 5,04                                           | FI-EGE-10LR-WD-B-W3-SV      |
|        | .39                      | 4568            |                                   | .28  | 1.08 | .47 | .75  | .75  | 25.8                             | 11.09                                          |                             |
|        | 10                       | 315             | G 3/8                             | 6    | 27,5 | 12  | 22   | 22   | 70                               | 5,91                                           | FI-EGE-10LR3/8-WD-B-W3-SV   |
|        | .39                      | 4568            |                                   | .24  | 1.08 | .47 | .87  | .87  | 51.8                             | 13.03                                          |                             |
|        | 10                       | 315             | G 1/2                             | 6    | 34,5 | 14  | 27   | 19   | 90                               | 10,04                                          | FI-EGE-10LR1/2-WD-B-W3-SV   |
|        | .39                      | 4568            |                                   | .24  | 1.36 | .55 | 1.06 | .75  | 66.6                             | 22.13                                          |                             |
|        | 12                       | 315             | G 1/4                             | 7    | 27,5 | 12  | 19   | 22   | 35                               | 6,07                                           | FI-EGE-12LR1/4-WD-B-W3-SV   |
|        | .47                      | 4568            |                                   | .28  | 1.08 | .47 | .75  | .87  | 25.8                             | 13.38                                          |                             |
|        | 12                       | 315             | G 3/8                             | 7,5  | 34   | 12  | 22   | 22   | 70                               | 9,23                                           | FI-EGE-12LR-WD-B-W3-SV      |
|        | .47                      | 4568            |                                   | .30  | 1.34 | .47 | .87  | .87  | 51.8                             | 20.31                                          |                             |
|        | 12                       | 315             | G 1/2                             | 7    | 34,5 | 14  | 27   | 22   | 90                               | 12,86                                          | FI-EGE-12LR1/2-WD-B-W3-SV   |
|        | .47                      | 4568            |                                   | .28  | 1.36 | .55 | 1.06 | .87  | 66.6                             | 28.35                                          |                             |
|        | 15                       | 315             | G 3/8                             | 10   | 31   | 12  | 22   | 27   | 70                               | 9,72                                           | FI-EGE-15LR3/8-WD-B-W3-SV   |
|        | .59                      | 4568            |                                   | .39  | 1.22 | .47 | .87  | 1.06 | 51.8                             | 21.43                                          |                             |
|        | 15                       | 315             | G 1/2                             | 11   | 32   | 14  | 27   | 27   | 90                               | 13,01                                          | FI-EGE-15LR-WD-B-W3-SV      |
|        | .59                      | 4568            |                                   | .43  | 1.26 | .55 | 1.06 | 1.06 | 66.6                             | 28.62                                          |                             |
|        | 18                       | 315             | G 1/2                             | 14   | 31,5 | 14  | 27   | 27   | 90                               | 13,89                                          | FI-EGE-18LR-WD-B-W3-SV      |
|        | .71                      | 4568            |                                   | .55  | 1.24 | .55 | 1.06 | 1.06 | 66.6                             | 30.55                                          |                             |
|        | 18                       | 315             | G 3/4                             | 13   | 31,5 | 16  | 32   | 32   | 180                              | 18,26                                          | FI-EGE-18LR3/4-WD-B-W3-SV   |
|        | .71                      | 4568            |                                   | .51  | 1.24 | .63 | 1.26 | 1.26 | 133.2                            | 40.26                                          |                             |
|        | 22                       | 160             | G 3/4                             | 18   | 32,5 | 16  | 32   | 36   | 180                              | 19,63                                          | FI-EGE-22LR-WD-B-W3-SV      |
|        | .87                      | 2320            |                                   | .71  | 1.28 | .63 | 1.26 | 1.42 | 133.2                            | 43.19                                          |                             |
|        | 28                       | 160             | G 1                               | 23   | 35   | 18  | 41   | 41   | 310                              | 28,64                                          | FI-EGE-28LR-WD-B-W3-SV      |
|        | 1.10                     | 2320            |                                   | .91  | 1.38 | .71 | 1.61 | 1.61 | 229.4                            | 63.02                                          |                             |
|        | 35                       | 160             | G 1 1/4                           | 29,5 | 42,5 | 20  | 50   | 50   | 450                              | 46,03                                          | FI-EGE-35LR-WD-B-W3-SV      |
|        | 1.38                     | 2320            |                                   | 1.16 | 1.67 | .79 | 1.97 | 1.97 | 333.0                            | 101.26                                         |                             |
|        | 42                       | 160             | G 1 1/2                           | 35,5 | 46,5 | 22  | 55   | 60   | 540                              | 69,40                                          | FI-EGE-42LR-WD-B-W3-SV      |
|        | 1.65                     | 2320            |                                   | 1.40 | 1.83 | .87 | 2.17 | 2.36 | 399.6                            | 152.68                                         |                             |

<sup>1</sup> Weight including cutting ring and union nut on the standpipe.

<sup>2</sup> Standard scope of delivery: Fitting body assembled with cutting ring and union nut on the standpipe.

Please note: Standpipes are always factory-assembled with cutting rings and union nuts.

The union nut assembled on the standpipe has to be tightened by only 1/12 a turn (equivalent to 30°) beyond the fixed point.



Male stud acc. to ISO 1179-2 (Type E)  
Port acc. to ISO 1179-1

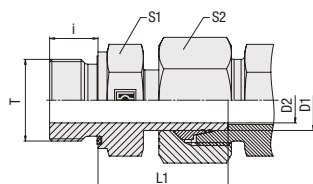
Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.



## Straight Male Stud Standpipe Fitting Type FI-EGE-...-R-WD • Series L / S



### Whitworth Parallel Pipe Thread (BSPP)

### Profile Sealing Ring

| Series | Tube OD                           | PN                                  | Dimensions                        |         |      |      |      |                                       | Torque                                 | Weight               | Ordering Codes <sup>2</sup> |
|--------|-----------------------------------|-------------------------------------|-----------------------------------|---------|------|------|------|---------------------------------------|----------------------------------------|----------------------|-----------------------------|
|        | ( <sup>mm</sup> / <sub>in</sub> ) | ( <sup>bar</sup> / <sub>PSI</sub> ) | ( <sup>mm</sup> / <sub>in</sub> ) |         |      |      |      | ( <sup>N-m</sup> / <sub>ft-lb</sub> ) | ( <sup>kg</sup> / <sub>lbs</sub> ) Ca. |                      |                             |
|        | D1                                |                                     | Thread T                          | D2      | L1   | i    | S1   | S2                                    | Thread T                               | per 100 <sup>1</sup> |                             |
| S      | 6                                 | 630                                 | G 1/4                             | 3,5     | 27   | 12   | 19   | 17                                    | 55                                     | 4,95                 | FI-EGE-06SR-WD-B-W3-SV      |
|        | .24                               | 9135                                |                                   | .14     | 1.06 | .47  | .75  | .67                                   | 40.7                                   | 10.89                |                             |
|        | 8                                 | 630                                 |                                   | G 1/4   | 4,5  | 29,5 | 12   | 19                                    | 19                                     | 55                   |                             |
|        | .31                               | 9135                                | .18                               |         | 1.16 | .47  | .75  | .75                                   | 40.7                                   | 13.09                |                             |
|        | 10                                | 630                                 | G 1/4                             |         | 6    | 31,5 | 12   | 19                                    | 22                                     | 55                   | 7,32                        |
|        | .39                               | 9135                                |                                   | .24     | 1.24 | .47  | .75  | .87                                   | 40.7                                   | 16.14                |                             |
|        | 10                                | 630                                 |                                   | G 3/8   | 6,5  | 32   | 12   | 22                                    | 22                                     | 80                   | 8,71                        |
|        | .39                               | 9135                                | .26                               |         | 1.26 | .47  | .87  | .87                                   | 59.2                                   | 19.15                |                             |
|        | 12                                | 630                                 | G 1/4                             |         | 5    | 34   | 12   | 19                                    | 24                                     | 55                   | 8,98                        |
|        | .47                               | 9135                                |                                   | .2      | 1.34 | .47  | .75  | .94                                   | 40.7                                   | 19.80                |                             |
|        | 12                                | 630                                 |                                   | G 3/8   | 7,5  | 34   | 12   | 22                                    | 24                                     | 80                   | 10,02                       |
|        | .47                               | 9135                                | .30                               |         | 1.34 | .47  | .87  | .94                                   | 59.2                                   | 22.05                |                             |
|        | 12                                | 630                                 | G 1/2                             |         | 7,3  | 34,5 | 14   | 27                                    | 24                                     | 115                  | 13,45                       |
|        | .47                               | 9135                                |                                   | .29     | 1.36 | .55  | 1.06 | .94                                   | 85,1                                   | 29.65                |                             |
|        | 14                                | 630                                 |                                   | G 1/2   | 9,5  | 36,5 | 14   | 27                                    | 27                                     | 115                  | 15,40                       |
|        | .55                               | 9135                                | .37                               |         | 1.44 | .55  | 1.06 | 1.06                                  | 85,1                                   | 33.88                |                             |
|        | 16                                | 630                                 | G 3/8                             |         | 10,5 | 37   | 12   | 22                                    | 30                                     | 80                   | 13,46                       |
|        | .63                               | 9135                                |                                   | .41     | 1.46 | .47  | .87  | 1.18                                  | 59,2                                   | 36.29                |                             |
|        | 16                                | 400                                 |                                   | G 1/2   | 11,5 | 37   | 14   | 27                                    | 30                                     | 115                  | 16,88                       |
|        | .63                               | 5800                                | .45                               |         | 1.46 | .55  | 1.06 | 1.18                                  | 85,1                                   | 37.13                |                             |
|        | 16                                | 400                                 | G 3/4                             |         | 11,5 | 39   | 16   | 32                                    | 36                                     | 180                  | 23,32                       |
|        | .63                               | 5800                                |                                   | .45     | 1.54 | .63  | 1.26 | 1.42                                  | 133,2                                  | 51.41                |                             |
|        | 20                                | 400                                 |                                   | G 1/2   | 12   | 43   | 14   | 32                                    | 36                                     | 115                  | 23,01                       |
|        | .79                               | 5800                                | .47                               |         | 1.69 | .55  | 1.26 | 1.42                                  | 85,1                                   | 50.73                |                             |
|        | 20                                | 400                                 | G 3/4                             |         | 15,5 | 43   | 16   | 32                                    | 36                                     | 180                  | 26,88                       |
|        | .79                               | 5800                                |                                   | .61     | 1.69 | .63  | 1.26 | 1.42                                  | 133,2                                  | 59.14                |                             |
|        | 25                                | 400                                 |                                   | G 1     | 18   | 48   | 18   | 41                                    | 46                                     | 310                  | 48,81                       |
|        | .98                               | 5800                                | .71                               |         | 1.89 | .71  | 1.61 | 1.81                                  | 229,4                                  | 107.38               |                             |
|        | 30                                | 400                                 | G 1 1/4                           |         | 23,5 | 51   | 20   | 50                                    | 50                                     | 450                  | 62,10                       |
|        | 1.18                              | 5800                                |                                   | .93     | 2.01 | .79  | 1.97 | 1.97                                  | 333,0                                  | 202.62               |                             |
|        | 38                                | 315                                 |                                   | G 1 1/2 | 29   | 60   | 22   | 55                                    | 60                                     | 540                  | 97,70                       |
|        | 1.50                              | 4568                                | 1.14                              |         | 2.36 | .87  | 2.17 | 2.36                                  | 399.6                                  | 214.94               |                             |

### Ordering Codes

**\*FI-EGE\*-10\*L\*R\*-WD\*-B\*-W3\*-SV**

\* Straight Male Stud Standpipe Fitting **FI-EGE**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series (page 158) **L**  
Heavy Series (page 159) **S**

\* Thread Type Whitworth Parallel Pipe Thread (BSPP) **R**

If required, please indicate special sizes, e.g. R1/8!

\* Seal Type Profile Sealing Ring **-WD**

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body assembled with cutting ring and union nut on the standpipe **-SV**

### Spare Parts / Accessories



Profile Sealing Ring  
Type **WDG**

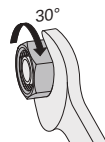
Page 238

<sup>1</sup> Weight including cutting ring and union nut on the standpipe.

<sup>2</sup> Standard scope of delivery: Fitting body assembled with cutting ring and union nut on the standpipe.

Please note: Standpipes are always factory-assembled with cutting rings and union nuts.

The union nut assembled on the standpipe has to be tightened by only 1/12 a turn (equivalent to 30°) beyond the fixed point.



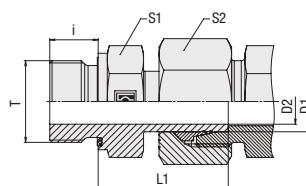
Male stud acc. to ISO 1179-2 (Type E)  
Port acc. to ISO 1179-1

Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.  
Please contact STAUFF prior to the assembly for further information.



## Straight Male Stud Standpipe Fitting Type FI-EGE-...-M-WD • Series L / S



### Ordering Codes

**\*FI-EGE\*-10\*L\*M\*-WD\*-B\*-W3\*-SV**

\* Straight Male Stud Standpipe Fitting **FI-EGE**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Metric Parallel Thread **M**

If required, please indicate special sizes, e.g. M12x1.5!

\* Seal Type Profile Sealing Ring **-WD**

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body assembled with cutting ring and union nut on the standpipe **-SV**

### Spare Parts / Accessories



Profile Sealing Ring  
Type **WDG**

Page 238

### Profile Sealing Ring

### Metric Parallel Thread

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/PSI) | Dimensions<br>(mm/in)<br>Thread T | D2   | L1   | i   | S1   | S2   | Torque<br>(Nm/lb.ft)<br>Thread T | Weight<br>(kg/lbs) ca.<br>per 100 <sup>1</sup> | Ordering Codes <sup>2</sup> |
|--------|--------------------------|-----------------|-----------------------------------|------|------|-----|------|------|----------------------------------|------------------------------------------------|-----------------------------|
| L      | 6                        | 500             | M 10 x 1                          | 3,5  | 24,5 | 8   | 14   | 14   | 18                               | 2,30                                           | FI-EGE-06LM-WD-B-W3-SV      |
|        | .24                      | 7251            | M 10 x 1                          | .14  | .96  | .31 | .55  | .55  | 13.3                             | 5,06                                           |                             |
|        | 8                        | 500             | M 12 x 1,5                        | 5,5  | 26,5 | 12  | 17   | 17   | 25                               | 3,90                                           | FI-EGE-08LM-WD-B-W3-SV      |
|        | .31                      | 7251            | M 12 x 1,5                        | .22  | 1.04 | .47 | .67  | .67  | 18.5                             | 8.58                                           |                             |
|        | 10                       | 500             | M 14 x 1,5                        | 7    | 27,5 | 12  | 19   | 19   | 45                               | 4,99                                           | FI-EGE-10LM-WD-B-W3-SV      |
|        | .39                      | 7251            | M 14 x 1,5                        | .28  | 1.08 | .47 | .75  | .75  | 33.3                             | 10.97                                          |                             |
|        | 12                       | 400             | M 16 x 1,5                        | 9    | 30,5 | 12  | 22   | 22   | 55                               | 7,18                                           | FI-EGE-12LM-WD-B-W3-SV      |
|        | .47                      | 5800            | M 16 x 1,5                        | .35  | 1.20 | .47 | .87  | .87  | 40.7                             | 15.79                                          |                             |
|        | 15                       | 400             | M 18 x 1,5                        | 11   | 31,5 | 12  | 24   | 27   | 90                               | 10,25                                          | FI-EGE-15LM-WD-B-W3-SV      |
|        | .59                      | 5800            | M 18 x 1,5                        | .43  | 1.24 | .47 | .94  | 1.06 | 66.6                             | 22.55                                          |                             |
|        | 18                       | 400             | M 22 x 1,5                        | 14   | 31,5 | 14  | 27   | 32   | 125                              | 13,62                                          | FI-EGE-18LM-WD-B-W3-SV      |
|        | .71                      | 5800            | M 22 x 1,5                        | .55  | 1.24 | .55 | 1.06 | 1.26 | 92.5                             | 29.97                                          |                             |
|        | 22                       | 250             | M 26 x 1,5                        | 18   | 32,5 | 16  | 32   | 36   | 180                              | 10,60                                          | FI-EGE-22LM-WD-B-W3-SV      |
|        | .87                      | 3625            | M 26 x 1,5                        | .71  | 1.28 | .63 | 1.26 | 1.42 | 133.2                            | 23.32                                          |                             |
|        | 28                       | 250             | M 33 x 2                          | 23   | 35   | 18  | 41   | 41   | 310                              | 30,26                                          | FI-EGE-28LM-WD-B-W3-SV      |
|        | 1.10                     | 3625            | M 33 x 2                          | .91  | 1.38 | .71 | 1.61 | 1.61 | 229.4                            | 66.57                                          |                             |
|        | 35                       | 250             | M 42 x 2                          | 29,5 | 42,5 | 20  | 50   | 50   | 450                              | 47,17                                          | FI-EGE-35LM-WD-B-W3-SV      |
|        | 1.38                     | 3625            | M 42 x 2                          | 1.16 | 1.67 | .79 | 1.97 | 1.97 | 333.0                            | 103.77                                         |                             |
|        | 42                       | 250             | M 48 x 2                          | 35,5 | 46,5 | 22  | 55   | 60   | 540                              | 77,85                                          | FI-EGE-42LM-WD-B-W3-SV      |
|        | 1.65                     | 3625            | M 48 x 2                          | 1.40 | 1.83 | .87 | 2.17 | 2.36 | 399.6                            | 171.26                                         |                             |
| S      | 6                        | 800             | M 12 x 1,5                        | 3,5  | 27   | 12  | 17   | 17   | 35                               | 4,34                                           | FI-EGE-06SM-WD-B-W3-SV      |
|        | .24                      | 11603           | M 12 x 1,5                        | .14  | 1.06 | .47 | .67  | .67  | 25.9                             | 9.54                                           |                             |
|        | 8                        | 800             | M 14 x 1,5                        | 4,5  | 29,5 | 12  | 19   | 19   | 55                               | 5,90                                           | FI-EGE-08SM-WD-B-W3-SV      |
|        | .31                      | 11603           | M 14 x 1,5                        | .18  | 1.16 | .47 | .75  | .75  | 40.7                             | 12.98                                          |                             |
|        | 10                       | 800             | M 16 x 1,5                        | 6,5  | 32   | 12  | 22   | 22   | 70                               | 8,20                                           | FI-EGE-10SM-WD-B-W3-SV      |
|        | .39                      | 11603           | M 16 x 1,5                        | .26  | 1.26 | .47 | .87  | .87  | 51.8                             | 18.04                                          |                             |
|        | 12                       | 630             | M 18 x 1,5                        | 7,5  | 34   | 12  | 24   | 24   | 90                               | 10,97                                          | FI-EGE-12SM-WD-B-W3-SV      |
|        | .47                      | 9135            | M 18 x 1,5                        | .30  | 1.34 | .47 | .94  | .94  | 66.6                             | 24.14                                          |                             |
|        | 14                       | 630             | M 20 x 1,5                        | 9,5  | 36,5 | 14  | 27   | 27   | 125                              | 15,57                                          | FI-EGE-14SM-WD-B-W3-SV      |
|        | .55                      | 9135            | M 20 x 1,5                        | .37  | 1.44 | .55 | 1.06 | 1.06 | 92.5                             | 34.25                                          |                             |
|        | 16                       | 630             | M 22 x 1,5                        | 11,5 | 37   | 14  | 27   | 30   | 135                              | 16,20                                          | FI-EGE-16SM-WD-B-W3-SV      |
|        | .63                      | 9135            | M 22 x 1,5                        | .45  | 1.46 | .55 | 1.06 | 1.18 | 99.9                             | 35.64                                          |                             |
|        | 20                       | 400             | M 27 x 2                          | 15,5 | 43   | 16  | 32   | 36   | 180                              | 27,06                                          | FI-EGE-20SM-WD-B-W3-SV      |
|        | .79                      | 5800            | M 27 x 2                          | .61  | 1.69 | .63 | 1.26 | 1.42 | 133.2                            | 59.54                                          |                             |
|        | 25                       | 400             | M 33 x 2                          | 18   | 48   | 18  | 41   | 46   | 310                              | 48,60                                          | FI-EGE-25SM-WD-B-W3-SV      |
|        | .98                      | 5800            | M 33 x 2                          | .71  | 1.89 | .71 | 1.61 | 1.81 | 229.4                            | 106.92                                         |                             |
|        | 30                       | 400             | M 42 x 2                          | 23,5 | 51   | 20  | 50   | 50   | 450                              | 69,15                                          | FI-EGE-30SM-WD-B-W3-SV      |
|        | 1.18                     | 5800            | M 42 x 2                          | .93  | 2.01 | .79 | 1.97 | 1.97 | 333.0                            | 152.13                                         |                             |
|        | 38                       | 420             | M 48 x 2                          | 29   | 60   | 22  | 55   | 60   | 540                              | 110,29                                         | FI-EGE-38SM-WD-B-W3-SV      |
|        | 1.50                     | 6091            | M 48 x 2                          | 1.14 | 2.36 | .87 | 2.17 | 2.36 | 399.6                            | 242.65                                         |                             |

<sup>1</sup> Weight including cutting ring and union nut on the standpipe.

<sup>2</sup> Standard scope of delivery: Fitting body assembled with cutting ring and union nut on the standpipe.

Please note: Standpipes are always factory-assembled with cutting rings and union nuts.

The union nut assembled on the standpipe has to be tightened by only 1/12 a turn (equivalent to 30°) beyond the fixed point.



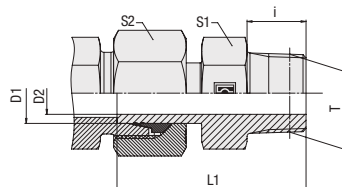
Male stud acc. to ISO 9974-2 (Type E)  
Port acc. to ISO 9974-1

Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.  
Please contact STAUFF prior to the assembly for further information.



## Straight Male Stud Standpipe Fitting Type FI-EGE-...-N • Series L / S



### NPT Thread

| Series | Tube OD | PN        | Dimensions |      |      |      |      |        | Weight                               | Ordering Codes <sup>2</sup> |
|--------|---------|-----------|------------|------|------|------|------|--------|--------------------------------------|-----------------------------|
|        | (mm/in) | (bar/Psi) | (mm/in)    |      |      |      |      |        | (kg/lbs) ca.<br>per 100 <sup>1</sup> |                             |
|        | D1      |           | Thread T   | D2   | L1   | i    | S1   | S2     |                                      |                             |
| L      | 6       | 315       |            | 3,3  | 33   | 10   | 11   | 14     | 2,27                                 |                             |
|        | .24     | 4567,5    | 1/8 NPT    | .13  | 1.30 | .39  | .43  | .55    | 4.99                                 | FI-EGE-06L1/8N-W3-SV        |
|        | 8       | 315       | 1/4 NPT    | 4    | 40   | 15,5 | 14   | 17     | 3,93                                 |                             |
|        | .31     | 4567,5    |            | .16  | 1.57 | .61  | .55  | .67    | 8.64                                 | FI-EGE-08L1/4N-W3-SV        |
|        | 10      | 315       | 1/4 NPT    | 6,5  | 41   | 15,5 | 14   | 19     | 4,46                                 |                             |
|        | .39     | 4567,5    |            | .26  | 1.61 | .61  | .55  | .75    | 9.81                                 | FI-EGE-10L1/4N-W3-SV        |
|        | 12      | 315       | 3/8 NPT    | 7    | 42   | 15,5 | 19   | 22     | 6,80                                 |                             |
|        | .47     | 4567,5    |            | .28  | 1.65 | .61  | .75  | .87    | 14.97                                | FI-EGE-12L3/8N-W3-SV        |
|        | 15      | 315       | 1/2 NPT    | 10   | 46,5 | 20   | 22   | 27     | 10,48                                |                             |
|        | .59     | 4567,5    |            | .39  | 1.83 | .79  | .87  | 1.06   | 23.05                                | FI-EGE-15L1/2N-W3-SV        |
|        | 18      | 315       | 1/2 NPT    | 13   | 49,5 | 20   | 22   | 32     | 13,44                                |                             |
|        | .71     | 4567,5    |            | .51  | 1.95 | .79  | .87  | 1.26   | 29.56                                | FI-EGE-18L1/2N-W3-SV        |
|        | 22      | 160       | 3/4 NPT    | 16,5 | 49   | 20   | 27   | 36     | 18,41                                |                             |
|        | .87     | 2320      |            | .65  | 1.93 | .79  | 1.06 | 1.42   | 40.51                                | FI-EGE-22L3/4N-W3-SV        |
|        | 28      | 160       | 1 NPT      | 22   | 55,5 | 25   | 36   | 41     | 25,80                                |                             |
|        | 1.10    | 2320      |            | .87  | 2.19 | .98  | 1.42 | 1.61   | 56.76                                | FI-EGE-28L1N-W3-SV          |
|        | 35      | 160       | 1 1/4 NPT  | 28   | 74,1 | 25,6 | 46   | 50     | 42,40                                |                             |
|        | 1.38    | 2320      |            | 1.10 | 2.92 | 1.01 | 1.81 | 1.97   | 93.28                                | FI-EGE-35L1-1/4N-W3-SV      |
| 42     | 160     | 1 1/2 NPT | 34         | 78,5 | 26   | 50   | 60   | 62,33  |                                      |                             |
| 1.65   | 2320    |           | 1.34       | 3.09 | 1.02 | 1.97 | 2.36 | 137.13 | FI-EGE-42L1-1/2N-W3-SV               |                             |
| S      | 6       | 630       | 1/4 NPT    | 3    | 45,1 | 14   | 14   | 17     | 1,92                                 |                             |
|        | .24     | 9135      |            | .12  | 1.78 | .55  | .55  | .67    | 4.23                                 | FI-EGE-06S1/4N-W3-SV        |
|        | 8       | 630       | 1/4 NPT    | 4,3  | 40   | 15,5 | 14   | 19     | 4,45                                 |                             |
|        | .31     | 9135      |            | .17  | 1.57 | .61  | .55  | .75    | 9.78                                 | FI-EGE-08S1/4N-W3-SV        |
|        | 10      | 630       | 3/8 NPT    | 6    | 44,5 | 15,5 | 19   | 22     | 7,29                                 |                             |
|        | .39     | 9135      |            | .24  | 1.75 | .61  | .75  | .87    | 16.04                                | FI-EGE-10S3/8N-W3-SV        |
|        | 12      | 630       | 3/8 NPT    | 7,3  | 46,5 | 15,5 | 19   | 24     | 8,49                                 |                             |
|        | .47     | 9135      |            | .29  | 1.83 | .61  | .75  | .94    | 18.67                                | FI-EGE-12S3/8N-W3-SV        |
|        | 14      | 630       | 1/2 NPT    | 10,5 | 53,5 | 20   | 22   | 27     | 12,81                                |                             |
|        | .55     | 9135      |            | .41  | 2.11 | .79  | .87  | 1.06   | 28.19                                | FI-EGE-14S1/2N-W3-SV        |
|        | 16      | 630       | 1/2 NPT    | 13,5 | 58   | 20   | 22   | 30     | 16,52                                |                             |
|        | .63     | 9135      |            | .53  | 2.28 | .79  | .87  | 1.18   | 36.34                                | FI-EGE-16S1/2N-W3-SV        |
|        | 20      | 400       | 3/4 NPT    | 17,5 | 68   | 20   | 27   | 36     | 24,50                                |                             |
|        | .79     | 5800      |            | .69  | 2.68 | .79  | 1.06 | 1.42   | 53.90                                | FI-EGE-20S3/4N-W3-SV        |
|        | 25      | 400       | 1 NPT      | 17,5 | 68   | 25   | 36   | 46     | 41,13                                |                             |
|        | .98     | 5800      |            | .69  | 2.68 | .98  | 1.42 | 1.81   | 90.49                                | FI-EGE-25S1N-W3-SV          |
|        | 30      | 400       | 1 1/4 NPT  | 22   | 70,5 | 26   | 46   | 50     | 52,80                                |                             |
|        | 1.18    | 5800      |            | .87  | 2.78 | 1.02 | 1.81 | 1.97   | 116.16                               | FI-EGE-30S1-1/4N-W3-SV      |
| 38     | 400     | 1 1/2 NPT | 29         | 92   | 26   | 50   | 60   | 83,60  |                                      |                             |
| 1.50   | 5800    |           | 1.14       | 3.62 | 1.02 | 1.97 | 2.36 | 183.92 | FI-EGE-38S1-1/2N-W3-SV               |                             |

### Ordering Codes

**\*FI-EGE\*-10\*L\*1/4\*N\*-W3\*-SV**

\* Straight Male Stud Standpipe Fitting **FI-EGE**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Size acc. to dimension table **1/4**

Please always indicate thread sizes, e.g. 1/4!

\* Thread Type NPT Thread **N**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

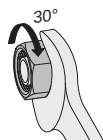
\* Assembling / Kitting Fitting body assembled with cutting ring and union nut on the standpipe **-SV**

<sup>1</sup> Weight including cutting ring and union nut on the standpipe.

<sup>2</sup> Standard scope of delivery: Fitting body assembled with cutting ring and union nut on the standpipe.

Please note: Standpipes are always factory-assembled with cutting rings and union nuts.

The union nut assembled on the standpipe has to be tightened by only 1/12 a turn (equivalent to 30°) beyond the fixed point.



Male stud acc. to ANSI/ASME B1.20.1-1983

Port acc. to ANSI/ASME B1.20.1-1983

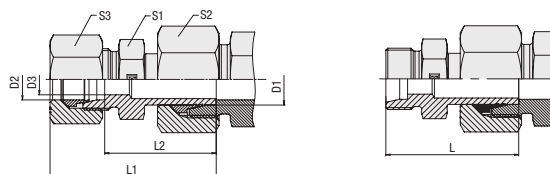
Suitable liquid / plastic sealant required.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.



## Straight Standpipe Reducer Type FI-REDS • Series L



### Ordering Codes

#### \*FI-REDS\*-10/\*08\*L\*-W3\*-MS+SV

- \* Straight Standpipe Reducer **FI-REDS**
- \* Outside Tube Diameter D1 (in mm) **-10**
- \* Outside Tube Diameter D2 (in mm) **08**
- \* Series Light Series (pages 162/163) **L**  
Heavy Series (pages 164/165) **S**
- \* Material Code Steel, zinc/nickel-plated **-W3**
- Please contact STAUFF for alternative materials and surface finishings.
- \* Assembling / Kitting Fitting body assembled with cutting ring and union nut on the standpipe **-SV**
- Fitting body assembled with cutting rings and union nuts on all ends **-MS+SV**

### Connecting Parts

- Cutting Ring Type **FI-DS** Page 28
- Soft-Sealing Cutting Ring Type **FI-WDDS** Page 29
- Support Sleeve Type **FI-VH** Page 31
- STAUFF Form EVO Sealing Ring Type **FI-FD** Page 32
- Union Nut Type **FI-M** Page 33
- 37° Flared Tube Fitting Set Type **FI-AB** Page 37

| Series | Tube OD<br>(mm/in) |     | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |                 |      |      | Weight<br>(kg/lbs) ca.<br>per 100 |      |       | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----|-----------------|-----------------------|------|-----------------|------|------|-----------------------------------|------|-------|-----------------------------|
|        | D1                 | D2  |                 | D3                    | L    | L1 <sup>1</sup> | L2   | S1   | S2                                | S3   |       |                             |
| L / LL | 6                  | 4   | 100             | 3                     | 32,5 | 38,5            | 28,5 | 10   | 10                                | 10   | 1,96  | FI-REDS-06L/04LL-W3-SV      |
|        | .24                | .16 | 1450            | .12                   | 1.28 | 1.52            | 1.12 | .39  | .39                               | .39  | 4.32  |                             |
| L      | 8                  | 6   | 500             | 4                     | 33   | 40,5            | 27,5 | 12   | 17                                | 14   | 3,15  | FI-REDS-08L/06L-W3-SV       |
|        | .31                | .24 | 7250            | .16                   | 1.30 | 1.59            | 1.08 | .47  | .67                               | .55  | 6.93  |                             |
|        | 10                 | 6   | 500             | 4                     | 34   | 41,5            | 28,5 | 12   | 19                                | 14   | 4,00  | FI-REDS-10L/06L-W3-SV       |
|        | .39                | .24 | 7250            | .16                   | 1.34 | 1.63            | 1.12 | .47  | .75                               | .55  | 8.79  |                             |
|        | 10                 | 8   | 500             | 6                     | 35   | 42,5            | 28,5 | 14   | 19                                | 17   | 3,97  | FI-REDS-10L/08L-W3-SV       |
|        | .39                | .31 | 7250            | .24                   | 1.38 | 1.67            | 1.12 | .55  | .75                               | .67  | 8.74  |                             |
|        | 12                 | 6   | 400             | 4                     | 37   | 44,5            | 28   | 14   | 22                                | 14   | 4,75  | FI-REDS-12L/06L-W3-SV       |
|        | .47                | .24 | 5800            | .16                   | 1.46 | 1.75            | 1.10 | .55  | .87                               | .55  | 10.44 |                             |
|        | 12                 | 8   | 400             | 6                     | 36   | 44,5            | 29   | 14   | 22                                | 17   | 5,35  | FI-REDS-12L/08L-W3-SV       |
|        | .47                | .31 | 5800            | .24                   | 1.42 | 1.75            | 1.14 | .55  | .87                               | .67  | 11.78 |                             |
|        | 12                 | 10  | 400             | 8                     | 37   | 45,5            | 30   | 17   | 22                                | 19   | 5,48  | FI-REDS-12L/10L-W3-SV       |
|        | .47                | .39 | 5800            | .31                   | 1.46 | 1.79            | 1.18 | .67  | .87                               | .75  | 12.05 |                             |
|        | 15                 | 6   | 400             | 4                     | 38   | 46              | 28   | 17   | 27                                | 14   | 7,53  | FI-REDS-15L/06L-W3-SV       |
|        | .59                | .24 | 5800            | .16                   | 1.50 | 1.81            | 1.10 | .67  | 1.06                              | .55  | 16.57 |                             |
|        | 15                 | 8   | 400             | 6                     | 38   | 46              | 29   | 17   | 27                                | 17   | 7,73  | FI-REDS-15L/08L-W3-SV       |
|        | .59                | .31 | 5800            | .24                   | 1.50 | 1.81            | 1.14 | .67  | 1.06                              | .67  | 17.01 |                             |
|        | 15                 | 10  | 400             | 8                     | 37   | 47              | 30   | 17   | 27                                | 19   | 8,24  | FI-REDS-15L/10L-W3-SV       |
|        | .59                | .39 | 5800            | .31                   | 1.46 | 1.85            | 1.18 | .67  | 1.06                              | .75  | 18.12 |                             |
|        | 15                 | 12  | 400             | 10                    | 38   | 48              | 31   | 19   | 27                                | 22   | 8,27  | FI-REDS-15L/12L-W3-SV       |
|        | .59                | .47 | 5800            | .39                   | 1.50 | 1.89            | 1.22 | .75  | 1.06                              | .87  | 18.19 |                             |
|        | 18                 | 6   | 400             | 4                     | 37,5 | 45,5            | 30   | 19   | 32                                | 14   | 10,36 | FI-REDS-18L/06L-W3-SV       |
|        | .71                | .24 | 5800            | .16                   | 1.48 | 1.79            | 1.18 | .75  | 1.26                              | .55  | 22.80 |                             |
|        | 18                 | 8   | 400             | 6                     | 37,5 | 45,5            | 31   | 19   | 32                                | 17   | 10,84 | FI-REDS-18L/08L-W3-SV       |
|        | .71                | .31 | 5800            | .24                   | 1.48 | 1.79            | 1.22 | .75  | 1.26                              | .67  | 23.85 |                             |
|        | 18                 | 10  | 400             | 8                     | 39   | 46,5            | 32   | 19   | 32                                | 19   | 10,98 | FI-REDS-18L/10L-W3-SV       |
|        | .71                | .39 | 5800            | .31                   | 1.54 | 1.83            | 1.26 | .75  | 1.26                              | .75  | 24.16 |                             |
|        | 18                 | 12  | 400             | 10                    | 40,5 | 46,5            | 33,5 | 19   | 32                                | 22   | 12,01 | FI-REDS-18L/12L-W3-SV       |
|        | .71                | .47 | 5800            | .39                   | 1.59 | 1.83            | 1.32 | .75  | 1.26                              | .87  | 26.43 |                             |
|        | 18                 | 15  | 400             | 12                    | 41   | 47,5            | 34   | 24   | 32                                | 27   | 12,76 | FI-REDS-18L/15L-W3-SV       |
|        | .71                | .59 | 5800            | .47                   | 1.61 | 1.87            | 1.34 | .94  | 1.26                              | 1.06 | 28.07 |                             |
|        | 22                 | 6   | 250             | 4                     | 39,5 | 47              | 32   | 24   | 36                                | 14   | 13,75 | FI-REDS-22L/06L-W3-SV       |
|        | .87                | .24 | 3625            | .16                   | 1.56 | 1.85            | 1.26 | .94  | 1.42                              | .55  | 30.25 |                             |
|        | 22                 | 8   | 250             | 6                     | 43   | 46,5            | 34   | 24   | 36                                | 17   | 19,87 | FI-REDS-22L/08L-W3-SV       |
|        | .87                | .31 | 3625            | .24                   | 1.69 | 1.83            | 1.34 | .94  | 1.42                              | .67  | 43.72 |                             |
|        | 22                 | 10  | 250             | 8                     | 41   | 47,5            | 34   | 24   | 36                                | 19   | 15,17 | FI-REDS-22L/10L-W3-SV       |
|        | .87                | .39 | 3625            | .31                   | 1.61 | 1.87            | 1.34 | .94  | 1.42                              | .75  | 33.37 |                             |
|        | 22                 | 12  | 250             | 10                    | 39,5 | 47,5            | 34,5 | 24   | 36                                | 22   | 15,45 | FI-REDS-22L/12L-W3-SV       |
|        | .87                | .47 | 3625            | .39                   | 1.56 | 1.87            | 1.36 | .94  | 1.42                              | .87  | 34.00 |                             |
|        | 22                 | 15  | 250             | 12                    | 40,5 | 48,5            | 36   | 24   | 36                                | 27   | 16,02 | FI-REDS-22L/15L-W3-SV       |
|        | .87                | .59 | 3625            | .47                   | 1.59 | 1.91            | 1.42 | .94  | 1.42                              | 1.06 | 35.24 |                             |
|        | 22                 | 18  | 250             | 15                    | 44   | 50,5            | 36,5 | 27   | 36                                | 32   | 17,93 | FI-REDS-22L/18L-W3-SV       |
|        | .87                | .71 | 3625            | .59                   | 1.73 | 1.99            | 1.44 | 1.06 | 1.42                              | 1.26 | 39.45 |                             |

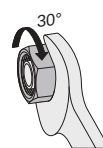
<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight including cutting ring and union nut on the standpipe.

<sup>3</sup> Standard scope of delivery: Fitting body assembled with cutting ring and union nut on the standpipe.

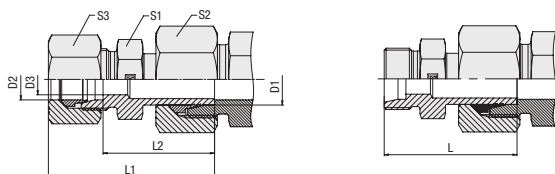
Please note: Standpipes are always factory-assembled with cutting rings and union nuts.

The union nut assembled on the standpipe has to be tightened by only 1/12 a turn (equivalent to 30°) beyond the fixed point.





## Straight Standpipe Reducer Type FI-REDS ■ Series L



| Series | Tube OD<br>( <sup>mm</sup> / <sub>in</sub> ) |      | PN<br>( <sup>bar</sup> / <sub>PSI</sub> ) | Dimensions<br>( <sup>mm</sup> / <sub>in</sub> ) |      |                 |      |      |      |      | Weight<br>( <sup>kg</sup> / <sub>lbs</sub> ) ca.<br>per 100 | Ordering Codes <sup>3</sup> |                      |
|--------|----------------------------------------------|------|-------------------------------------------|-------------------------------------------------|------|-----------------|------|------|------|------|-------------------------------------------------------------|-----------------------------|----------------------|
|        | D1                                           | D2   |                                           | D3                                              | L    | L1 <sup>1</sup> | L2   | S1   | S2   | S3   |                                                             |                             |                      |
| L      | 28                                           | 6    | 250                                       | 4                                               | 41   | 49              | 34,5 | 30   | 41   | 14   | 18,12                                                       | FI-REDS-28/06L-W3-SV        |                      |
|        | 1.10                                         | .24  | 3625                                      | .16                                             | 1.61 | 1.93            | 1.36 | 1.18 | 1.61 | .55  | 39.85                                                       |                             |                      |
|        | 28                                           | 8    | 250                                       | 6                                               | 42   | 50              | 34,5 | 30   | 41   | 17   | 18,24                                                       |                             | FI-REDS-28/08L-W3-SV |
|        | 1.10                                         | .31  | 3625                                      | .24                                             | 1.65 | 1.97            | 1.36 | 1.18 | 1.61 | .67  | 40.12                                                       |                             |                      |
|        | 28                                           | 10   | 250                                       | 8                                               | 41   | 49              | 35,5 | 30   | 41   | 19   | 18,45                                                       | FI-REDS-28/10L-W3-SV        |                      |
|        | 1.10                                         | .39  | 3625                                      | .31                                             | 1.61 | 1.93            | 1.40 | 1.18 | 1.61 | .75  | 40.58                                                       |                             |                      |
|        | 28                                           | 12   | 250                                       | 10                                              | 41   | 49              | 35,5 | 30   | 41   | 22   | 19,79                                                       | FI-REDS-28/12L-W3-SV        |                      |
|        | 1.10                                         | .47  | 3625                                      | .39                                             | 1.61 | 1.93            | 1.40 | 1.18 | 1.61 | .87  | 43.54                                                       |                             |                      |
|        | 28                                           | 15   | 250                                       | 12                                              | 42   | 50              | 36,5 | 30   | 41   | 27   | 20,30                                                       | FI-REDS-28/15L-W3-SV        |                      |
|        | 1.10                                         | .59  | 3625                                      | .47                                             | 1.65 | 1.97            | 1.44 | 1.18 | 1.61 | 1.06 | 44.66                                                       |                             |                      |
|        | 28                                           | 18   | 250                                       | 15                                              | 43,5 | 52              | 36   | 30   | 41   | 32   | 20,48                                                       | FI-REDS-28/18L-W3-SV        |                      |
|        | 1.10                                         | .71  | 3625                                      | .59                                             | 1.71 | 2.05            | 1.42 | 1.18 | 1.61 | 1.26 | 45.05                                                       |                             |                      |
|        | 28                                           | 22   | 250                                       | 19                                              | 45,5 | 54              | 38   | 32   | 41   | 36   | 23,25                                                       | FI-REDS-28/22L-W3-SV        |                      |
|        | 1.10                                         | .87  | 3625                                      | .75                                             | 1.79 | 2.13            | 1.50 | 1.26 | 1.61 | 1.42 | 51.14                                                       |                             |                      |
|        | 35                                           | 6    | 250                                       | 4                                               | 48   | 56              | 40,5 | 36   | 50   | 14   | 29,53                                                       | FI-REDS-35/06L-W3-SV        |                      |
|        | 1.38                                         | .24  | 3625                                      | .16                                             | 1.89 | 2.20            | 1.59 | 1.42 | 1.97 | .55  | 64.97                                                       |                             |                      |
|        | 35                                           | 8    | 250                                       | 6                                               | 48   | 56              | 40,5 | 36   | 50   | 17   | 28,78                                                       | FI-REDS-35/08L-W3-SV        |                      |
|        | 1.38                                         | .31  | 3625                                      | .24                                             | 1.89 | 2.20            | 1.59 | 1.42 | 1.97 | .67  | 63.32                                                       |                             |                      |
|        | 35                                           | 10   | 250                                       | 8                                               | 49   | 57              | 41,5 | 36   | 50   | 19   | 31,70                                                       | FI-REDS-35/10L-W3-SV        |                      |
|        | 1.38                                         | .39  | 3625                                      | .31                                             | 1.93 | 2.24            | 1.63 | 1.42 | 1.97 | .75  | 69.74                                                       |                             |                      |
|        | 35                                           | 12   | 250                                       | 10                                              | 47   | 55              | 41,5 | 36   | 50   | 22   | 32,26                                                       | FI-REDS-35/12L-W3-SV        |                      |
|        | 1.38                                         | .47  | 3625                                      | .39                                             | 1.85 | 2.17            | 1.63 | 1.42 | 1.97 | .87  | 70.97                                                       |                             |                      |
|        | 35                                           | 15   | 250                                       | 12                                              | 48,5 | 56,5            | 42,5 | 36   | 50   | 27   | 28,97                                                       | FI-REDS-35/15L-W3-SV        |                      |
|        | 1.38                                         | .59  | 3625                                      | .47                                             | 1.91 | 2.22            | 1.67 | 1.42 | 1.97 | 1.06 | 63.73                                                       |                             |                      |
|        | 35                                           | 18   | 250                                       | 15                                              | 49,5 | 58,5            | 42   | 36   | 50   | 32   | 32,20                                                       | FI-REDS-35/18L-W3-SV        |                      |
|        | 1.38                                         | .71  | 3625                                      | .59                                             | 1.95 | 2.30            | 1.65 | 1.42 | 1.97 | 1.26 | 70.83                                                       |                             |                      |
|        | 35                                           | 22   | 250                                       | 19                                              | 51,5 | 60,5            | 44   | 36   | 50   | 36   | 32,94                                                       | FI-REDS-35/22L-W3-SV        |                      |
|        | 1.38                                         | .87  | 3625                                      | .75                                             | 2.03 | 2.38            | 1.73 | 1.42 | 1.97 | 1.42 | 72.47                                                       |                             |                      |
|        | 35                                           | 28   | 250                                       | 24                                              | 52,5 | 61,5            | 44   | 41   | 50   | 41   | 34,18                                                       | FI-REDS-35/28L-W3-SV        |                      |
|        | 1.38                                         | 1.10 | 3625                                      | .94                                             | 2.07 | 2.42            | 1.73 | 1.61 | 1.97 | 1.61 | 75.19                                                       |                             |                      |
|        | 42                                           | 10   | 250                                       | 8                                               | 51   | 59              | 45   | 46   | 60   | 19   | 45,84                                                       | FI-REDS-42/10L-W3-SV        |                      |
|        | 1.65                                         | .39  | 3625                                      | .31                                             | 2.01 | 2.32            | 1.77 | 1.81 | 2.36 | .75  | 100.85                                                      |                             |                      |
|        | 42                                           | 12   | 250                                       | 10                                              | 52   | 60              | 45   | 46   | 60   | 22   | 56,37                                                       | FI-REDS-42/12L-W3-SV        |                      |
|        | 1.65                                         | .47  | 3625                                      | .39                                             | 2.05 | 2.36            | 1.77 | 1.81 | 2.36 | .87  | 124.01                                                      |                             |                      |
|        | 42                                           | 15   | 250                                       | 12                                              | 52   | 60              | 46   | 46   | 60   | 27   | 58,28                                                       | FI-REDS-42/15L-W3-SV        |                      |
|        | 1.65                                         | .59  | 3625                                      | .47                                             | 2.05 | 2.36            | 1.81 | 1.81 | 2.36 | 1.06 | 115.06                                                      |                             |                      |
|        | 42                                           | 18   | 250                                       | 15                                              | 53   | 61              | 45,5 | 46   | 60   | 32   | 51,80                                                       | FI-REDS-42/18L-W3-SV        |                      |
|        | 1.65                                         | .71  | 3625                                      | .59                                             | 2.09 | 2.40            | 1.79 | 1.81 | 2.36 | 1.26 | 113.96                                                      |                             |                      |
|        | 42                                           | 22   | 250                                       | 19                                              | 54   | 63              | 47,5 | 46   | 60   | 36   | 58,28                                                       | FI-REDS-42/22L-W3-SV        |                      |
|        | 1.65                                         | .87  | 3625                                      | .75                                             | 2.13 | 2.48            | 1.87 | 1.81 | 2.36 | 1.42 | 128.22                                                      |                             |                      |
|        | 42                                           | 28   | 250                                       | 24                                              | 55   | 64              | 47,5 | 46   | 60   | 41   | 52,40                                                       | FI-REDS-42/28L-W3-SV        |                      |
|        | 1.65                                         | 1.10 | 3625                                      | .94                                             | 2.17 | 2.52            | 1.87 | 1.81 | 2.36 | 1.61 | 115.28                                                      |                             |                      |
|        | 42                                           | 35   | 250                                       | 30                                              | 57   | 69              | 46,5 | 46   | 60   | 50   | 53,30                                                       | FI-REDS-42/35L-W3-SV        |                      |
|        | 1.65                                         | 1.38 | 3625                                      | 1.18                                            | 2.24 | 2.72            | 1.83 | 1.81 | 2.36 | 1.97 | 117.26                                                      |                             |                      |

### Ordering Codes

**\*FI-REDS\*-10/\*08\*L\*-W3\*-MS+SV**

\* Straight Standpipe Reducer **FI-REDS**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Outside Tube Diameter D2 (in mm) **08**

\* Series Light Series (pages 162/163) **L**  
Heavy Series (pages 164/165) **S**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body assembled with cutting ring and union nut on the standpipe **-SV**

Fitting body assembled with cutting rings and union nuts on all ends **-MS+SV**

### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

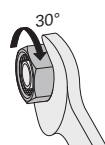
<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight including cutting ring and union nut on the standpipe.

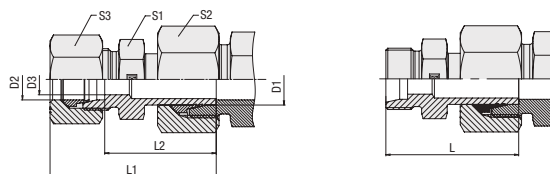
<sup>3</sup> Standard scope of delivery: Fitting body assembled with cutting ring and union nut on the standpipe.

Please note: Standpipes are always factory-assembled with cutting rings and union nuts.

The union nut assembled on the standpipe has to be tightened by only 1/12 a turn (equivalent to 30°) beyond the fixed point.



## Straight Standpipe Reducer Type FI-REDS • Series S



### Ordering Codes

#### \*FI-REDS\*-10/\*08\*S\*-W3\*-MS+SV

\* Straight Standpipe Reducer **FI-REDS**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Outside Tube Diameter D2 (in mm) **08**

\* Series Light Series (pages 162/163) **L**  
Heavy Series (pages 164/165) **S**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body assembled with cutting ring and union nut on the standpipe **-SV**

Fitting body assembled with cutting rings and union nuts on all ends **-MS+SV**

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

| Series | Tube OD<br>(mm/in) |     | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |                 |      |      |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----|-----------------|-----------------------|------|-----------------|------|------|------|------|-----------------------------------|-----------------------------|
|        | D1                 | D2  |                 | D3                    | L    | L1 <sup>1</sup> | L2   | S1   | S2   | S3   |                                   |                             |
| S      | 8                  | 6   | 800             | 4                     | 37   | 45              | 30   | 14   | 19   | 17   | 4,42                              | FI-REDS-08/06S-W3-SV        |
|        | .31                | .24 | 11600           | .16                   | 1.46 | 1.77            | 1.18 | .55  | .75  | .67  | 9.73                              |                             |
|        | 10                 | 6   | 800             | 4                     | 39   | 47              | 34   | 14   | 22   | 17   | 6,26                              | FI-REDS-10/06S-W3-SV        |
|        | .39                | .24 | 11600           | .16                   | 1.54 | 1.85            | 1.34 | .55  | .87  | .67  | 13.78                             |                             |
|        | 10                 | 8   | 800             | 5                     | 41   | 49              | 34   | 17   | 22   | 19   | 6,81                              | FI-REDS-10/08S-W3-SV        |
|        | .39                | .31 | 11600           | .20                   | 1.61 | 1.93            | 1.34 | .67  | .87  | .75  | 14.98                             |                             |
|        | 12                 | 6   | 630             | 4                     | 39   | 47              | 36   | 14   | 24   | 17   | 6,70                              | FI-REDS-12/06S-W3-SV        |
|        | .47                | .24 | 9135            | .16                   | 1.54 | 1.85            | 1.42 | .55  | .94  | .67  | 14.74                             |                             |
|        | 12                 | 8   | 630             | 5                     | 41   | 49              | 31,5 | 17   | 24   | 19   | 7,46                              | FI-REDS-12/08S-W3-SV        |
|        | .47                | .31 | 9135            | .20                   | 1.61 | 1.93            | 1.24 | .67  | .94  | .75  | 16.41                             |                             |
|        | 12                 | 10  | 630             | 7                     | 41   | 50              | 36   | 19   | 24   | 22   | 7,80                              | FI-REDS-12/10S-W3-SV        |
|        | .47                | .39 | 9135            | .28                   | 1.61 | 1.97            | 1.42 | .75  | .94  | .87  | 17.16                             |                             |
|        | 14                 | 6   | 630             | 4                     | 42   | 50              | 37   | 17   | 27   | 17   | 9,61                              | FI-REDS-14/06S-W3-SV        |
|        | .55                | .24 | 9135            | .16                   | 1.65 | 1.97            | 1.46 | .67  | 1.06 | .67  | 21.15                             |                             |
|        | 14                 | 8   | 630             | 5                     | 44   | 52              | 37   | 17   | 27   | 19   | 10,19                             | FI-REDS-14/08S-W3-SV        |
|        | .55                | .31 | 9135            | .20                   | 1.73 | 2.05            | 1.46 | .67  | 1.06 | .75  | 22.42                             |                             |
|        | 14                 | 10  | 630             | 7                     | 44   | 53              | 36,5 | 19   | 27   | 22   | 11,24                             | FI-REDS-14/10S-W3-SV        |
|        | .55                | .39 | 9135            | .28                   | 1.73 | 2.09            | 1.44 | .75  | 1.06 | .87  | 24.72                             |                             |
|        | 14                 | 12  | 630             | 8                     | 44   | 55              | 36,5 | 22   | 27   | 24   | 11,98                             | FI-REDS-14/12S-W3-SV        |
|        | .55                | .47 | 9135            | .31                   | 1.73 | 2.17            | 1.44 | .87  | 1.06 | .94  | 26.36                             |                             |
|        | 16                 | 6   | 630             | 4                     | 45,5 | 50              | 38,5 | 17   | 30   | 17   | 12,14                             | FI-REDS-16/06S-W3-SV        |
|        | .63                | .24 | 9135            | .16                   | 1.79 | 1.97            | 1.52 | .67  | 1.18 | .67  | 26.71                             |                             |
|        | 16                 | 8   | 630             | 5                     | 44   | 52              | 38,5 | 17   | 30   | 19   | 12,29                             | FI-REDS-16/08S-W3-SV        |
|        | .63                | .31 | 9135            | .20                   | 1.73 | 2.05            | 1.52 | .67  | 1.18 | .75  | 27.03                             |                             |
|        | 16                 | 10  | 630             | 7                     | 44   | 53              | 38   | 19   | 30   | 22   | 12,78                             | FI-REDS-16/10S-W3-SV        |
|        | .63                | .39 | 9135            | .28                   | 1.73 | 2.09            | 1.50 | .75  | 1.18 | .87  | 28.12                             |                             |
|        | 16                 | 12  | 630             | 8                     | 46   | 55              | 38   | 22   | 30   | 24   | 14,39                             | FI-REDS-16/12S-W3-SV        |
|        | .63                | .47 | 9135            | .31                   | 1.81 | 2.17            | 1.50 | .87  | 1.18 | .94  | 31.66                             |                             |
|        | 16                 | 14  | 630             | 10                    | 47,5 | 58              | 39,5 | 24   | 30   | 27   | 14,70                             | FI-REDS-16/14S-W3-SV        |
|        | .63                | .55 | 9135            | .39                   | 1.87 | 2.28            | 1.56 | .94  | 1.18 | 1.06 | 32.34                             |                             |
|        | 20                 | 6   | 400             | 4                     | 47   | 55              | 46,5 | 22   | 36   | 17   | 20,15                             | FI-REDS-20/06S-W3-SV        |
|        | .79                | .24 | 5800            | .16                   | 1.85 | 2.17            | 1.83 | .87  | 1.42 | .67  | 44.33                             |                             |
|        | 20                 | 8   | 400             | 5                     | 48   | 56              | 46,5 | 22   | 36   | 19   | 17,67                             | FI-REDS-20/08S-W3-SV        |
|        | .79                | .31 | 5800            | .20                   | 1.89 | 2.20            | 1.83 | .87  | 1.42 | .75  | 38.88                             |                             |
|        | 20                 | 10  | 400             | 7                     | 53,5 | 57              | 46   | 22   | 36   | 22   | 16,90                             | FI-REDS-20/10S-W3-SV        |
|        | .79                | .39 | 5800            | .28                   | 2.11 | 2.24            | 1.81 | .87  | 1.42 | .87  | 37.18                             |                             |
|        | 20                 | 12  | 400             | 8                     | 50   | 59              | 46   | 22   | 36   | 24   | 18,10                             | FI-REDS-20/12S-W3-SV        |
|        | .79                | .47 | 5800            | .31                   | 1.97 | 2.32            | 1.81 | .87  | 1.42 | .94  | 39.82                             |                             |
|        | 20                 | 14  | 400             | 10                    | 52   | 62              | 47,5 | 24   | 36   | 27   | 19,20                             | FI-REDS-20/14S-W3-SV        |
|        | .79                | .55 | 5800            | .39                   | 2.05 | 2.44            | 1.87 | .94  | 1.42 | 1.06 | 42.24                             |                             |
|        | 20                 | 16  | 400             | 12                    | 55,5 | 62              | 47   | 27   | 36   | 30   | 23,31                             | FI-REDS-20/16S-W3-SV        |
|        | .79                | .63 | 5800            | .47                   | 2.19 | 2.44            | 1.85 | 1.06 | 1.42 | 1.18 | 51.27                             |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight including cutting ring and union nut on the standpipe.

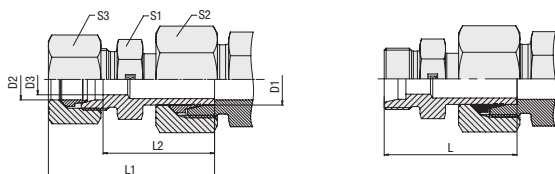
<sup>3</sup> Standard scope of delivery: Fitting body assembled with cutting ring and union nut on the standpipe.

Please note: Standpipes are always factory-assembled with cutting rings and union nuts.

The union nut assembled on the standpipe has to be tightened by only 1/12 a turn (equivalent to 30°) beyond the fixed point.



## Straight Standpipe Reducer Type FI-REDS ■ Series S



| Series | Tube OD<br>(mm/in) |      | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |                 |      |      |      |      | Weight<br>(kg/lbs) ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|------|-----------------|-----------------------|------|-----------------|------|------|------|------|------------------------|-----------------------------|
|        | D1                 | D2   |                 | D3                    | L    | L1 <sup>1</sup> | L2   | S1   | S2   | S3   | per 100                |                             |
| S      | 25                 | 6    | 400             | 4                     | 50   | 58              | 51   | 27   | 46   | 17   | 31,38                  | FI-REDS-25/06S-W3-SV        |
|        | .98                | .24  | 5800            | .16                   | 1.97 | 2.28            | 2.01 | 1.06 | 1.81 | .67  | 69.04                  | FI-REDS-25/08S-W3-SV        |
|        | 25                 | 8    | 400             | 5                     | 51   | 59              | 51   | 27   | 46   | 19   | 31,65                  | FI-REDS-25/10S-W3-SV        |
|        | .98                | .31  | 5800            | .20                   | 2.01 | 2.32            | 2.01 | 1.06 | 1.81 | .75  | 69.62                  | FI-REDS-25/12S-W3-SV        |
|        | 25                 | 10   | 400             | 7                     | 58   | 60              | 50,5 | 27   | 46   | 22   | 35,51                  | FI-REDS-25/14S-W3-SV        |
|        | .98                | .39  | 5800            | .28                   | 2.28 | 2.36            | 1.99 | 1.06 | 1.81 | .87  | 78.12                  | FI-REDS-25/16S-W3-SV        |
|        | 25                 | 12   | 400             | 8                     | 53   | 62              | 50,5 | 27   | 46   | 24   | 38,88                  | FI-REDS-25/20S-W3-SV        |
|        | .98                | .47  | 5800            | .31                   | 2.09 | 2.44            | 1.99 | 1.06 | 1.81 | .94  | 85.54                  | FI-REDS-25/20S-W3-SV        |
|        | 25                 | 14   | 400             | 10                    | 60   | 65              | 52   | 27   | 46   | 27   | 41,86                  | FI-REDS-25/20S-W3-SV        |
|        | .98                | .55  | 5800            | .39                   | 2.36 | 2.56            | 2.05 | 1.06 | 1.81 | 1.06 | 92.10                  | FI-REDS-25/20S-W3-SV        |
|        | 25                 | 16   | 400             | 12                    | 60   | 65              | 51,5 | 27   | 46   | 30   | 35,70                  | FI-REDS-30/06S-W3-SV        |
|        | .98                | .63  | 5800            | .47                   | 2.36 | 2.56            | 2.03 | 1.06 | 1.81 | 1.18 | 78.54                  | FI-REDS-30/08S-W3-SV        |
|        | 25                 | 20   | 400             | 16                    | 62   | 70              | 51,5 | 32   | 46   | 36   | 39,99                  | FI-REDS-30/10S-W3-SV        |
|        | .98                | .79  | 5800            | .63                   | 2.44 | 2.76            | 2.03 | 1.26 | 1.81 | 1.42 | 87.97                  | FI-REDS-30/12S-W3-SV        |
|        | 30                 | 6    | 400             | 4                     | 53   | 61              | 52,5 | 32   | 50   | 17   | 42,88                  | FI-REDS-30/14S-W3-SV        |
|        | 1.18               | .24  | 5800            | .16                   | 2.09 | 2.40            | 2.07 | 1.26 | 1.97 | .67  | 94.33                  | FI-REDS-30/16S-W3-SV        |
|        | 30                 | 8    | 400             | 5                     | 53   | 61              | 52,5 | 32   | 50   | 19   | 38,19                  | FI-REDS-30/18S-W3-SV        |
|        | 1.18               | .31  | 5800            | .20                   | 2.09 | 2.40            | 2.07 | 1.26 | 1.97 | .75  | 84.01                  | FI-REDS-30/20S-W3-SV        |
|        | 30                 | 10   | 400             | 7                     | 53   | 62              | 52   | 32   | 50   | 22   | 43,13                  | FI-REDS-30/25S-W3-SV        |
|        | 1.18               | .39  | 5800            | .28                   | 2.09 | 2.44            | 2.05 | 1.26 | 1.97 | .87  | 94.88                  | FI-REDS-30/25S-W3-SV        |
|        | 30                 | 12   | 400             | 8                     | 59,5 | 65              | 52   | 32   | 50   | 24   | 38,53                  | FI-REDS-30/25S-W3-SV        |
|        | 1.18               | .47  | 5800            | .31                   | 2.34 | 2.56            | 2.05 | 1.26 | 1.97 | .94  | 84.76                  | FI-REDS-30/25S-W3-SV        |
|        | 30                 | 14   | 400             | 10                    | 61,5 | 68              | 53,5 | 32   | 50   | 27   | 39,19                  | FI-REDS-30/25S-W3-SV        |
|        | 1.18               | .55  | 5800            | .39                   | 2.42 | 2.68            | 2.11 | 1.26 | 1.97 | 1.06 | 86.23                  | FI-REDS-30/25S-W3-SV        |
|        | 30                 | 16   | 400             | 12                    | 61,5 | 68              | 53   | 32   | 50   | 30   | 43,00                  | FI-REDS-30/25S-W3-SV        |
|        | 1.18               | .63  | 5800            | .47                   | 2.42 | 2.68            | 2.09 | 1.26 | 1.97 | 1.18 | 94.59                  | FI-REDS-30/25S-W3-SV        |
|        | 30                 | 20   | 400             | 16                    | 62   | 73              | 53   | 32   | 50   | 36   | 55,33                  | FI-REDS-30/25S-W3-SV        |
|        | 1.18               | .79  | 5800            | .63                   | 2.44 | 2.87            | 2.09 | 1.26 | 1.97 | 1.42 | 121.72                 | FI-REDS-30/25S-W3-SV        |
|        | 30                 | 25   | 400             | 20                    | 66   | 78              | 53,5 | 41   | 50   | 46   | 52,60                  | FI-REDS-38/06S-W3-SV        |
|        | 1.18               | .98  | 5800            | .79                   | 2.60 | 3.07            | 2.11 | 1.61 | 1.97 | 1.81 | 115.72                 | FI-REDS-38/08S-W3-SV        |
|        | 38                 | 6    | 315             | 4                     | 60   | 68              | 56   | 41   | 60   | 17   | 64,17                  | FI-REDS-38/08S-W3-SV        |
|        | 1.50               | .24  | 4568            | .16                   | 2.36 | 2.68            | 2.20 | 1.61 | 2.36 | .67  | 141.16                 | FI-REDS-38/10S-W3-SV        |
|        | 38                 | 8    | 315             | 5                     | 60   | 68              | 56   | 41   | 60   | 19   | 64,88                  | FI-REDS-38/10S-W3-SV        |
|        | 1.50               | .31  | 4568            | .20                   | 2.36 | 2.68            | 2.20 | 1.61 | 2.36 | .75  | 142.73                 | FI-REDS-38/12S-W3-SV        |
|        | 38                 | 10   | 315             | 7                     | 62   | 71              | 55,5 | 41   | 60   | 22   | 63,89                  | FI-REDS-38/12S-W3-SV        |
|        | 1.50               | .39  | 4568            | .28                   | 2.44 | 2.80            | 2.19 | 1.61 | 2.36 | .87  | 140.55                 | FI-REDS-38/14S-W3-SV        |
|        | 38                 | 12   | 315             | 8                     | 62   | 69              | 55,5 | 41   | 60   | 24   | 64,80                  | FI-REDS-38/14S-W3-SV        |
|        | 1.50               | .47  | 4568            | .31                   | 2.44 | 2.72            | 2.19 | 1.61 | 2.36 | .94  | 142.56                 | FI-REDS-38/16S-W3-SV        |
|        | 38                 | 14   | 315             | 10                    | 65   | 75              | 57   | 41   | 60   | 27   | 67,79                  | FI-REDS-38/16S-W3-SV        |
|        | 1.50               | .55  | 4568            | .39                   | 2.56 | 2.95            | 2.24 | 1.61 | 2.36 | 1.06 | 149.14                 | FI-REDS-38/20S-W3-SV        |
|        | 38                 | 16   | 315             | 12                    | 65   | 74              | 56,5 | 41   | 60   | 30   | 64,60                  | FI-REDS-38/20S-W3-SV        |
|        | 1.50               | .63  | 4568            | .47                   | 2.56 | 2.91            | 2.22 | 1.61 | 2.36 | 1.18 | 142.12                 | FI-REDS-38/25S-W3-SV        |
|        | 38                 | 20   | 315             | 16                    | 68   | 79              | 56,5 | 41   | 60   | 36   | 72,99                  | FI-REDS-38/25S-W3-SV        |
|        | 1.50               | .79  | 4568            | .63                   | 2.68 | 3.11            | 2.22 | 1.61 | 2.36 | 1.42 | 160.57                 | FI-REDS-38/25S-W3-SV        |
|        | 38                 | 25   | 315             | 20                    | 69   | 84              | 57   | 41   | 60   | 46   | 66,80                  | FI-REDS-38/30S-W3-SV        |
|        | 1.50               | .98  | 4568            | .79                   | 2.72 | 3.31            | 2.24 | 1.61 | 2.36 | 1.81 | 146.96                 | FI-REDS-38/30S-W3-SV        |
|        | 38                 | 30   | 315             | 25                    | 74   | 87              | 57,5 | 46   | 60   | 50   | 71,80                  | FI-REDS-38/30S-W3-SV        |
|        | 1.50               | 1.18 | 4568            | .98                   | 2.91 | 3.43            | 2.26 | 1.81 | 2.36 | 1.97 | 157.96                 | FI-REDS-38/30S-W3-SV        |

### Ordering Codes

**\*FI-REDS\*-10/\*08\*S\*-W3\*-MS+SV**

\* Straight Standpipe Reducer **FI-REDS**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Outside Tube Diameter D2 (in mm) **08**

\* Series Light Series (pages 162/163) **L**  
Heavy Series (pages 164/165) **S**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body assembled with cutting ring and union nut on the standpipe **-SV**

Fitting body assembled with cutting rings and union nuts on all ends **-MS+SV**

### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

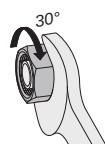
<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight including cutting ring and union nut on the standpipe.

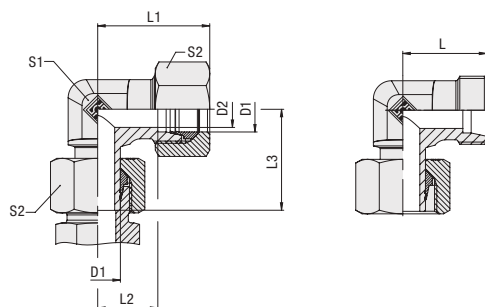
<sup>3</sup> Standard scope of delivery: Fitting body assembled with cutting ring and union nut on the standpipe.

Please note: Standpipes are always factory-assembled with cutting rings and union nuts.

The union nut assembled on the standpipe has to be tightened by only 1/12 a turn (equivalent to 30°) beyond the fixed point.



## Adjustable Standpipe Elbow Type FI-EW ▪ Series L / S



### Ordering Codes

#### \*FI-EW\*-10\*L\*-W3\*-MS+SV

\* Adjustable Standpipe Elbow

FI-EW

\* Outside Tube Diameter D1 (in mm)

-10

\* Series

Light Series

L

Heavy Series

S

\* Material Code

Steel, zinc/nickel-plated

-W3

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting

Fitting body assembled with cutting ring and union nut on the standpipe

-SV

Fitting body assembled with cutting rings and union nuts on all ends

-MS+SV

### Connecting Parts



Cutting Ring  
Type FI-DS

Page 28



Soft-Sealing Cutting Ring  
Type FI-WDDS

Page 29



Support Sleeve  
Type FI-VH

Page 31



STAUFF Form EVO Sealing Ring  
Type FI-FD

Page 32



Union Nut  
Type FI-M

Page 33



37° Flared Tube Fitting Set  
Type FI-AB

Page 37

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |                 |      |      |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------|------|-----------------|------|------|------|------|-----------------------------------|-----------------------------|
|        |                          |                 | D2                    | L    | L1 <sup>1</sup> | L2   | L3   | S1   | S2   |                                   |                             |
| L      | 6                        | 500             | 4                     | 19   | 27              | 12   | 26   | 12   | 14   | 2,89                              | FI-EW-06L-W3-SV             |
|        | .24                      | 7251            | .16                   | .75  | 1.06            | .47  | 1.02 | .47  | .55  | 6,39                              |                             |
|        | 8                        | 500             | 6                     | 21   | 29              | 14   | 27,5 | 12   | 17   | 3,89                              | FI-EW-08L-W3-SV             |
|        | .31                      | 7251            | .24                   | .83  | 1.14            | .55  | 1.08 | .47  | .67  | 8,56                              |                             |
|        | 10                       | 500             | 8                     | 22   | 30              | 15   | 29   | 14   | 19   | 5,20                              | FI-EW-10L-W3-SV             |
|        | .39                      | 7251            | .31                   | .87  | 1.18            | .59  | 1.14 | .55  | .75  | 11,44                             |                             |
|        | 12                       | 400             | 10                    | 24   | 32              | 17   | 29,5 | 17   | 22   | 7,20                              | FI-EW-12L-W3-SV             |
|        | .47                      | 5800            | .39                   | .94  | 1.26            | .67  | 1.16 | .67  | .87  | 15,84                             |                             |
|        | 15                       | 400             | 12                    | 28   | 36              | 21   | 32,5 | 19   | 27   | 17,20                             | FI-EW-15L-W3-SV             |
|        | .59                      | 5800            | .47                   | 1.10 | 1.42            | .83  | 1.28 | .75  | 1.06 | 37,84                             |                             |
|        | 18                       | 400             | 15                    | 31   | 40              | 23,5 | 35,5 | 24   | 32   | 17,70                             | FI-EW-18L-W3-SV             |
|        | .71                      | 5800            | .59                   | 1.22 | 1.57            | .93  | 1.40 | .94  | 1.26 | 38,94                             |                             |
|        | 22                       | 250             | 19                    | 35   | 44              | 27,5 | 38,5 | 27   | 36   | 24,00                             | FI-EW-22L-W3-SV             |
|        | .87                      | 3625            | .75                   | 1.38 | 1.73            | 1.08 | 1.52 | 1.06 | 1.42 | 52,80                             |                             |
|        | 28                       | 250             | 24                    | 38   | 47              | 30,5 | 41,5 | 36   | 41   | 35,70                             | FI-EW-28L-W3-SV             |
|        | 1.10                     | 3625            | .94                   | 1.50 | 1.85            | 1.20 | 1.63 | 1.42 | 1.61 | 78,54                             |                             |
|        | 35                       | 250             | 30                    | 45   | 56              | 34,5 | 51   | 41   | 50   | 58,10                             | FI-EW-35L-W3-SV             |
|        | 1.38                     | 3625            | 1.18                  | 1.77 | 2.20            | 1.36 | 2.01 | 1.61 | 1.97 | 127,82                            |                             |
|        | 42                       | 250             | 36                    | 51   | 63              | 40   | 56   | 50   | 60   | 87,00                             | FI-EW-42L-W3-SV             |
|        | 1.65                     | 3625            | 1.42                  | 2.01 | 2.48            | 1.57 | 2.20 | 1.97 | 2.36 | 191,40                            |                             |
| S      | 6                        | 800             | 4                     | 23   | 31              | 16   | 27   | 12   | 17   | 4,60                              | FI-EW-06S-W3-SV             |
|        | .24                      | 11603           | .16                   | .91  | 1.22            | .63  | 1.06 | .47  | .67  | 10,12                             |                             |
|        | 8                        | 800             | 5                     | 24   | 32              | 17   | 27,5 | 14   | 19   | 6,20                              | FI-EW-08S-W3-SV             |
|        | .31                      | 11603           | .20                   | .94  | 1.26            | .67  | 1.08 | .55  | .75  | 13,64                             |                             |
|        | 10                       | 800             | 7                     | 25   | 34              | 17,5 | 30   | 17   | 22   | 8,80                              | FI-EW-10S-W3-SV             |
|        | .39                      | 11603           | .28                   | .98  | 1.34            | .69  | 1.18 | .67  | .87  | 19,36                             |                             |
|        | 12                       | 630             | 8                     | 29   | 38              | 21,5 | 31   | 17   | 24   | 10,90                             | FI-EW-12S-W3-SV             |
|        | .47                      | 9135            | .31                   | 1.14 | 1.50            | .85  | 1.22 | .67  | .94  | 23,98                             |                             |
|        | 14                       | 630             | 10                    | 30   | 40              | 22   | 35   | 19   | 27   | 14,90                             | FI-EW-14S-W3-SV             |
|        | .55                      | 9135            | .39                   | 1.18 | 1.57            | .87  | 1.38 | .75  | 1.06 | 32,78                             |                             |
|        | 16                       | 630             | 11                    | 33   | 43              | 24,5 | 36,5 | 24   | 30   | 20,10                             | FI-EW-16S-W3-SV             |
|        | .63                      | 9135            | .43                   | 1.30 | 1.69            | .96  | 1.44 | .94  | 1.18 | 44,22                             |                             |
|        | 20                       | 400             | 16                    | 37   | 48              | 26,5 | 44,5 | 27   | 36   | 30,60                             | FI-EW-20S-W3-SV             |
|        | .79                      | 5800            | .63                   | 1.46 | 1.89            | 1.04 | 1.75 | 1.06 | 1.42 | 67,32                             |                             |
|        | 25                       | 400             | 20                    | 42   | 54              | 30   | 50   | 36   | 46   | 55,40                             | FI-EW-25S-W3-SV             |
|        | .98                      | 5800            | .79                   | 1.65 | 2.13            | 1.18 | 1.97 | 1.42 | 1.81 | 121,88                            |                             |
|        | 30                       | 400             | 25                    | 49   | 62              | 35,5 | 55   | 41   | 50   | 79,80                             | FI-EW-30S-W3-SV             |
|        | 1.18                     | 5800            | .98                   | 1.93 | 2.44            | 1.40 | 2.17 | 1.61 | 1.97 | 175,56                            |                             |
|        | 38                       | 420             | 32                    | 57   | 72              | 41   | 63   | 50   | 60   | 110,30                            | FI-EW-38S-W3-SV             |
|        | 1.50                     | 6091            | 1.26                  | 2.24 | 2.83            | 1.61 | 2.48 | 1.97 | 2.36 | 242,66                            |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight including cutting ring and union nut on the standpipe.

<sup>3</sup> Standard scope of delivery: Fitting body assembled with cutting ring and union nut on the standpipe.

Please note: Standpipes are always factory-assembled with cutting rings and union nuts.

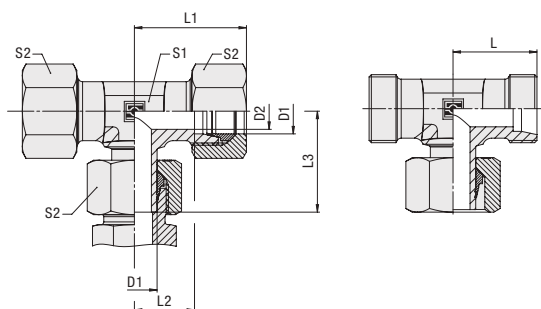
The union nut assembled on the standpipe has to be tightened by only 1/12 a turn (equivalent to 30°) beyond the fixed point.



Typical application with a  
Straight Male Stud Fitting FI-GE-...



## Adjustable Standpipe Branch Tee Type FI-ET ■ Series L / S



| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |                 |      |      |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------|-----------------|------|------|------|------|-----------------------------------|-----------------------------|
|        | D1                 |                 | D2                    | L    | L1 <sup>1</sup> | L2   | L3   | S1   | S2   |                                   |                             |
| L      | 6                  | 500             | 4                     | 19   | 27              | 12   | 26   | 12   | 14   | 3,60                              | FI-ET-06L-W3-SV             |
|        | .24                | 7251            | .16                   | .75  | 1.06            | .47  | 1.02 | .47  | .55  | 7.92                              |                             |
|        | 8                  | 500             | 6                     | 21   | 29              | 14   | 27,5 | 12   | 17   | 4,70                              | FI-ET-08L-W3-SV             |
|        | .31                | 7251            | .24                   | .83  | 1.14            | .55  | 1.08 | .47  | .67  | 10.34                             |                             |
|        | 10                 | 500             | 8                     | 22   | 30              | 15   | 29   | 14   | 19   | 6,10                              | FI-ET-10L-W3-SV             |
|        | .39                | 7251            | .31                   | .87  | 1.18            | .59  | 1.14 | .55  | .75  | 13.42                             |                             |
|        | 12                 | 400             | 10                    | 24   | 32              | 17   | 29,5 | 17   | 22   | 8,30                              | FI-ET-12L-W3-SV             |
|        | .47                | 5800            | .39                   | .94  | 1.26            | .67  | 1.16 | .67  | .87  | 18.26                             |                             |
|        | 15                 | 400             | 12                    | 28   | 36              | 21   | 32,5 | 19   | 27   | 14,40                             | FI-ET-15L-W3-SV             |
|        | .59                | 5800            | .47                   | 1.10 | 1.42            | .83  | 1.28 | .75  | 1.06 | 31.68                             |                             |
|        | 18                 | 400             | 15                    | 31   | 40              | 23,5 | 35,5 | 24   | 32   | 20,70                             | FI-ET-18L-W3-SV             |
|        | .71                | 5800            | .59                   | 1.22 | 1.57            | .93  | 1.40 | .94  | 1.26 | 45.45                             |                             |
|        | 22                 | 250             | 19                    | 35   | 44              | 27,5 | 38,5 | 27   | 36   | 29,30                             | FI-ET-22L-W3-SV             |
|        | .87                | 3625            | .75                   | 1.38 | 1.73            | 1.08 | 1.52 | 1.06 | 1.42 | 64.46                             |                             |
|        | 28                 | 250             | 24                    | 38   | 47              | 30,5 | 41,5 | 36   | 41   | 40,80                             | FI-ET-28L-W3-SV             |
|        | 1.10               | 3625            | .94                   | 1.50 | 1.85            | 1.20 | 1.63 | 1.42 | 1.61 | 89.76                             |                             |
|        | 35                 | 250             | 30                    | 45   | 56              | 34,5 | 51   | 41   | 50   | 65,00                             | FI-ET-35L-W3-SV             |
|        | 1.38               | 3625            | 1.18                  | 1.77 | 2.20            | 1.36 | 2.01 | 1.61 | 1.97 | 143.00                            |                             |
|        | 42                 | 250             | 36                    | 51   | 63              | 40   | 56   | 50   | 60   | 87,90                             | FI-ET-42L-W3-SV             |
|        | 1.65               | 3625            | 1.42                  | 2.01 | 2.48            | 1.57 | 2.20 | 1.97 | 2.36 | 193.38                            |                             |
| S      | 6                  | 800             | 4                     | 23   | 31              | 16   | 27   | 12   | 17   | 5,80                              | FI-ET-06S-W3-SV             |
|        | .24                | 11603           | .16                   | .91  | 1.22            | .63  | 1.06 | .47  | .67  | 12.76                             |                             |
|        | 8                  | 800             | 5                     | 24   | 32              | 17   | 27,5 | 14   | 19   | 7,80                              | FI-ET-08S-W3-SV             |
|        | .31                | 11603           | .20                   | .94  | 1.26            | .67  | 1.08 | .55  | .75  | 17.16                             |                             |
|        | 10                 | 800             | 7                     | 25   | 34              | 17,5 | 30   | 17   | 22   | 10,20                             | FI-ET-10S-W3-SV             |
|        | .39                | 11603           | .28                   | .98  | 1.34            | .69  | 1.18 | .67  | .87  | 22.44                             |                             |
|        | 12                 | 630             | 8                     | 29   | 38              | 21,5 | 31   | 17   | 24   | 13,50                             | FI-ET-12S-W3-SV             |
|        | .47                | 9135            | .31                   | 1.14 | 1.50            | .85  | 1.22 | .67  | .94  | 29.70                             |                             |
|        | 14                 | 630             | 10                    | 30   | 40              | 22   | 35   | 19   | 27   | 17,70                             | FI-ET-14S-W3-SV             |
|        | .55                | 9135            | .39                   | 1.18 | 1.57            | .87  | 1.38 | .75  | 1.06 | 38.94                             |                             |
|        | 16                 | 630             | 12                    | 33   | 43              | 24,5 | 36,5 | 24   | 30   | 23,70                             | FI-ET-16S-W3-SV             |
|        | .63                | 9135            | .47                   | 1.30 | 1.69            | .96  | 1.44 | .94  | 1.18 | 52.14                             |                             |
|        | 20                 | 400             | 16                    | 37   | 48              | 26,5 | 44,5 | 27   | 36   | 36,50                             | FI-ET-20S-W3-SV             |
|        | .79                | 5800            | .63                   | 1.46 | 1.89            | 1.04 | 1.75 | 1.06 | 1.42 | 80.30                             |                             |
|        | 25                 | 400             | 20                    | 42   | 54              | 30   | 50   | 36   | 46   | 63,70                             | FI-ET-25S-W3-SV             |
|        | .98                | 5800            | .79                   | 1.65 | 2.13            | 1.18 | 1.97 | 1.42 | 1.81 | 140.14                            |                             |
|        | 30                 | 400             | 25                    | 49   | 62              | 35,5 | 55   | 41   | 50   | 88,90                             | FI-ET-30S-W3-SV             |
|        | 1.18               | 5800            | .98                   | 1.93 | 2.44            | 1.40 | 2.17 | 1.61 | 1.97 | 195.58                            |                             |
|        | 38                 | 400             | 32                    | 57   | 72              | 41   | 63   | 50   | 60   | 135,80                            | FI-ET-38S-W3-SV             |
|        | 1.50               | 5800            | 1.26                  | 2.24 | 2.83            | 1.61 | 2.48 | 1.97 | 2.36 | 298.76                            |                             |

### Ordering Codes

**\*FI-ET\*-10\*L\*-W3\*-MS+SV**

\* Adjustable Standpipe Branch Tee **FI-ET**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body assembled with cutting ring and union nut on the standpipe **-SV**

Fitting body assembled with cutting rings and union nuts on all ends **-MS+SV**

### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight including cutting ring and union nut on the standpipe.

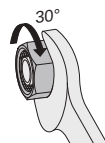
<sup>3</sup> Standard scope of delivery: Fitting body assembled with cutting ring and union nut on the standpipe.



Typical application with a  
Straight Male Stud Fitting FI-GE-...

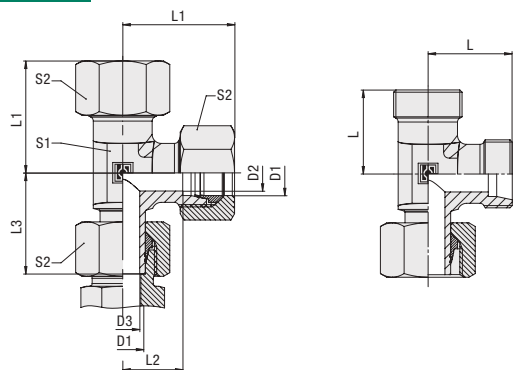
Please note: Standpipes are always factory-assembled with cutting rings and union nuts.

The union nut assembled on the standpipe has to be tightened by only 1/12 a turn (equivalent to 30°) beyond the fixed point.





## Adjustable Standpipe Barrel Tee Type FI-EL ▪ Series L / S



### Ordering Codes

#### \*FI-EL\*-10\*L\*-W3\*-MS+SV

|                                                                         |                                                                                    |
|-------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| * Adjustable Standpipe Barrel Tee                                       | <b>FI-EL</b>                                                                       |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                         |
| * Series                                                                | Light Series <b>L</b><br>Heavy Series <b>S</b>                                     |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                               |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                    |
| * Assembling / Kitting                                                  | Fitting body assembled with cutting ring and union nut on the standpipe <b>-SV</b> |
|                                                                         | Fitting body assembled with cutting rings and union nuts on all ends <b>-MS+SV</b> |

### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in) |      |                 |      |      |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------|------|-----------------|------|------|------|------|-----------------------------------|-----------------------------|
|        |                          |                 | D2                    | L    | L1 <sup>1</sup> | L2   | L3   | S1   | S2   |                                   |                             |
| L      | 6                        | 500             | 4                     | 19   | 27              | 12   | 26   | 12   | 14   | 3,60                              | FI-EL-06L-W3-SV             |
|        | .24                      | 7251            | .16                   | .75  | 1.06            | .47  | 1.02 | .47  | .55  | 7.92                              |                             |
|        | 8                        | 500             | 6                     | 21   | 29              | 14   | 27,5 | 12   | 17   | 4,70                              | FI-EL-08L-W3-SV             |
|        | .31                      | 7251            | .24                   | .75  | 1.06            | .47  | 1.02 | .47  | .55  | 10.34                             |                             |
|        | 10                       | 500             | 8                     | 22   | 30              | 15   | 29   | 14   | 19   | 6,10                              | FI-EL-10L-W3-SV             |
|        | .39                      | 7251            | .31                   | .83  | 1.14            | .55  | 1.08 | .47  | .67  | 13.42                             |                             |
|        | 12                       | 400             | 10                    | 24   | 32              | 17   | 29,5 | 17   | 22   | 8,30                              | FI-EL-12L-W3-SV             |
|        | .47                      | 5800            | .39                   | .87  | 1.18            | .59  | 1.14 | .55  | .75  | 18.26                             |                             |
|        | 15                       | 400             | 12                    | 28   | 36              | 21   | 32,5 | 19   | 27   | 14,40                             | FI-EL-15L-W3-SV             |
|        | .59                      | 5800            | .47                   | .94  | 1.26            | .67  | 1.16 | .67  | .87  | 31.68                             |                             |
|        | 18                       | 400             | 15                    | 31   | 40              | 23,5 | 35,5 | 24   | 32   | 20,70                             | FI-EL-18L-W3-SV             |
|        | .71                      | 5800            | .59                   | 1.10 | 1.42            | .83  | 1.28 | .75  | 1.06 | 45.45                             |                             |
|        | 22                       | 250             | 19                    | 35   | 44              | 27,5 | 38,5 | 27   | 36   | 29,30                             | FI-EL-22L-W3-SV             |
|        | .87                      | 3625            | .75                   | 1.22 | 1.57            | .93  | 1.40 | .94  | 1.26 | 64.46                             |                             |
|        | 28                       | 250             | 24                    | 38   | 47              | 30,5 | 41,5 | 36   | 41   | 40,80                             | FI-EL-28L-W3-SV             |
|        | 1.10                     | 3625            | .94                   | 1.38 | 1.73            | 1.08 | 1.52 | 1.06 | 1.42 | 89.76                             |                             |
|        | 35                       | 250             | 30                    | 45   | 56              | 34,5 | 51   | 41   | 50   | 65,00                             | FI-EL-35L-W3-SV             |
|        | 1.38                     | 3625            | 1.18                  | 1.50 | 1.85            | 1.20 | 1.63 | 1.42 | 1.61 | 143.00                            |                             |
|        | 42                       | 250             | 36                    | 51   | 63              | 40   | 56   | 50   | 60   | 87,90                             | FI-EL-42L-W3-SV             |
|        | 1.65                     | 3625            | 1.42                  | 1.77 | 2.20            | 1.36 | 2.01 | 1.61 | 1.97 | 193.38                            |                             |
| S      | 6                        | 800             | 4                     | 23   | 31              | 16   | 27   | 12   | 17   | 5,80                              | FI-EL-06S-W3-SV             |
|        | .24                      | 11603           | .16                   | 2.01 | 2.48            | 1.57 | 2.20 | 1.97 | 2.36 | 12.76                             |                             |
|        | 8                        | 800             | 5                     | 24   | 32              | 17   | 27,5 | 14   | 19   | 7,80                              | FI-EL-08S-W3-SV             |
|        | .31                      | 11603           | .20                   | .91  | 1.22            | .63  | 1.06 | .47  | .67  | 17.16                             |                             |
|        | 10                       | 800             | 7                     | 25   | 34              | 17,5 | 30   | 17   | 22   | 10,20                             | FI-EL-10S-W3-SV             |
|        | .39                      | 11603           | .28                   | .94  | 1.26            | .67  | 1.08 | .55  | .75  | 22.44                             |                             |
|        | 12                       | 630             | 8                     | 29   | 38              | 21,5 | 31   | 17   | 24   | 13,50                             | FI-EL-12S-W3-SV             |
|        | .47                      | 9135            | .31                   | .98  | 1.34            | .69  | 1.18 | .67  | .87  | 29.70                             |                             |
|        | 14                       | 630             | 10                    | 30   | 40              | 22   | 35   | 19   | 27   | 17,70                             | FI-EL-14S-W3-SV             |
|        | .55                      | 9135            | .39                   | 1.14 | 1.50            | .85  | 1.22 | .67  | .94  | 38.94                             |                             |
|        | 16                       | 630             | 12                    | 33   | 43              | 24,5 | 36,5 | 24   | 30   | 23,70                             | FI-EL-16S-W3-SV             |
|        | .63                      | 9135            | .47                   | 1.18 | 1.57            | .87  | 1.38 | .75  | 1.06 | 52.14                             |                             |
|        | 20                       | 400             | 16                    | 37   | 48              | 26,5 | 44,5 | 27   | 36   | 36,50                             | FI-EL-20S-W3-SV             |
|        | .79                      | 5800            | .63                   | 1.30 | 1.69            | .96  | 1.44 | .94  | 1.18 | 80.30                             |                             |
|        | 25                       | 400             | 20                    | 42   | 54              | 30   | 50   | 36   | 46   | 63,70                             | FI-EL-25S-W3-SV             |
|        | .98                      | 5800            | .79                   | 1.46 | 1.89            | 1.04 | 1.75 | 1.06 | 1.42 | 140.14                            |                             |
|        | 30                       | 400             | 25                    | 49   | 62              | 35,5 | 55   | 41   | 50   | 88,90                             | FI-EL-30S-W3-SV             |
|        | 1.18                     | 5800            | .98                   | 1.65 | 2.13            | 1.18 | 1.97 | 1.42 | 1.81 | 195.58                            |                             |
|        | 38                       | 420             | 32                    | 57   | 72              | 41   | 63   | 50   | 60   | 135,80                            | FI-EL-38S-W3-SV             |
|        | 1.50                     | 6091            | 1.26                  | 1.93 | 2.44            | 1.40 | 2.17 | 1.61 | 1.97 | 298.76                            |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight including cutting ring and union nut on the standpipe.

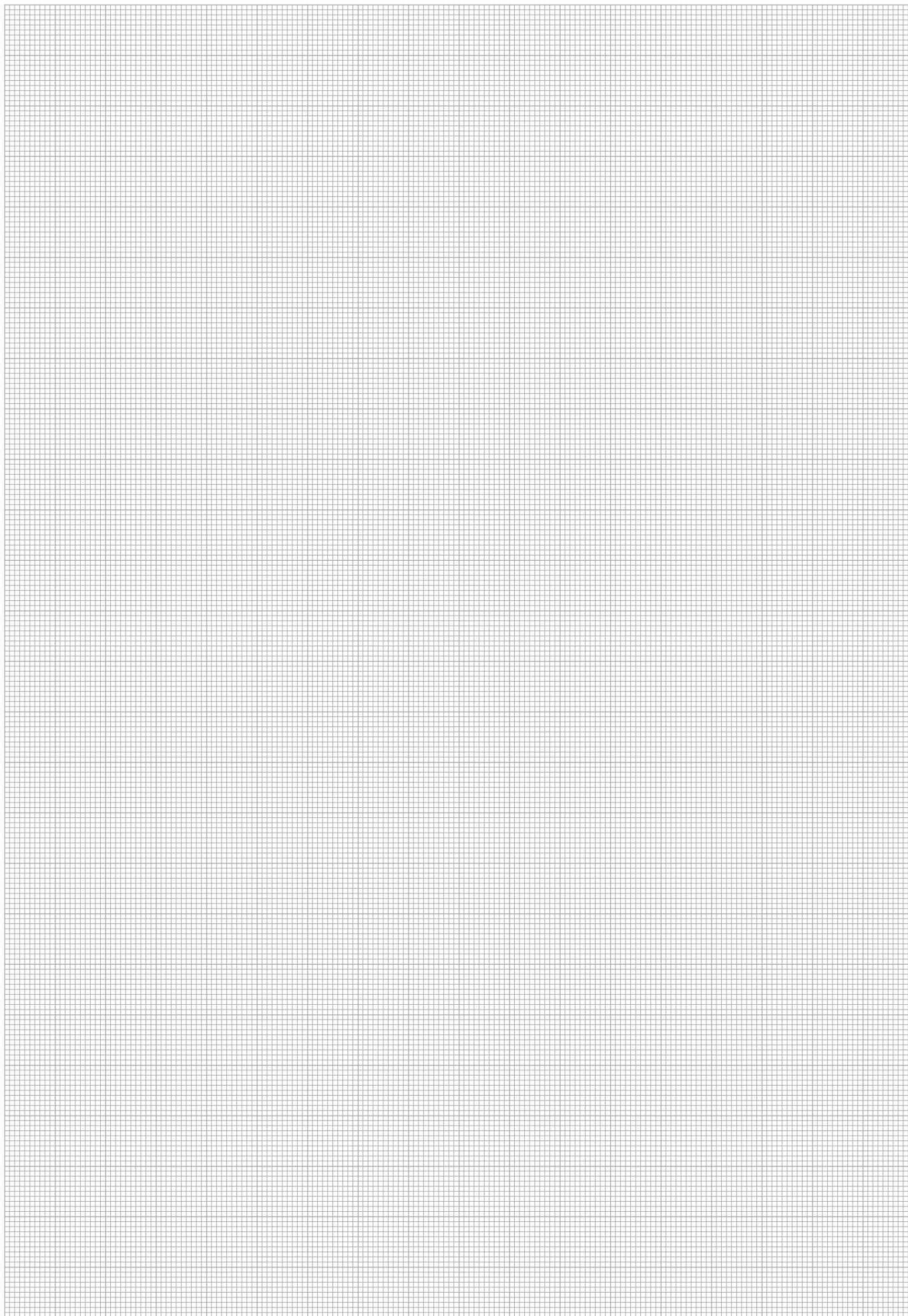
<sup>3</sup> Standard scope of delivery: Fitting body assembled with cutting ring and union nut on the standpipe.

Please note: Standpipes are always factory-assembled with cutting rings and union nuts.

The union nut assembled on the standpipe has to be tightened by only 1/12 a turn (equivalent to 30°) beyond the fixed point.


Typical application with a  
Straight Male Stud Fitting FI-GE-...





## Adjustable Male Stud Elbow (90°) with Lock Nut

FI-WEE



Whitworth Parallel Pipe Thread (BSPP) /  
O-Ring and Retaining Ring (Small)  
FI-WEE-...-R-OK

172



Metric Parallel Thread /  
O-Ring and Retaining Ring (Small)  
FI-WEE-...-M-OK

174



Metric Parallel Thread /  
O-Ring  
FI-WEE-...-M-OR

176



UN/UNF Thread /  
O-Ring  
FI-WEE-...-U-OR

178

## Adjustable Male Stud Elbow (45°) with Lock Nut

FI-VEE



Whitworth Parallel Pipe Thread (BSPP) /  
O-Ring and Retaining Ring (Small)  
FI-VEE-...-R-OK

173



Metric Parallel Thread /  
O-Ring and Retaining Ring (Small)  
FI-VEE-...-M-OK

175



Metric Parallel Thread /  
O-Ring  
FI-VEE-...-M-OR

177



UN/UNF Thread /  
O-Ring  
FI-VEE-...-U-OR

179

## Adjustable Male Stud Branch Tee with Lock Nut

FI-TEE



Whitworth Parallel Pipe Thread (BSPP) /  
O-Ring and Retaining Ring (Small)  
FI-TEE-...-R-OK

173



Metric Parallel Thread /  
O-Ring and Retaining Ring (Small)  
FI-TEE-...-M-OK

175



Metric Parallel Thread /  
O-Ring  
FI-TEE-...-M-OR

177



UN/UNF Thread /  
O-Ring  
FI-TEE-...-U-OR

179

## Adjustable Male Stud Barrel Tee with Lock Nut

FI-LEE



Whitworth Parallel Pipe Thread (BSPP) /  
O-Ring and Retaining Ring (Small)  
FI-LEE-...-R-OK

173



Metric Parallel Thread /  
O-Ring and Retaining Ring (Small)  
FI-LEE-...-M-OK

175



Metric Parallel Thread /  
O-Ring  
FI-LEE-...-M-OR

177



UN/UNF Thread /  
O-Ring  
FI-LEE-...-U-OR

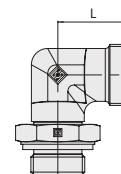
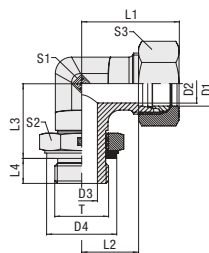
179

J



## Adjustable Male Stud Elbow (90°) with Lock Nut

### Type FI-WEE-...-R-OK • Series L / S



#### Whitworth Parallel Pipe Thread (BSPP)

#### O-Ring and Retaining Ring (Small)

| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in) |      |      |      |      |                 |      |      |     |      |      |      |          | Torque<br>(Nm/ft-lb) | Weight<br>(kg/lbs) ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------|------|------|------|-----------------|------|------|-----|------|------|------|----------|----------------------|------------------------|-----------------------------|
|        | D1                 |                 | Thread T              | D2   | D3   | D4   | L    | L1 <sup>1</sup> | L2   | L3   | L4  | S1   | S2   | S3   | Thread T |                      | per 100                |                             |
| L      | 6                  | 315             | G 1/8                 | 4    | 4    | 14,8 | 21   | 29              | 14   | 20   | 7   | 14   | 14   | 14   | 25       | 4,06                 |                        | FI-WEE-06LR-OK-B-W3         |
|        | .24                | 4568            |                       | .16  | .16  | .58  | .83  | 1.14            | .55  | .79  | .28 | .55  | .55  | .55  | 18.5     | 8.94                 |                        |                             |
|        | 8                  | 315             | G 1/4                 | 6    | 5    | 19,8 | 23   | 31              | 16   | 25   | 9   | 14   | 19   | 17   | 50       | 6,34                 |                        | FI-WEE-08LR-OK-B-W3         |
|        | .31                | 4568            |                       | .24  | .20  | .78  | .91  | 1.22            | .63  | .98  | .35 | .55  | .75  | .67  | 37.0     | 13.95                |                        |                             |
|        | 10                 | 315             | G 1/4                 | 8    | 5    | 19,8 | 24   | 32              | 17   | 27   | 9   | 19   | 19   | 19   | 50       | 9,17                 |                        | FI-WEE-10LR-OK-B-W3         |
|        | .39                | 4568            |                       | .31  | .20  | .78  | .94  | 1.26            | .67  | 1.06 | .35 | .75  | .75  | .75  | 37.0     | 20.18                |                        |                             |
|        | 12                 | 250             | G 3/8                 | 10   | 8    | 22,8 | 26   | 34              | 19   | 28   | 9   | 19   | 22   | 22   | 80       | 10,39                |                        | FI-WEE-12LR-OK-B-W3         |
|        | .47                | 3625            |                       | .39  | .31  | .90  | 1.02 | 1.34            | .75  | 1.10 | .35 | .75  | .87  | .87  | 59.2     | 22.87                |                        |                             |
|        | 15                 | 250             | G 1/2                 | 12   | 12   | 27,8 | 28   | 36              | 21   | 29   | 13  | 22   | 27   | 27   | 105      | 15,73                |                        | FI-WEE-15LR-OK-B-W3         |
|        | .59                | 3625            |                       | .47  | .47  | 1.09 | 1.10 | 1.42            | .83  | 1.14 | .51 | .87  | 1.06 | 1.06 | 77.7     | 34.61                |                        |                             |
|        | 18                 | 250             | G 1/2                 | 15   | 12   | 27,8 | 31   | 40              | 23,5 | 33   | 13  | 27   | 27   | 32   | 105      | 22,29                |                        | FI-WEE-18LR-OK-B-W3         |
|        | .71                | 3625            |                       | .59  | .47  | 1.09 | 1.22 | 1.57            | .93  | 1.30 | .51 | 1.06 | 1.06 | 1.26 | 77.7     | 49.04                |                        |                             |
|        | 22                 | 160             | G 3/4                 | 19   | 16   | 32,8 | 35   | 44              | 27,5 | 38   | 13  | 30   | 36   | 36   | 220      | 33,01                |                        | FI-WEE-22LR-OK-B-W3         |
|        | .87                | 2320            |                       | .75  | .63  | 1.29 | 1.38 | 1.73            | 1.08 | 1.50 | .51 | 1.18 | 1.42 | 1.42 | 162.8    | 72.63                |                        |                             |
|        | 28                 | 160             | G 1                   | 24   | 20   | 40,8 | 38   | 47              | 30,5 | 44   | 15  | 36   | 41   | 41   | 370      | 50,60                |                        | FI-WEE-28LR-OK-B-W3         |
|        | 1.10               | 2320            |                       | .94  | .79  | 1.61 | 1.50 | 1.85            | 1.20 | 1.73 | .59 | 1.42 | 1.61 | 1.61 | 273.8    | 111.32               |                        |                             |
| S      | 35                 | 160             | G 1 1/4               | 30   | 25   | 50,8 | 48   | 59              | 37,5 | 55   | 15  | 50   | 50   | 50   | 500      | 115,30               |                        | FI-WEE-35LR-OK-B-W3         |
|        | 1.38               | 2320            |                       | 1.18 | .98  | 2.00 | 1.89 | 2.32            | 1.48 | 2.17 | .59 | 1.97 | 1.97 | 1.97 | 370.0    | 253.66               |                        |                             |
|        | 42                 | 160             | G 1 1/2               | 36   | 32   | 55,8 | 49   | 61              | 38   | 59   | 15  | 50   | 55   | 60   | 600      | 112,50               |                        | FI-WEE-42LR-OK-B-W3         |
|        | 1.65               | 2320            |                       | 1.42 | 1.26 | 2.20 | 1.93 | 2.40            | 1.50 | 2.32 | .59 | 1.97 | 2.17 | 2.36 | 444.0    | 247.50               |                        |                             |
|        | 6                  | 315             | G 1/4                 | 4    | 5    | 19,8 | 22   | 30              | 15   | 25   | 9   | 14   | 19   | 17   | 50       | 6,62                 |                        | FI-WEE-06SR-OK-B-W3         |
|        | .24                | 4568            |                       | .16  | .20  | .78  | .87  | 1.18            | .59  | .98  | .35 | .55  | .75  | .67  | 37.0     | 14.56                |                        |                             |
|        | 8                  | 315             | G 1/4                 | 5    | 5    | 19,8 | 24   | 32              | 17   | 27   | 9   | 19   | 19   | 19   | 50       | 9,70                 |                        | FI-WEE-08SR-OK-B-W3         |
|        | .31                | 4568            |                       | .20  | .20  | .78  | .94  | 1.26            | .67  | 1.06 | .35 | .75  | .75  | .75  | 37.0     | 21.34                |                        |                             |
|        | 10                 | 250             | G 3/8                 | 7    | 8    | 22,8 | 25   | 34              | 17,5 | 28   | 9   | 19   | 22   | 22   | 80       | 10,96                |                        | FI-WEE-10SR-OK-B-W3         |
|        | .39                | 3625            |                       | .28  | .31  | .90  | .98  | 1.34            | .69  | 1.10 | .35 | .75  | .87  | .87  | 59.2     | 24.12                |                        |                             |
|        | 12                 | 250             | G 3/8                 | 8    | 8    | 22,8 | 29   | 38              | 21,5 | 31   | 9   | 22   | 22   | 24   | 80       | 14,98                |                        | FI-WEE-12SR-OK-B-W3         |
|        | .47                | 3625            |                       | .31  | .31  | .90  | 1.14 | 1.50            | .85  | 1.22 | .35 | .87  | .87  | .94  | 59.2     | 32.95                |                        |                             |
|        | 16                 | 250             | G 1/2                 | 12   | 12   | 27,8 | 33   | 43              | 24,5 | 33   | 13  | 27   | 27   | 30   | 105      | 23,56                |                        | FI-WEE-16SR-OK-B-W3         |
|        | .63                | 3625            |                       | .47  | .47  | 1.09 | 1.30 | 1.69            | .96  | 1.30 | .51 | 1.06 | 1.06 | 1.18 | 77.7     | 51.84                |                        |                             |
|        | 20                 | 250             | G 3/4                 | 16   | 16   | 32,8 | 38   | 49              | 27,5 | 39   | 12  | 30   | 36   | 36   | 220      | 36,41                |                        | FI-WEE-20SR-OK-B-W3         |
|        | .79                | 3625            |                       | .63  | .63  | 1.29 | 1.50 | 1.93            | 1.08 | 1.54 | .47 | 1.18 | 1.42 | 1.42 | 162.8    | 80.09                |                        |                             |
|        | 25                 | 250             | G 1                   | 20   | 20   | 40,8 | 42   | 54              | 30   | 45   | 14  | 36   | 41   | 46   | 370      | 56,20                |                        | FI-WEE-25SR-OK-B-W3         |
|        | .98                | 3625            |                       | .79  | .79  | 1.61 | 1.65 | 2.13            | 1.18 | 1.77 | .55 | 1.42 | 1.61 | 1.81 | 273.8    | 123.64               |                        |                             |
|        | 30                 | 160             | G 1 1/4               | 25   | 25   | 50,8 | 49   | 62              | 35,5 | 55   | 15  | 50   | 50   | 50   | 500      | 120,20               |                        | FI-WEE-30SR-OK-B-W3         |
|        | 1.18               | 2320            |                       | .98  | .98  | 2.00 | 1.93 | 2.44            | 1.40 | 2.17 | .59 | 1.97 | 1.97 | 1.97 | 370.0    | 264.44               |                        |                             |
|        | 38                 | 160             | G 1 1/2               | 32   | 32   | 55,8 | 50   | 65              | 34   | 59   | 15  | 50   | 55   | 60   | 600      | 120,30               |                        | FI-WEE-38SR-OK-B-W3         |
|        | 1.50               | 2320            |                       | 1.26 | 1.26 | 2.20 | 1.97 | 2.56            | 1.34 | 2.32 | .59 | 1.97 | 2.17 | 2.36 | 444.0    | 264.66               |                        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is NBR (Buna-N®).

Male stud acc. to ISO 1179-3 (Type H)

Port acc. to ISO 1179-1

Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

## Ordering Codes

### \*FI-WEE\*-10\*L\*R\*-OK\*-B\*-W3\*-MS

\* Adjustable Male Stud Elbow (90°) with Lock Nut **FI-WEE**

\* Outside Tube Diameter (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Whitworth Parallel Pipe Thread (BSPP) **R**

\* Seal Type O-Ring and Retaining Ring (Small) **-OK**

\* Seal Material NBR (Buna-N®) **-B**

FKM (Viton®) **-V**

EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only **—**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

If required, please indicate special sizes, e.g. R1/8!



## Adjustable Male Stud Elbow (45°) with Lock Nut Type FI-VEE-...-R-OK • Series L / S

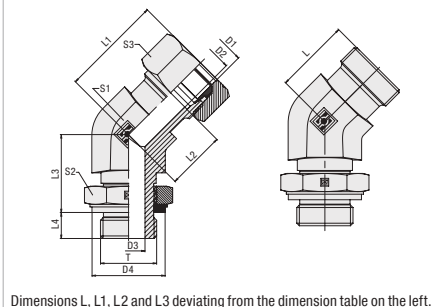
## Adjustable Male Stud Branch Tee with Lock Nut Type FI-TEE-...-R-OK • Series L / S

## Adjustable Male Stud Barrel Tee with Lock Nut Type FI-LEE-...-R-OK • Series L / S

### Type FI-VEE-...-R-OK

Whitworth Parallel Pipe Thread (BSPP)  
O-Ring and Retaining Ring (Small)

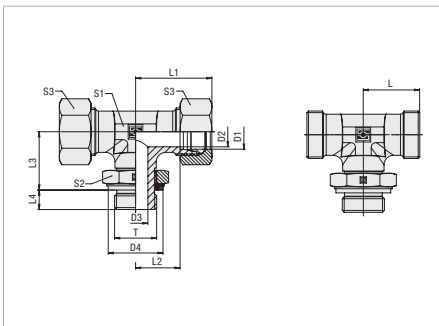
Male stud acc. to ISO 1179-3 (Type H)  
Port acc. to ISO 1179-1



### Type FI-TEE-...-R-OK

Whitworth Parallel Pipe Thread (BSPP)  
O-Ring and Retaining Ring (Small)

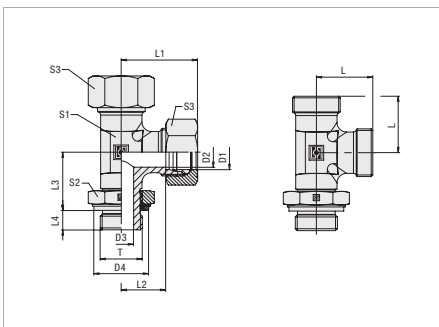
Male stud acc. to ISO 1179-3 (Type H)  
Port acc. to ISO 1179-1



### Type FI-LEE-...-R-OK

Whitworth Parallel Pipe Thread (BSPP)  
O-Ring and Retaining Ring (Small)

Male stud acc. to ISO 1179-3 (Type H)  
Port acc. to ISO 1179-1



Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.  
Please contact STAUFF prior to the assembly for further information.

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

### Spare Parts / Accessories



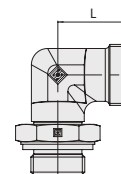
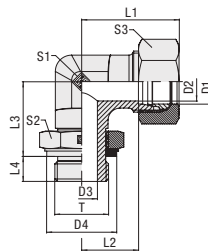
O-Ring  
Type **O-RING** Page 239



Retaining Ring (Small)  
Type **FI-KR** Page 247



## Adjustable Male Stud Elbow (90°) with Lock Nut Type FI-WEE-...-M-OK • Series L / S



### Metric Parallel Thread

### O-Ring and Retaining Ring (Small)

| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in) |      |      |      |      |                 |      |      |     |      |      |      |          | Torque<br>(Nm/ft-lb) | Weight<br>(kg/lbs) ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------|------|------|------|-----------------|------|------|-----|------|------|------|----------|----------------------|------------------------|-----------------------------|
|        | D1                 |                 | Thread T              | D2   | D3   | D4   | L    | L1 <sup>1</sup> | L2   | L3   | L4  | S1   | S2   | S3   | Thread T |                      |                        |                             |
| L      | 6                  | 315             | M 10 x 1              | 4    | 4    | 14,8 | 21   | 29              | 14   | 20   | 7   | 14   | 14   | 14   | 18       | 4,42                 |                        | FI-WEE-06LM-OK-B-W3         |
|        | .24                | 4568            |                       | .16  | .16  | .58  | .83  | 1.14            | .55  | .79  | .28 | .55  | .55  | .55  | 13.3     | 9.72                 |                        |                             |
|        | 8                  | 315             | M 12 x 1,5            | 6    | 4    | 17,8 | 23   | 31              | 16   | 23,5 | 10  | 14   | 17   | 17   | 35       | 5,14                 |                        | FI-WEE-08LM-OK-B-W3         |
|        | .31                | 4568            |                       | .24  | .16  | .70  | .91  | 1.22            | .63  | .93  | .39 | .55  | .67  | .67  | 25.9     | 11.31                |                        |                             |
|        | 10                 | 315             | M 14 x 1,5            | 8    | 5    | 19,8 | 24   | 32              | 17   | 27   | 10  | 19   | 19   | 19   | 55       | 8,60                 |                        | FI-WEE-10LM-OK-B-W3         |
|        | .39                | 4568            |                       | .31  | .20  | .78  | .94  | 1.26            | .67  | 1.06 | .39 | .75  | .75  | .75  | 40.7     | 18.92                |                        |                             |
|        | 12                 | 315             | M 16 x 1,5            | 10   | 7    | 22,8 | 26   | 34              | 19   | 27   | 10  | 19   | 22   | 22   | 80       | 10,44                |                        | FI-WEE-12LM-OK-B-W3         |
|        | .47                | 4568            |                       | .39  | .28  | .90  | 1.02 | 1.34            | .75  | 1.06 | .39 | .75  | .87  | .87  | 59.2     | 22.96                |                        |                             |
|        | 15                 | 315             | M 18 x 1,5            | 12   | 8    | 24,8 | 28   | 36              | 21   | 29   | 11  | 22   | 24   | 27   | 105      | 14,89                |                        | FI-WEE-15LM-OK-B-W3         |
|        | .59                | 4568            |                       | .47  | .31  | .98  | 1.10 | 1.42            | .83  | 1.14 | .43 | .87  | .94  | 1.06 | 77.7     | 32.75                |                        |                             |
|        | 18                 | 250             | M 22 x 1,5            | 15   | 12   | 27,8 | 31   | 40              | 23,5 | 36   | 12  | 27   | 27   | 32   | 125      | 23,93                |                        | FI-WEE-18LM-OK-B-W3         |
|        | .71                | 3625            |                       | .59  | .47  | 1.09 | 1.22 | 1.57            | .93  | 1.42 | .47 | 1.06 | 1.06 | 1.26 | 92.5     | 52.65                |                        |                             |
|        | 22                 | 160             | M 27 x 2              | 19   | 16   | 32,8 | 35   | 44              | 27,5 | 38   | 14  | 30   | 32   | 36   | 220      | 30,36                |                        | FI-WEE-22LM-OK-B-W3         |
|        | .87                | 2320            |                       | .75  | .63  | 1.29 | 1.38 | 1.73            | 1.08 | 1.50 | .55 | 1.18 | 1.26 | 1.42 | 162.8    | 66.79                |                        |                             |
|        | 28                 | 160             | M 33 x 2              | 24   | 20   | 40,8 | 38   | 47              | 30,5 | 47   | 14  | 36   | 41   | 41   | 370      | 51,70                |                        | FI-WEE-28LM-OK-B-W3         |
|        | 1.10               | 2320            |                       | .94  | .79  | 1.61 | 1.50 | 1.85            | 1.20 | 1.85 | .55 | 1.42 | 1.61 | 1.61 | 273.8    | 113.74               |                        |                             |
|        | 35                 | 160             | M 42 x 2              | 30   | 25   | 50,8 | 48   | 59              | 37,5 | 58   | 14  | 50   | 50   | 50   | 500      | 106,10               |                        | FI-WEE-35LM-OK-B-W3         |
|        | 1.38               | 2320            |                       | 1.18 | .98  | 2.00 | 1.89 | 2.32            | 1.48 | 2.28 | .55 | 1.97 | 1.97 | 1.97 | 370.0    | 233.42               |                        |                             |
|        | 42                 | 160             | M 48 x 2              | 36   | 32   | 55,8 | 49   | 61              | 38   | 58,5 | 16  | 50   | 55   | 60   | 600      | 101,60               |                        | FI-WEE-42LM-OK-B-W3         |
|        | 1.65               | 2320            |                       | 1.42 | 1.26 | 2.20 | 1.93 | 2.40            | 1.50 | 2.30 | .63 | 1.97 | 2.17 | 2.36 | 444.0    | 223.52               |                        |                             |
| S      | 6                  | 315             | M 12 x 1,5            | 4    | 4    | 17,8 | 22   | 30              | 15   | 23,5 | 10  | 14   | 17   | 17   | 35       | 6,43                 |                        | FI-WEE-06SM-OK-B-W3         |
|        | .24                | 4568            |                       | .16  | .16  | .70  | .87  | 1.18            | .59  | .93  | .39 | .55  | .67  | .67  | 25.9     | 14.14                |                        |                             |
|        | 8                  | 315             | M 14 x 1,5            | 5    | 5    | 19,8 | 24   | 32              | 17   | 27   | 10  | 19   | 19   | 19   | 55       | 9,06                 |                        | FI-WEE-08SM-OK-B-W3         |
|        | .31                | 4568            |                       | .20  | .20  | .78  | .94  | 1.26            | .67  | 1.06 | .39 | .75  | .75  | .75  | 40.7     | 19.94                |                        |                             |
|        | 10                 | 315             | M 16 x 1,5            | 7    | 7    | 22,8 | 25   | 34              | 17,5 | 26   | 11  | 19   | 22   | 22   | 80       | 11,02                |                        | FI-WEE-10SM-OK-B-W3         |
|        | .39                | 4568            |                       | .28  | .28  | .90  | .98  | 1.34            | .69  | 1.02 | .43 | .75  | .87  | .87  | 59.2     | 24.24                |                        |                             |
|        | 12                 | 315             | M 18 x 1,5            | 8    | 8    | 24,8 | 29   | 38              | 21,5 | 28   | 12  | 22   | 24   | 24   | 105      | 15,90                |                        | FI-WEE-12SM-OK-B-W3         |
|        | .47                | 4568            |                       | .31  | .31  | .98  | 1.14 | 1.50            | .85  | 1.10 | .47 | .87  | .94  | .94  | 77.7     | 34.98                |                        |                             |
|        | 16                 | 250             | M 22 x 1,5            | 12   | 12   | 27,8 | 33   | 43              | 24,5 | 34   | 14  | 27   | 27   | 30   | 125      | 25,14                |                        | FI-WEE-16SM-OK-B-W3         |
|        | .63                | 3625            |                       | .47  | .47  | 1.09 | 1.30 | 1.69            | .96  | 1.34 | .55 | 1.06 | 1.06 | 1.18 | 92.5     | 55.31                |                        |                             |
|        | 20                 | 250             | M 27 x 2              | 16   | 16   | 32,8 | 38   | 49              | 27,5 | 36   | 16  | 30   | 32   | 36   | 220      | 38,45                |                        | FI-WEE-20SM-OK-B-W3         |
|        | .79                | 3625            |                       | .63  | .63  | 1.29 | 1.50 | 1.93            | 1.08 | 1.42 | .63 | 1.18 | 1.26 | 1.42 | 162.8    | 84.59                |                        |                             |
|        | 25                 | 250             | M 33 x 2              | 20   | 20   | 40,8 | 42   | 54              | 30   | 45   | 16  | 36   | 41   | 46   | 370      | 53,82                |                        | FI-WEE-25SM-OK-B-W3         |
|        | .98                | 3625            |                       | .79  | .79  | 1.61 | 1.65 | 2.13            | 1.18 | 1.77 | .63 | 1.42 | 1.61 | 1.81 | 273.8    | 118.40               |                        |                             |
|        | 30                 | 160             | M 42 x 2              | 25   | 25   | 50,8 | 49   | 62              | 35,5 | 55   | 17  | 50   | 50   | 50   | 500      | 110,10               |                        | FI-WEE-30SM-OK-B-W3         |
|        | 1.18               | 2320            |                       | .98  | .98  | 2.00 | 1.93 | 2.44            | 1.40 | 2.17 | .67 | 1.97 | 1.97 | 1.97 | 370.0    | 242.22               |                        |                             |
|        | 38                 | 160             | M 48 x 2              | 32   | 32   | 55,8 | 50   | 65              | 34   | 55,5 | 19  | 50   | 55   | 60   | 600      | 109,30               |                        | FI-WEE-38SM-OK-B-W3         |
|        | 1.50               | 2320            |                       | 1.26 | 1.26 | 2.20 | 1.97 | 2.56            | 1.34 | 2.19 | .75 | 1.97 | 2.17 | 2.36 | 444.0    | 240.46               |                        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Port acc. to ISO 9974-1

Torque recommendations for Steel mating material.

Standard seal material is NBR (Buna-N®).

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

## Ordering Codes

### \*FI-WEE\*-10\*L\*M\*-OK\*-B\*-W3\*-MS

\* Adjustable Male Stud Elbow (90°) with Lock Nut **FI-WEE**

\* Outside Tube Diameter (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Metric Parallel Thread **M**

If required, please indicate special sizes, e.g. M26x1.5!

\* Seal Type O-Ring and Retaining Ring (Small) **-OK**

\* Seal Material NBR (Buna-N®) **-B**

FKM (Viton®) **-V**

EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only **—**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**





## Adjustable Male Stud Elbow (45°) with Lock Nut Type FI-VEE-...-M-OK • Series L / S

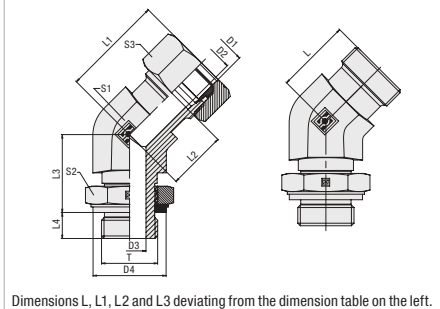
## Adjustable Male Stud Branch Tee with Lock Nut Type FI-TEE-...-M-OK • Series L / S

## Adjustable Male Stud Barrel Tee with Lock Nut Type FI-LEE-...-M-OK • Series L / S

### Type FI-VEE-...-M-OK

Metric Parallel Thread  
O-Ring and Retaining Ring (Small)

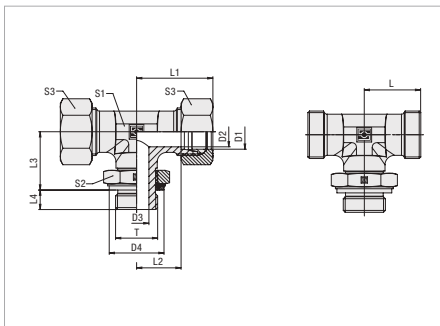
Port acc. to ISO 9974-1



### Type FI-TEE-...-M-OK

Metric Parallel Thread  
O-Ring and Retaining Ring (Small)

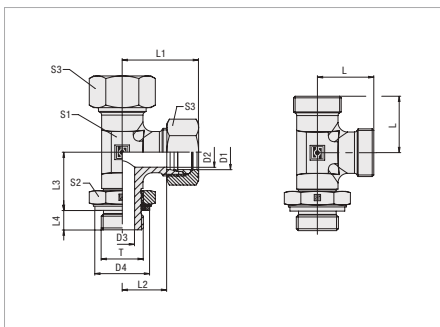
Port acc. to ISO 9974-1



### Type FI-LEE-...-M-OK

Metric Parallel Thread  
O-Ring and Retaining Ring (Small)

Port acc. to ISO 9974-1



Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

### Spare Parts / Accessories



O-Ring  
Type **O-RING** Page 239

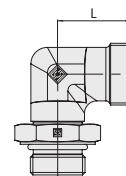
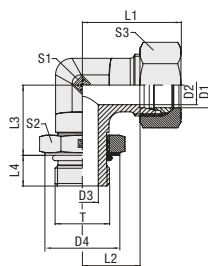


Retaining Ring (Small)  
Type **FI-KR** Page 247



## Adjustable Male Stud Elbow (90°) with Lock Nut

### Type FI-WEE-...-M-OR ▪ Series L / S



#### Metric Parallel Thread

#### O-Ring

| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in) |      |      |      |      |                 |      |      |     |      |      |      |          | Torque<br>(Nm/ft-lb) | Weight<br>(kg/lbs) ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------|------|------|------|-----------------|------|------|-----|------|------|------|----------|----------------------|------------------------|-----------------------------|
|        | D1                 |                 | Thread T              | D2   | D3   | D4   | L    | L1 <sup>1</sup> | L2   | L3   | L4  | S1   | S2   | S3   | Thread T |                      | per 100                |                             |
| L      | 6                  | 315             | M 10 x 1              | 4    | 4    | 14,5 | 21   | 29              | 14   | 20   | 7   | 14   | 14   | 14   | 15       | 5,16                 |                        | FI-WEE-06LM-OR-B-W3         |
|        | .24                | 4568            |                       | .16  | .16  | .57  | .83  | 1.14            | .55  | .79  | .28 | .55  | .55  | .55  | 11.1     | 11.35                |                        |                             |
|        | 8                  | 315             | M 12 x 1,5            | 6    | 4    | 17,5 | 23   | 31              | 16   | 23,5 | 10  | 14   | 17   | 25   | 5,44     |                      |                        | FI-WEE-08LM-OR-B-W3         |
|        | .31                | 4568            |                       | .24  | .16  | .69  | .91  | 1.22            | .63  | .93  | .39 | .55  | .67  | .67  | 18.5     | 11.96                |                        |                             |
|        | 10                 | 315             | M 14 x 1,5            | 8    | 5    | 19,5 | 24   | 32              | 17   | 27   | 10  | 19   | 19   | 19   | 35       | 9,00                 |                        | FI-WEE-10LM-OR-B-W3         |
|        | .39                | 4568            |                       | .31  | .20  | .77  | .94  | 1.26            | .67  | 1.06 | .39 | .75  | .75  | .75  | 25.9     | 19.80                |                        |                             |
|        | 12                 | 315             | M 16 x 1,5            | 10   | 7    | 22,5 | 26   | 34              | 19   | 27   | 10  | 19   | 22   | 22   | 40       | 10,23                |                        | FI-WEE-12LM-OR-B-W3         |
|        | .47                | 4568            |                       | .39  | .28  | .89  | 1.02 | 1.34            | .75  | 1.06 | .39 | .75  | .87  | .87  | 29.6     | 22.51                |                        |                             |
|        | 15                 | 315             | M 18 x 1,5            | 12   | 8    | 24,5 | 28   | 36              | 21   | 29   | 11  | 22   | 24   | 27   | 45       | 14,59                |                        | FI-WEE-15LM-OR-B-W3         |
|        | .59                | 4568            |                       | .47  | .31  | .96  | 1.10 | 1.42            | .83  | 1.14 | .43 | .87  | .94  | 1.06 | 33.3     | 32.11                |                        |                             |
|        | 18                 | 250             | M 22 x 1,5            | 15   | 12   | 27,5 | 31   | 40              | 23,5 | 36   | 12  | 27   | 27   | 32   | 60       | 23,09                |                        | FI-WEE-18LM-OR-B-W3         |
|        | .71                | 3625            |                       | .59  | .47  | 1.08 | 1.22 | 1.57            | .93  | 1.42 | .47 | 1.06 | 1.06 | 1.26 | 44.4     | 50.80                |                        |                             |
|        | 22                 | 160             | M 27 x 2              | 19   | 16   | 32,5 | 35   | 44              | 27,5 | 38   | 14  | 30   | 32   | 36   | 100      | 39,11                |                        | FI-WEE-22LM-OR-B-W3         |
|        | .87                | 2320            |                       | .75  | .63  | 1.28 | 1.38 | 1.73            | 1.08 | 1.50 | .55 | 1.18 | 1.26 | 1.42 | 74.0     | 86.04                |                        |                             |
|        | 28                 | 160             | M 33 x 2              | 24   | 20   | 41,5 | 38   | 47              | 30,5 | 47   | 14  | 36   | 41   | 41   | 160      | 61,54                |                        | FI-WEE-28LM-OR-B-W3         |
|        | 1.10               | 2320            |                       | .94  | .79  | 1.63 | 1.50 | 1.85            | 1.20 | 1.85 | .55 | 1.42 | 1.61 | 1.61 | 118.4    | 135.38               |                        |                             |
|        | 35                 | 160             | M 42 x 2              | 30   | 25   | 50,5 | 48   | 59              | 37,5 | 58   | 14  | 50   | 50   | 50   | 210      | 131,90               |                        | FI-WEE-35LM-OR-B-W3         |
|        | 1.38               | 2320            |                       | 1.18 | .98  | 1.99 | 1.89 | 2.32            | 1.48 | 2.28 | .55 | 1.97 | 1.97 | 1.97 | 155.4    | 290.18               |                        |                             |
|        | 42                 | 160             | M 48 x 2              | 36   | 32   | 55,5 | 49   | 61              | 38   | 58,5 | 16  | 50   | 55   | 60   | 260      | 136,43               |                        | FI-WEE-42LM-OR-B-W3         |
|        | 1.65               | 2320            |                       | 1.42 | 1.26 | 2.19 | 1.93 | 2.40            | 1.50 | 2.30 | .63 | 1.97 | 2.17 | 2.36 | 192.4    | 300.15               |                        |                             |
| S      | 6                  | 315             | M 12 x 1,5            | 4    | 4    | 17,5 | 22   | 30              | 15   | 23,5 | 10  | 14   | 17   | 35   | 7,62     |                      |                        | FI-WEE-06SM-OR-B-W3         |
|        | .24                | 4568            |                       | .16  | .16  | .69  | .87  | 1.18            | .59  | .93  | .39 | .55  | .67  | .67  | 25.9     | 16.77                |                        |                             |
|        | 8                  | 315             | M 14 x 1,5            | 5    | 5    | 19,5 | 24   | 32              | 17   | 27   | 10  | 19   | 19   | 19   | 45       | 11,98                |                        | FI-WEE-08SM-OR-B-W3         |
|        | .31                | 4568            |                       | .20  | .20  | .77  | .94  | 1.26            | .67  | 1.06 | .39 | .75  | .75  | .75  | 33.3     | 26.35                |                        |                             |
|        | 10                 | 250             | M 16 x 1,5            | 7    | 7    | 22,5 | 25   | 34              | 17,5 | 26   | 11  | 19   | 22   | 22   | 55       | 10,81                |                        | FI-WEE-10SM-OR-B-W3         |
|        | .39                | 3625            |                       | .28  | .28  | .89  | .98  | 1.34            | .69  | 1.02 | .43 | .75  | .87  | .87  | 40.7     | 23.79                |                        |                             |
|        | 12                 | 250             | M 18 x 1,5            | 8    | 8    | 24,5 | 29   | 38              | 21,5 | 28   | 12  | 22   | 24   | 24   | 70       | 15,60                |                        | FI-WEE-12SM-OR-B-W3         |
|        | .47                | 3625            |                       | .31  | .31  | .96  | 1.14 | 1.50            | .85  | 1.10 | .47 | .87  | .94  | .94  | 51.8     | 34.32                |                        |                             |
|        | 16                 | 250             | M 22 x 1,5            | 12   | 12   | 27,5 | 33   | 43              | 24,5 | 34   | 14  | 27   | 27   | 30   | 100      | 24,52                |                        | FI-WEE-16SM-OR-B-W3         |
|        | .63                | 3625            |                       | .47  | .47  | 1.08 | 1.30 | 1.69            | .96  | 1.34 | .55 | 1.06 | 1.06 | 1.18 | 74.0     | 53.94                |                        |                             |
|        | 20                 | 250             | M 27 x 2              | 16   | 16   | 32,5 | 38   | 49              | 27,5 | 36   | 16  | 30   | 32   | 36   | 170      | 33,16                |                        | FI-WEE-20SM-OR-B-W3         |
|        | .79                | 3625            |                       | .63  | .63  | 1.28 | 1.50 | 1.93            | 1.08 | 1.42 | .63 | 1.18 | 1.26 | 1.42 | 125.8    | 72.96                |                        |                             |
|        | 25                 | 160             | M 33 x 2              | 20   | 20   | 41,5 | 42   | 54              | 30   | 45   | 16  | 36   | 41   | 46   | 310      | 56,70                |                        | FI-WEE-25SM-OR-B-W3         |
|        | .98                | 2320            |                       | .79  | .79  | 1.63 | 1.65 | 2.13            | 1.18 | 1.77 | .63 | 1.42 | 1.61 | 1.81 | 229.4    | 124.74               |                        |                             |
|        | 30                 | 160             | M 42 x 2              | 25   | 25   | 50,5 | 49   | 62              | 35,5 | 55   | 17  | 50   | 50   | 50   | 330      | 144,57               |                        | FI-WEE-30SM-OR-B-W3         |
|        | 1.18               | 2320            |                       | .98  | .98  | 1.99 | 1.93 | 2.44            | 1.40 | 2.17 | .67 | 1.97 | 1.97 | 1.97 | 244.2    | 318.05               |                        |                             |
|        | 38                 | 160             | M 48 x 2              | 32   | 32   | 55,5 | 50   | 65              | 34   | 55,5 | 19  | 50   | 55   | 60   | 420      | 152,80               |                        | FI-WEE-38SM-OR-B-W3         |
|        | 1.50               | 2320            |                       | 1.26 | 1.26 | 2.19 | 1.97 | 2.56            | 1.34 | 2.19 | .75 | 1.97 | 2.17 | 2.36 | 310.8    | 336.17               |                        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is NBR (Buna-N®).

Male stud according to ISO 6149-2/-3

Port according to ISO 6149-1

Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

## Ordering Codes

### \*FI-WEE\*-10\*L\*M\*-OR\*-B\*-W3\*-MS

\* Adjustable Male Stud Elbow (90°) with Lock Nut **FI-WEE**

\* Outside Tube Diameter (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Metric Parallel Thread **M**

If required, please indicate special sizes, e.g. M26x1.5!

\* Seal Type O-Ring **-OR**

\* Seal Material NBR (Buna-N®) **-B**

FKM (Viton®) **-V**

EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only **—**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**



## Adjustable Male Stud Elbow (45°) with Lock Nut Type FI-VEE-...-M-OR • Series L / S

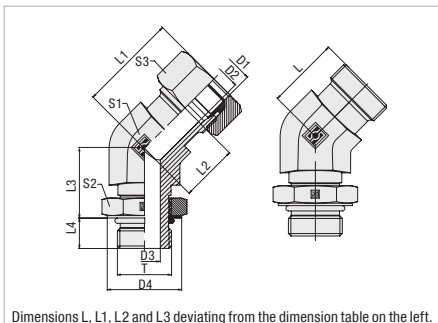
## Adjustable Male Stud Branch Tee with Lock Nut Type FI-TEE-...-M-OR • Series L / S

## Adjustable Male Stud Barrel Tee with Lock Nut Type FI-LEE-...-M-OR • Series L / S

### Type FI-VEE-...-M-OR

Metric Parallel Thread  
O-Ring

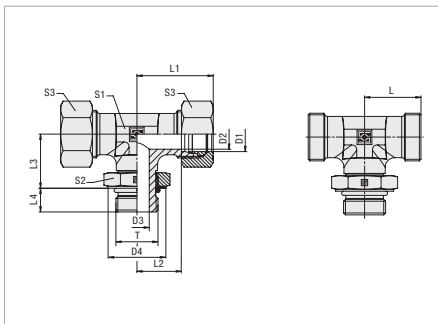
Male stud according to ISO 6149-2/-3  
Port according to ISO 6149-1



### Type FI-TEE-...-M-OR

Metric Parallel Thread  
O-Ring

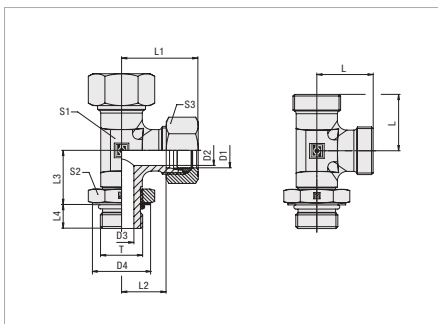
Male stud according to ISO 6149-2/-3  
Port according to ISO 6149-1



### Type FI-LEE-...-M-OR

Metric Parallel Thread  
O-Ring

Male stud according to ISO 6149-2/-3  
Port according to ISO 6149-1



Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

### Spare Parts / Accessories

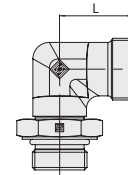
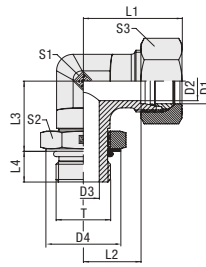


O-Ring  
Type **O-RING** Page 239



## Adjustable Male Stud Elbow (90°) with Lock Nut

### Type FI-WEE-...-U • Series L / S



UN/UNF Thread

O-Ring

| Series | Tube OD                           | PN                                  | Dimensions                        |      |      |      |      |      |                 |      |      |      |      |       |        | Torque                                | Weight                                 | Ordering Codes <sup>3</sup> |
|--------|-----------------------------------|-------------------------------------|-----------------------------------|------|------|------|------|------|-----------------|------|------|------|------|-------|--------|---------------------------------------|----------------------------------------|-----------------------------|
|        | ( <sup>mm</sup> / <sub>in</sub> ) | ( <sup>bar</sup> / <sub>PSI</sub> ) | ( <sup>mm</sup> / <sub>in</sub> ) | D1   | D2   | D3   | D4   | L    | L1 <sup>1</sup> | L2   | L3   | L4   | S1   | S2    | S3     | ( <sup>N-m</sup> / <sub>ft-lb</sub> ) | ( <sup>kg</sup> / <sub>lbs</sub> ) ca. |                             |
| L      | D1                                |                                     | Thread T                          |      |      |      |      |      |                 |      |      |      |      |       |        | Thread T                              | per 100                                |                             |
|        | 6                                 | 315                                 | 7/16-20 UNF                       | 4    | 4,5  | 16,5 | 21   | 29   | 14              | 21   | 11   | 14   | 17   | 14    | 18     | 5,02                                  |                                        | FI-WEE-06L7/16U-OR-B-W3     |
|        | .24                               | 4568                                |                                   | .16  | .18  | .65  | .83  | 1.14 | .55             | .83  | .43  | .55  | .67  | .55   | 13.3   | 11.04                                 |                                        |                             |
|        | 8                                 | 315                                 | 7/16-20 UNF                       | 6    | 4,5  | 16,5 | 23   | 31   | 16              | 21   | 11   | 14   | 17   | 17    | 18     | 5,16                                  |                                        | FI-WEE-08L7/16U-OR-B-W3     |
|        | .31                               | 4568                                |                                   | .24  | .18  | .65  | .91  | 1.22 | .63             | .83  | .43  | .55  | .67  | .67   | 13.3   | 11.36                                 |                                        |                             |
|        | 10                                | 315                                 | 9/16-18 UNF                       | 8    | 7,5  | 20,2 | 24   | 32   | 17              | 25   | 12   | 19   | 19   | 19    | 34     | 14,99                                 |                                        | FI-WEE-10L9/16U-OR-B-W3     |
|        | .39                               | 4568                                |                                   | .31  | .30  | .80  | .94  | 1.26 | .67             | .98  | .47  | .75  | .75  | .75   | 25.1   | 32.97                                 |                                        |                             |
|        | 12                                | 315                                 | 9/16-18 UNF                       | 10   | 7,5  | 20,2 | 26   | 34   | 19              | 25,5 | 12   | 19   | 19   | 22    | 34     | 15,29                                 |                                        | FI-WEE-12L9/16U-OR-B-W3     |
|        | .47                               | 4568                                |                                   | .39  | .30  | .80  | 1.02 | 1.34 | .75             | 1.00 | .47  | .75  | .75  | .87   | 25.1   | 33.63                                 |                                        |                             |
|        | 15                                | 315                                 | 3/4-16 UNF                        | 12   | 10   | 25,7 | 28   | 36   | 21              | 30   | 14   | 22   | 24   | 27    | 55     | 15,03                                 |                                        | FI-WEE-15L3/4U-OR-B-W3      |
|        | .59                               | 4568                                |                                   | .47  | .39  | 1.01 | 1.10 | 1.42 | .83             | 1.18 | .55  | .87  | .94  | 1.06  | 40.6   | 33.07                                 |                                        |                             |
|        | 18                                | 250                                 | 7/8-14 UNF                        | 15   | 12,5 | 29,3 | 31   | 40   | 23,5            | 35   | 16   | 27   | 27   | 32    | 80     | 24,03                                 |                                        | FI-WEE-18L7/8U-OR-B-W3      |
|        | .71                               | 3625                                |                                   | .59  | .49  | 1.15 | 1.22 | 1.57 | .93             | 1.38 | .63  | 1.06 | 1.06 | 1.26  | 59.0   | 52.87                                 |                                        |                             |
|        | 22                                | 160                                 | 1 1/16-12 UN                      | 19   | 15,5 | 36,7 | 35   | 44   | 27,5            | 39   | 18   | 30   | 36   | 36    | 100    | 35,96                                 |                                        | FI-WEE-22L1-1/16U-OR-B-W3   |
|        | .87                               | 2320                                |                                   | .75  | .61  | 1.44 | 1.38 | 1.73 | 1.08            | 1.54 | .71  | 1.18 | 1.42 | 1.42  | 73.8   | 79.11                                 |                                        |                             |
|        | 28                                | 160                                 | 1 5/16-12 UN                      | 24   | 21,5 | 44   | 38   | 47   | 30,5            | 43   | 18   | 36   | 41   | 41    | 150    | 49,38                                 |                                        | FI-WEE-28L1-5/16U-OR-B-W3   |
|        | 1.10                              | 2320                                |                                   | .94  | .85  | 1.73 | 1.50 | 1.85 | 1.20            | 1.69 | .71  | 1.42 | 1.61 | 1.61  | 110.6  | 108.64                                |                                        |                             |
|        | 35                                | 160                                 | 1 5/8-12 UN                       | 30   | 27,5 | 55   | 48   | 59   | 37,5            | 50   | 18   | 50   | 50   | 50    | 290    | 106,22                                |                                        | FI-WEE-35L1-5/8U-OR-B-W3    |
|        | 1.38                              | 2320                                |                                   | 1.18 | 1.08 | 2.17 | 1.89 | 2.32 | 1.48            | 1.97 | .71  | 1.97 | 1.97 | 1.97  | 213.9  | 233.69                                |                                        |                             |
|        | 42                                | 160                                 | 1 7/8-12 UN                       | 36   | 33,5 | 62,3 | 49   | 61   | 37,89           | 52   | 18   | 50   | 55   | 60    | 325    | 101,73                                |                                        | FI-WEE-42L1-7/8U-OR-B-W3    |
| 1.65   | 2320                              |                                     | 1.42                              | 1.32 | 2.45 | 1.93 | 2.40 | 1.49 | 2.05            | .71  | 1.97 | 2.17 | 2.36 | 239.7 | 223.81 |                                       |                                        |                             |
| S      | 6                                 | 315                                 | 7/16-20 UNF                       | 4    | 4,5  | 16,5 | 22   | 30   | 15              | 21   | 11   | 14   | 17   | 17    | 20     | 5,92                                  |                                        | FI-WEE-06S7/16U-OR-B-W3     |
|        | .24                               | 4568                                |                                   | .16  | .18  | .65  | .87  | 1.18 | .59             | .83  | .43  | .55  | .67  | .67   | 14.8   | 13.03                                 |                                        |                             |
|        | 8                                 | 315                                 | 9/16-18 UNF                       | 5    | 7,5  | 20,2 | 24   | 32   | 17              | 25   | 12   | 19   | 19   | 19    | 46     | 9,45                                  |                                        | FI-WEE-08S9/16U-OR-B-W3     |
|        | .31                               | 4568                                |                                   | .20  | .30  | .80  | .94  | 1.26 | .67             | .98  | .47  | .75  | .75  | .75   | 33.9   | 20.79                                 |                                        |                             |
|        | 10                                | 315                                 | 9/16-18 UNF                       | 7    | 7,5  | 20,2 | 25   | 34   | 17,5            | 25,5 | 12   | 19   | 19   | 22    | 46     | 9,80                                  |                                        | FI-WEE-10S9/16U-OR-B-W3     |
|        | .39                               | 4568                                |                                   | .28  | .30  | .80  | .98  | 1.34 | .69             | 1.00 | .47  | .75  | .75  | .87   | 33.9   | 21.56                                 |                                        |                             |
|        | 12                                | 315                                 | 3/4-16 UNF                        | 8    | 10   | 25,7 | 29   | 38   | 21,5            | 30   | 14   | 22   | 24   | 24    | 80     | 16,06                                 |                                        | FI-WEE-12S3/4U-OR-B-W3      |
|        | .47                               | 4568                                |                                   | .31  | .39  | 1.01 | 1.14 | 1.50 | .85             | 1.18 | .55  | .87  | .94  | .94   | 59.0   | 35.34                                 |                                        |                             |
|        | 16                                | 250                                 | 7/8-14 UNF                        | 12   | 12,5 | 29,3 | 33   | 43   | 24,5            | 35   | 16   | 27   | 27   | 30    | 80     | 25,18                                 |                                        | FI-WEE-16S7/8U-OR-B-W3      |
|        | .63                               | 3625                                |                                   | .47  | .49  | 1.15 | 1.30 | 1.69 | .96             | 1.38 | .63  | 1.06 | 1.06 | 1.18  | 59.0   | 55.40                                 |                                        |                             |
|        | 20                                | 250                                 | 1 1/16-12 UN                      | 16   | 15,5 | 36,7 | 38   | 49   | 27,5            | 39   | 18   | 30   | 36   | 36    | 185    | 38,53                                 |                                        | FI-WEE-20S1-1/16U-OR-B-W3   |
|        | .79                               | 3625                                |                                   | .63  | .61  | 1.44 | 1.50 | 1.93 | 1.08            | 1.54 | .71  | 1.18 | 1.42 | 1.42  | 136.4  | 84.76                                 |                                        |                             |
|        | 25                                | 160                                 | 1 1/16-12 UN                      | 20   | 15,5 | 36,7 | 42   | 54   | 30              | 43   | 18   | 36   | 36   | 46    | 185    | 53,90                                 |                                        | FI-WEE-25S1-1/16U-OR-B-W3   |
|        | .98                               | 2320                                |                                   | .79  | .61  | 1.44 | 1.65 | 2.13 | 1.18            | 1.69 | .71  | 1.42 | 1.42 | 1.81  | 136.4  | 118.58                                |                                        |                             |
|        | 30                                | 160                                 | 1 5/8-12 UN                       | 25   | 27,5 | 55   | 49   | 62   | 35,5            | 50   | 18   | 50   | 50   | 50    | 340    | 110,22                                |                                        | FI-WEE-30S1-5/8U-OR-B-W3    |
|        | 1.18                              | 2320                                |                                   | .98  | 1.08 | 2.17 | 1.93 | 2.44 | 1.40            | 1.97 | .71  | 1.97 | 1.97 | 1.97  | 250.8  | 242.49                                |                                        |                             |
|        | 38                                | 160                                 | 1 7/8-12 UN                       | 32   | 33,5 | 62,3 | 50   | 65   | 33,9            | 52   | 18   | 50   | 55   | 60    | 415    | 109,43                                |                                        | FI-WEE-38S1-7/8U-OR-B-W3    |
|        | 1.50                              | 2320                                |                                   | 1.26 | 1.32 | 2.45 | 1.97 | 2.56 | 1.33            | 2.05 | .71  | 1.97 | 2.17 | 2.36  | 306.1  | 240.75                                |                                        |                             |

<sup>1</sup> Approximate dimension in assembled condition.<sup>2</sup> Weight excluding cutting ring and union nut.<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is NBR (Buna-N®).

Male stud acc. to ISO 11926-2/-3

Port acc. to ISO 11926-1

Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

## Ordering Codes

### \*FI-WEE\*-10\*L\*9/16\*U\*-OR\*-B\*-W3\*-MS

|                                                  |                                 |
|--------------------------------------------------|---------------------------------|
| * Adjustable Male Stud Elbow (90°) with Lock Nut | FI-WEE                          |
| * Outside Tube Diameter (in mm)                  | -10                             |
| * Series                                         | Light Series<br>Heavy Series    |
|                                                  | L<br>S                          |
| * Thread Size                                    | acc. to dimension table<br>9/16 |

Please always indicate thread sizes, e.g. 9/16!

|                 |                                       |                |
|-----------------|---------------------------------------|----------------|
| * Thread Type   | UN/UNF Thread with O-Ring             | U              |
| * Seal Material | NBR (Buna-N®)<br>FKM (Viton®)<br>EPDM | -B<br>-V<br>-E |
| * Material Code | Steel, zinc/nickel-plated             | -W3            |

Please contact STAUFF for alternative materials and surface finishings.

|                        |                                                                    |      |
|------------------------|--------------------------------------------------------------------|------|
| * Assembling / Kitting | Fitting body only                                                  | —    |
|                        | Fitting body supplied with cutting ring and union nut              | -MS  |
|                        | Fitting body supplied with soft-sealing cutting ring and union nut | -MSV |



## Adjustable Male Stud Elbow (45°) with Lock Nut Type FI-VEE-...-U • Series L / S

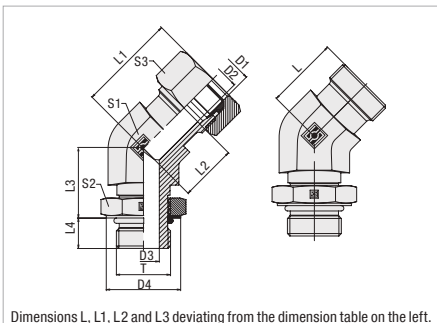
## Adjustable Male Stud Branch Tee with Lock Nut Type FI-TEE-...-U • Series L / S

## Adjustable Male Stud Barrel Tee with Lock Nut Type FI-LEE-...-U • Series L / S

### Type FI-VEE-...-U

UN/UNF Thread  
O-Ring

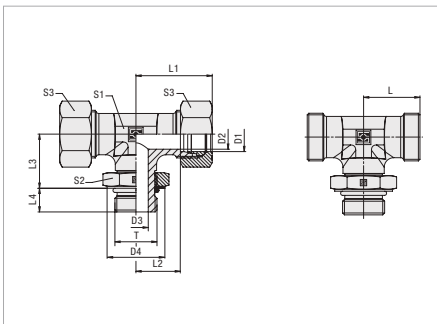
Male stud according to ISO 6149-2/-3  
Port according to ISO 6149-1



### Type FI-TEE-...-U

UN/UNF Thread  
O-Ring

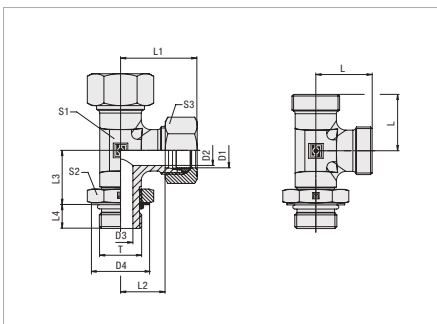
Male stud according to ISO 6149-2/-3  
Port according to ISO 6149-1



### Type FI-LEE-...-U

UN/UNF Thread  
O-Ring

Male stud according to ISO 6149-2/-3  
Port according to ISO 6149-1



Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.  
Please contact STAUFF prior to the assembly for further information.

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

### Spare Parts / Accessories



O-Ring  
Type **O-RING** Page 239







## Banjo Elbow (Medium-Pressure Version)

FI-RSWND

182-185



**Whitworth Parallel Pipe Thread (BSPP) /  
External Metallic Sealing Ring**  
FI-RSWND-...-R-DK

182



**Metric Parallel Thread /  
External Metallic Sealing Ring**  
FI-RSWND-...-M-DK

183



**Whitworth Parallel Pipe Thread (BSPP) /  
Retaining Ring with Captive Seal**  
FI-RSWND-...-R-WD

184



**Metric Parallel Thread /  
Retaining Ring with Captive Seal**  
FI-RSWND-...-M-WD

185

## Banjo Elbow (High-Pressure Version)

FI-RSW

186-189



**Whitworth Parallel Pipe Thread (BSPP) /  
External Metallic Sealing Ring**  
FI-RSW-...-R-DK

186



**Metric Parallel Thread /  
External Metallic Sealing Ring**  
FI-RSW-...-M-DK

187



**Whitworth Parallel Pipe Thread (BSPP) /  
Retaining Ring with Captive Seal**  
FI-RSW-...-R-WD

188



**Metric Parallel Thread /  
Retaining Ring with Captive Seal**  
FI-RSW-...-M-WD

189

## Banjo Tee (High-Pressure Version)

FI-RST

190-193



**Whitworth Parallel Pipe Thread (BSPP) /  
External Metallic Sealing Ring**  
FI-RST-...-R-DK

190



**Metric Parallel Thread /  
External Metallic Sealing Ring**  
FI-RST-...-M-DK

191



**Whitworth Parallel Pipe Thread (BSPP) /  
Retaining Ring with Captive Seal**  
FI-RST-...-R-WD

192



**Metric Parallel Thread /  
Retaining Ring with Captive Seal**  
FI-RST-...-M-WD

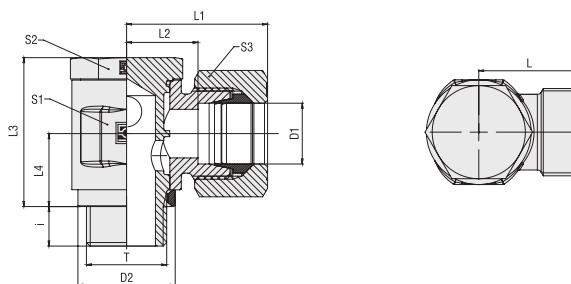
193

K



## Banjo Elbow (Medium-Pressure Version)

### Type FI-RSWND-...-R-DK • Series LL / L / S



### Ordering Codes

**\*FI-RSWND\*-10\*L\*R\*-DK\*-W3\*-MS**

\* Banjo Elbow (Medium-Pressure Version) **FI-RSWND**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Extra-Light Series **LL**  
Light Series **L**  
Heavy Series **S**

\* Thread Type Whitworth Parallel Pipe Thread (BSPP) **R**

If required, please indicate special sizes, e.g. R1/8!

\* Seal Type External Metallic Sealing Ring **-DK**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only **—**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

### Spare Parts / Accessories



External Metallic Sealing Ring  
Type **FI-DKR** Page 244

### Whitworth Parallel Pipe Thread (BSPP)

### External Metallic Sealing Ring

| Series | Tube OD<br>(mm/in) | PB<br>(bar/psi) | Dimensions<br>(mm/in)                                     | Weight<br>(kg/lbs) ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------------------------------------------|------------------------|-----------------------------|
|        | D1                 |                 | Thread T D2 L L1 <sup>1</sup> L2 L3 L4 i S1 S2 S3 per 100 |                        |                             |
| LL     | 4                  | 100             | G 1/8 13 15,5 21 11,5 21 10 6 14 14 10 2,85               | 2,85                   | FI-RSWND-04LLR-DK-W3        |
|        | .16                | 1450            | .51 .61 .83 .45 .83 .39 .24 .55 .55 .39 6,27              | 6,27                   |                             |
|        | 6                  | 100             | G 1/8 13 15,5 21 10 21 10 6 14 14 12 2,85                 | 2,85                   | FI-RSWND-06LLR-DK-W3        |
|        | .24                | 1450            | .51 .61 .83 .39 .83 .39 .24 .55 .55 .47 6,27              | 6,27                   |                             |
|        | 8                  | 100             | G 1/8 13 16,5 23 11 21 10 6 14 14 14 2,93                 | 2,93                   | FI-RSWND-08LLR-DK-W3        |
|        | .31                | 1450            | .51 .65 .91 .43 .83 .39 .24 .55 .55 .55 6,45              | 6,45                   |                             |
|        | 6                  | 250             | G 1/8 13 18,5 25 11,5 21 10 6 14 14 14 3,15               | 3,15                   | FI-RSWND-06LR-DK-W3         |
|        | .24                | 3625            | .51 .73 .98 .45 .83 .39 .24 .55 .55 .55 6,93              | 6,93                   |                             |
|        | 8                  | 250             | G 1/4 17,7 20 26 13 26 12 10 17 19 17 5,85                | 5,85                   | FI-RSWND-08LR-DK-W3         |
|        | .31                | 3625            | .70 .79 1.02 .51 1.02 .47 .39 .67 .75 .67 12,88           | 12,88                  |                             |
| L      | 10                 | 250             | G 1/4 17,7 22 30 15 27 13 9 19 19 19 6,95                 | 6,95                   | FI-RSWND-10LR-DK-W3         |
|        | .39                | 3625            | .70 .87 1.18 .59 1.06 .51 .35 .75 .75 .75 15,29           | 15,29                  |                             |
|        | 10                 | 160             | G 3/8 22 23 31 16 32 15 9 22 22 19 10,11                  | 10,11                  | FI-RSWND-10LR3/8-DK-W3      |
|        | .39                | 2320            | .87 .91 1.22 .63 1.26 .59 .35 .87 .87 .75 22,29           | 22,29                  |                             |
|        | 12                 | 160             | G 1/4 17,7 23 30 16 28 13 9 22 19 22 8,23                 | 8,23                   | FI-RSWND-12LR1/4-DK-W3      |
|        | .47                | 2320            | .70 .91 1.18 .63 1.10 .51 .35 .87 .75 .87 18,14           | 18,14                  |                             |
|        | 12                 | 250             | G 3/8 22 23 31 16 32 15 9 22 22 22 6,77                   | 6,77                   | FI-RSWND-12LR-DK-W3         |
|        | .47                | 3625            | .87 .91 1.22 .63 1.26 .59 .35 .87 .87 .87 14,90           | 14,90                  |                             |
|        | 12                 | 160             | G 1/2 26 26,5 34 19,5 37,5 18 11 27 27 22 16,42           | 16,42                  | FI-RSWND-12LR1/2-DK-W3      |
|        | .47                | 2320            | 1.02 1.04 1.34 .77 1.48 .71 .43 1.06 1.06 .87 36,20       | 36,20                  |                             |
|        | 15                 | 160             | G 1/2 26 26,5 35 19,5 37,5 18 11 27 27 27 17,36           | 17,36                  | FI-RSWND-15LR-DK-W3         |
|        | .59                | 2320            | 1.02 1.04 1.38 .77 1.48 .71 .43 1.06 1.06 1.06 38,18      | 38,18                  |                             |
|        | 18                 | 160             | G 1/2 26 27 36 19,5 44,5 21,5 11 30 27 32 21,47           | 21,47                  | FI-RSWND-18LR-DK-W3         |
|        | .71                | 2320            | 1.02 1.06 1.42 .77 1.75 .85 .43 1.18 1.06 1.26 47,23      | 47,23                  |                             |
|        | 22                 | 160             | G 3/4 32 32 41 24,5 49 24 13 36 32 36 30,63               | 30,63                  | FI-RSWND-22LR-DK-W3         |
|        | .87                | 2320            | 1.26 1.26 1.61 .96 1.93 .94 .51 1.42 1.26 1.42 67,38      | 67,38                  |                             |
|        | 6                  | 250             | G 1/4 17,7 21,5 29 14,5 26 12 10 17 19 17 6,23            | 6,23                   | FI-RSWND-06SR-DK-W3         |
|        | .24                | 3625            | .70 .85 1.14 .57 1.02 .47 .39 .67 .75 .67 13,70           | 13,70                  |                             |
|        | 8                  | 250             | G 1/4 17,7 23 29 16 27 13 9 19 19 19 7,47                 | 7,47                   | FI-RSWND-08SR-DK-W3         |
|        | .31                | 3625            | .70 .91 1.14 .63 1.06 .51 .35 .75 .75 .75 16,43           | 16,43                  |                             |
|        | 10                 | 250             | G 3/8 22 23,5 32 16 32 15 9 22 22 22 10,92                | 10,92                  | FI-RSWND-10SR-DK-W3         |
|        | .39                | 3625            | .87 .93 1.26 .63 1.26 .59 .35 .87 .87 .87 24,03           | 24,03                  |                             |
| S      | 12                 | 250             | G 3/8 22 26 34 18,5 37 18 9 24 24 24 14,87                | 14,87                  | FI-RSWND-12SR-DK-W3         |
|        | .47                | 3625            | .87 1.02 1.34 .73 1.46 .71 .35 .94 .94 .94 32,71          | 32,71                  |                             |
|        | 14                 | 160             | G 1/2 26 28,5 39 20,5 37,5 18 11 27 27 27 18,58           | 18,58                  | FI-RSWND-14SR-DK-W3         |
|        | .55                | 2320            | 1.02 1.12 1.54 .81 1.48 .71 .43 1.06 1.06 1.06 40,88      | 40,88                  |                             |
|        | 16                 | 160             | G 1/2 26 30 40 21,5 44,5 21,5 11 30 27 30 22,48           | 22,48                  | FI-RSWND-16SR-DK-W3         |
|        | .63                | 2320            | 1.02 1.18 1.57 .85 1.75 .85 .43 1.18 1.06 1.18 49,45      | 49,45                  |                             |
|        | 20                 | 160             | G 3/4 32 34 45 23,5 49 24 13 36 32 36 32,20               | 32,20                  | FI-RSWND-20SR-DK-W3         |
|        | .79                | 2320            | 1.26 1.34 1.77 .93 1.93 .94 .51 1.42 1.26 1.42 70,84      | 70,84                  |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

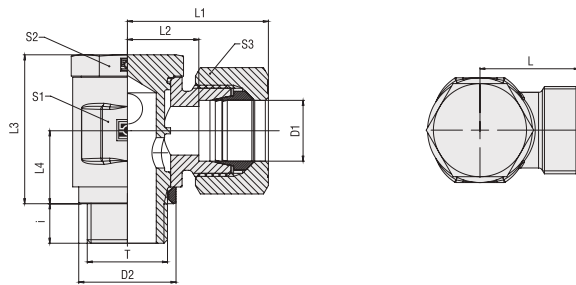
Port acc. to DIN 3852-2 (Form X) / ISO 1179-1

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.



## Banjo Elbow (Medium-Pressure Version) Type FI-RSWND-...-M-DK ■ Series LL / L / S



### External Metallic Sealing Ring

### Metric Parallel Thread

| Series | Tube OD<br>(mm/in) | PB<br>(bar/psi) | Dimensions<br>(mm/in) | Weight<br>(kg/lbs) ca.                               | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------------------------------------------------------|-----------------------------|
|        | D1                 |                 | Thread T              | D2 L L1 <sup>1</sup> L2 L3 L4 i S1 S2 S3 per 100     |                             |
| LL     | 4                  | 100             | M 8 x 1               | 10,8 15,5 21 11,5 17 8 6 14 12 10 2,66               | FI-RSWND-04LLM-DK-W3        |
|        | .16                | 1450            |                       | .43 .61 .83 .45 .67 .31 .24 .55 .47 .39 5.85         |                             |
|        | 6                  | 100             | M 10 x 1              | 13 15,5 21 10 21 10 6 14 14 12 2,86                  | FI-RSWND-06LLM-DK-W3        |
|        | .24                | 1450            |                       | .51 .61 .83 .39 .83 .39 .24 .55 .55 .47 6.30         |                             |
|        | 8                  | 100             | M 10 x 1              | 13 16,5 23 11 21 10 6 14 14 14 2,94                  | FI-RSWND-08LLM-DK-W3        |
| L      | .31                | 1450            |                       | .51 .65 .91 .43 .83 .39 .24 .55 .55 .55 6.47         |                             |
|        | 6                  | 250             | M 10 x 1              | 13 18,5 26 11,5 21 10 6 14 14 14 3,16                | FI-RSWND-06LM-DK-W3         |
|        | .24                | 3625            |                       | .51 .73 1.02 .45 .83 .39 .24 .55 .55 .55 6.95        |                             |
|        | 8                  | 250             | M 12 x 1,5            | 17,8 20 28 13 25 12 9 17 17 17 5,02                  | FI-RSWND-08LM-DK-W3         |
|        | .31                | 3625            |                       | .70 .79 1.10 .51 .98 .47 .35 .67 .67 .67 11.04       |                             |
|        | 10                 | 250             | M 14 x 1,5            | 17,8 22 30 15 27 13 9 19 19 19 7,02                  | FI-RSWND-10LM-DK-W3         |
|        | .39                | 3625            |                       | .70 .87 1.18 .59 1.06 .51 .35 .75 .75 .75 15.44      |                             |
|        | 12                 | 250             | M 16 x 1,5            | 21,5 23 31 16 32 15 9 22 22 22 6,63                  | FI-RSWND-12LM-DK-W3         |
|        | .47                | 3625            |                       | .85 .91 1.22 .63 1.26 .59 .35 .87 .87 .87 14.58      |                             |
|        | 12                 | 160             | M 18 x 1,5            | 23 25 33 18 37 18,5 9 24 24 22 12,70                 | FI-RSWND-12LM18x1,5-DK-W3   |
|        | .47                | 2320            |                       | .91 .98 1.30 .71 1.46 .73 .35 .94 .94 .87 28.00      |                             |
|        | 15                 | 160             | M 18 x 1,5            | 23 25 33 18 37 18 9 24 24 27 13,44                   | FI-RSWND-15LM-DK-W3         |
|        | .59                | 2320            |                       | .91 .98 1.30 .71 1.46 .71 .35 .94 .94 1.06 29.56     |                             |
|        | 18                 | 160             | M 22 x 1,5            | 27 27 36 19,5 44,5 21,5 11 30 27 32 22,82            | FI-RSWND-18LM-DK-W3         |
|        | .71                | 2320            |                       | 1.06 1.06 1.42 .77 1.75 .85 .43 1.18 1.06 1.26 50.20 |                             |
| S      | 22                 | 160             | M 26 x 1,5            | 31 32 41 24,5 49 24 13 36 32 36 30,46                | FI-RSWND-22LM-DK-W3         |
|        | .87                | 2320            |                       | 1.22 1.26 1.61 .96 1.93 .94 .51 1.42 1.26 1.42 67.01 |                             |
|        | 6                  | 250             | M 12 x 1,5            | 17,8 21,5 29 14,5 25 12 9 17 17 17 5,39              | FI-RSWND-06SM-DK-W3         |
|        | .24                | 3625            |                       | .70 .85 1.14 .57 .98 .47 .35 .67 .67 .67 11.86       |                             |
|        | 8                  | 250             | M 14 x 1,5            | 17,8 23 31 16 27 13 9 19 19 19 7,54                  | FI-RSWND-08SM-DK-W3         |
|        | .31                | 3625            |                       | .70 .91 1.22 .63 1.06 .51 .35 .75 .75 .75 16.58      |                             |
|        | 10                 | 250             | M 16 x 1,5            | 21,5 23,5 32,5 16 32 15 9 22 22 22 10,78             | FI-RSWND-10SM-DK-W3         |
|        | .39                | 3625            |                       | .85 .93 1.28 .63 1.26 .59 .35 .87 .87 .87 23.71      |                             |
|        | 12                 | 250             | M 18 x 1,5            | 23 25 34 17,5 37 18 9 24 24 24 13,70                 | FI-RSWND-12SM-DK-W3         |
|        | .47                | 3625            |                       | .91 .98 1.34 .69 1.46 .71 .35 .94 .94 .94 30.14      |                             |
|        | 14                 | 160             | M 20 x 1,5            | 26 28,5 38,5 20,5 37 18 11 27 27 27 17,94            | FI-RSWND-14SM-DK-W3         |
|        | .55                | 2320            |                       | 1.02 1.12 1.52 .81 1.46 .71 .43 1.06 1.06 1.06 39.47 |                             |
|        | 16                 | 160             | M 22 x 1,5            | 27 30 40 21,5 44,5 21,5 11 30 27 30 23,83            | FI-RSWND-16SM-DK-W3         |
|        | .63                | 2320            |                       | 1.06 1.18 1.57 .85 1.75 .85 .43 1.18 1.06 1.18 52.42 |                             |
|        | 20                 | 160             | M 27 x 2              | 32 34 45 23,5 49 24 13 36 32 36 33,34                | FI-RSWND-20SM-DK-W3         |
|        | .79                | 2320            |                       | 1.26 1.34 1.77 .93 1.93 .94 .51 1.42 1.26 1.42 73.35 |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Port acc. to DIN 3852-1 (Form X) / ISO 9974-1

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

**\*FI-RSWND\*-10\*L\*M\*-DK\*-W3\*-MS**

\* Banjo Elbow (Medium-Pressure Version) **FI-RSWND**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Extra-Light Series **LL**  
Light Series **L**  
Heavy Series **S**

\* Thread Type Metric Parallel Thread **M**

If required, please indicate special sizes, e.g. M12x1.5!

\* Seal Type External Metallic Sealing Ring **-DK**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only **—**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

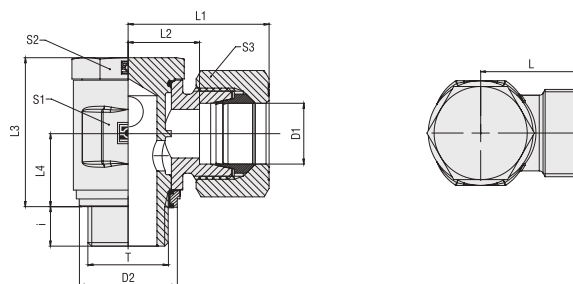
### Spare Parts / Accessories

|  |                                                      |          |
|--|------------------------------------------------------|----------|
|  | External Metallic Sealing Ring<br>Type <b>FI-DKR</b> | Page 244 |
|--|------------------------------------------------------|----------|



## Banjo Elbow (Medium-Pressure Version)

### Type FI-RSND-...-R-WD ■ Series LL / L / S



### Ordering Codes

#### \*FI-RSND\*-10\*L\*-R\*-WD\*-B\*-W3\*-MS

\* Banjo Elbow (Medium-Pressure Version) **FI-RSND**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Extra-Light Series **LL**  
Light Series **L**  
Heavy Series **S**

\* Thread Type Whitworth Parallel Pipe Thread (BSPP) **R**

If required, please indicate special sizes, e.g. R1/8!

\* Seal Type Retaining Ring with Captive Seal **-WD**

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only **—**  
Fitting body supplied with cutting ring and union nut **-MS**  
Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

### Spare Parts / Accessories



Retaining Ring with Captive Seal  
Type **FI-DIR** Page 245



O-Ring  
Type **O-RING** Page 239

### Whitworth Parallel Pipe Thread (BSPP)

### Retaining Ring with Captive Seal

| Series | Tube OD<br>(mm/in) | PB<br>(°/psi) | Dimensions<br>(mm/in)                                | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|---------------|------------------------------------------------------|-----------------------------------|-----------------------------|
|        | D1                 |               | Thread T D2 L L1 <sup>1</sup> L2 L3 L4 i S1 S2 S3    |                                   |                             |
| LL     | 6                  | 100           | G 1/8 14,9 15,5 24 10 21 10 6 14 14 14 2,70          |                                   | FI-RSND-06LLR-WD-B-W3       |
|        | .24                | 1450          | .59 .61 .94 .39 .83 .39 .24 .55 .55 .55 5,95         |                                   |                             |
|        | 8                  | 100           | G 1/8 14,9 16,5 26 11 21 10 6 14 14 14 2,80          |                                   | FI-RSND-08LLR-WD-B-W3       |
| L      | .31                | 1450          | .59 .65 1.02 .43 .83 .39 .24 .55 .55 .55 6,17        |                                   |                             |
|        | 6                  | 250           | G 1/8 14,9 18,5 25 11,5 21 10 6 14 14 14 3,07        |                                   | FI-RSND-06LR-WD-B-W3        |
|        | .24                | 3625          | .59 .73 .98 .45 .83 .39 .24 .55 .55 .55 6,75         |                                   |                             |
| S      | 8                  | 250           | G 1/4 18,8 20 26 13 26 12 10 17 19 17 5,97           |                                   | FI-RSND-08LR-WD-B-W3        |
|        | .31                | 3625          | .74 .79 1.02 .51 1.02 .47 .39 .67 .75 .67 13,14      |                                   |                             |
|        | 10                 | 250           | G 1/4 18,8 22 30 15 27 13 9 19 19 19 7,60            |                                   | FI-RSND-10LR-WD-B-W3        |
| S      | .39                | 3625          | .74 .87 1.18 .59 1.06 .51 .35 .75 .75 .75 16,71      |                                   |                             |
|        | 10                 | 250           | G 3/8 22,8 23 31 16 33 15 8 22 22 19 9,95            |                                   | FI-RSND-10LR3/8-WD-B-W3     |
|        | .39                | 3625          | .90 .91 1.22 .63 1.30 .59 .31 .87 .87 .75 21,94      |                                   |                             |
| S      | 12                 | 250           | G 1/4 18,8 16 30 16 28,2 13 9,5 22 19 22 8,27        |                                   | FI-RSND-12LR1/4-WD-B-W3     |
|        | .47                | 3625          | .74 .63 1.18 .63 1.11 .51 .37 .87 .75 .87 18,23      |                                   |                             |
|        | 12                 | 250           | G 3/8 22,8 23 31 16 32 15 9 22 22 22 10,45           |                                   | FI-RSND-12LR-WD-B-W3        |
| S      | .47                | 3625          | .90 .91 1.22 .63 1.26 .59 .35 .87 .87 .87 22,99      |                                   |                             |
|        | 15                 | 160           | G 1/2 27,9 26,5 35 19,5 37,5 18 11 27 27 27 18,00    |                                   | FI-RSND-15LR-WD-B-W3        |
|        | .59                | 2320          | 1.10 1.04 1.38 .77 1.48 .71 .43 1.06 1.06 1.06 39,59 |                                   |                             |
| S      | 18                 | 250           | G 1/2 27,9 27 36 19,5 44,5 21,5 11 30 27 32 22,31    |                                   | FI-RSND-18LR-WD-B-W3        |
|        | .71                | 3625          | 1.10 1.06 1.42 .77 1.75 .85 .43 1.18 1.06 1.26 49,08 |                                   |                             |
|        | 22                 | 160           | G 3/4 32,9 32 41 24,5 49 24 13 36 32 36 31,05        |                                   | FI-RSND-22LR-WD-B-W3        |
| S      | .87                | 2320          | 1.3 1.26 1.61 .96 1.93 .94 .51 1.42 1.26 1.42 68,30  |                                   |                             |
|        | 6                  | 250           | G 1/4 18,8 21,5 29 14,5 26 12 10 17 19 17 6,34       |                                   | FI-RSND-06SR-WD-B-W3        |
|        | .24                | 3625          | .74 .85 1.14 .57 1.02 .47 .39 .67 .75 .67 13,96      |                                   |                             |
| S      | 8                  | 250           | G 1/4 18,8 23 29 16 27 13 9 19 19 19 7,60            |                                   | FI-RSND-08SR-WD-B-W3        |
|        | .31                | 3625          | .74 .91 1.14 .63 1.06 .51 .35 .75 .75 .75 16,71      |                                   |                             |
| S      | 10                 | 250           | G 3/8 22,8 23,5 32 16 32 15 9 22 22 22 10,89         |                                   | FI-RSND-10SR-WD-B-W3        |
|        | .39                | 3625          | .90 .93 1.26 .63 1.26 .59 .35 .87 .87 .87 23,96      |                                   |                             |
| S      | 12                 | 250           | G 3/8 22,8 26 34 18,5 37 18 9 24 24 24 14,51         |                                   | FI-RSND-12SR-WD-B-W3        |
|        | .47                | 3625          | .90 1.02 1.34 .73 1.46 .71 .35 .94 .94 .94 31,92     |                                   |                             |
| S      | 14                 | 160           | G 1/2 27,9 28,5 39 20,5 37,5 18 11 27 27 27 18,77    |                                   | FI-RSND-14SR-WD-B-W3        |
|        | .55                | 2320          | 1.10 1.12 1.54 .81 1.48 .71 .43 1.06 1.06 1.06 41,30 |                                   |                             |
| S      | 16                 | 160           | G 1/2 27,9 30 40 21,5 44,5 21,5 11 30 27 30 23,32    |                                   | FI-RSND-16SR-WD-B-W3        |
|        | .63                | 2320          | 1.10 1.18 1.57 .85 1.75 .85 .43 1.18 1.06 1.18 51,29 |                                   |                             |
| S      | 20                 | 160           | G 3/4 32,9 34 45 23,5 49 24 13 36 32 36 32,63        |                                   | FI-RSND-20SR-WD-B-W3        |
|        | .79                | 2320          | 1.30 1.34 1.77 .93 1.93 .94 .51 1.42 1.26 1.42 71,79 |                                   |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

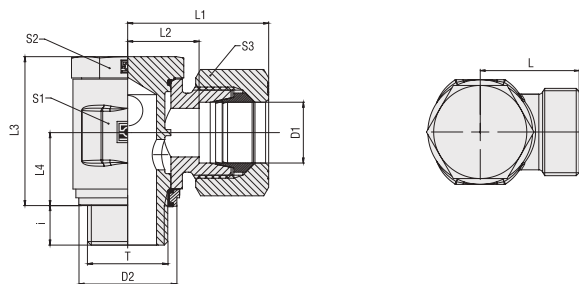
Standard seal material is NBR (Buna-N®).

Port acc. to DIN 3852-2 (Form X) / ISO 1179-1

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.





## Banjo Elbow (Medium-Pressure Version) Type FI-RSWND-...-M-WD ■ Series LL / L / S



### Retaining Ring with Captive Seal

### Metric Parallel Thread

| Series | Tube OD<br>(mm/in) | PB<br>(bar/psi) | Dimensions<br>(mm/in)                            | Weight<br>(kg/lbs) ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|--------------------------------------------------|------------------------|-----------------------------|
|        | D1                 |                 | Thread T D2 L L1 L2 L3 L4 i S1 S2 S3             | per 100                |                             |
| LL     | 6                  | 100             | M 10 x 1 14,9 15,5 24 10 21 10 6 14 14 14        | 2,70                   | FI-RSWND-06LLM-WD-B-W3      |
|        | .24                | 1450            | .59 .61 .94 .39 .83 .39 .24 .55 .55 .55          | 5,95                   |                             |
|        | 8                  | 100             | M 10 x 1 14,9 16,5 26 11 21 10 6 14 14 14        | 2,80                   | FI-RSWND-08LLM-WD-B-W3      |
|        | .31                | 1450            | .59 .65 1.02 .43 .83 .39 .24 .55 .55 .55         | 6,17                   |                             |
| L      | 6                  | 250             | M 10 x 1 14,9 18,5 26 11,5 21 10 6 14 14 14      | 3,10                   | FI-RSWND-06LM-WD-B-W3       |
|        | .24                | 3625            | .59 .73 1.02 .45 .83 .39 .24 .55 .55 .55         | 6,83                   |                             |
|        | 8                  | 250             | M 12 x 1,5 17,8 20 28 13 25 12 9 17 17 17        | 5,20                   | FI-RSWND-08LM-WD-B-W3       |
|        | .31                | 3625            | .70 .79 1.10 .51 .98 .47 .35 .67 .67 .67         | 11,44                  |                             |
|        | 10                 | 250             | M 14 x 1,5 19,9 22 30 15 27 13 9 19 19 19        | 7,31                   | FI-RSWND-10LM-WD-B-W3       |
|        | .39                | 3625            | .78 .87 1.18 .59 1.06 .51 .35 .75 .75 .75        | 16,07                  |                             |
|        | 12                 | 250             | M 16 x 1,5 22,8 23 31 16 32 15 9 22 22 22        | 10,27                  | FI-RSWND-12LM-WD-B-W3       |
|        | .47                | 3625            | .90 .91 1.22 .63 1.26 .59 .35 .87 .87 .87        | 22,59                  |                             |
|        | 12                 | 250             | M 18 x 1,5 24,9 25 33 18 37 19 9 24 24 22        | 12,66                  | FI-RSWND-12LM18x1,5-WD-B-W3 |
|        | .47                | 3625            | .98 .98 1.30 .71 1.46 .75 .35 .94 .94 .87        | 27,91                  |                             |
|        | 15                 | 250             | M 18 x 1,5 24,9 25 33 18 37 18 9 24 24 27        | 13,86                  | FI-RSWND-15LM-WD-B-W3       |
|        | .59                | 3625            | .98 .98 1.30 .71 1.46 .71 .35 .94 .94 1.06       | 30,49                  |                             |
|        | 18                 | 250             | M 22 x 1,5 27,9 27 36 19,5 44,5 21,5 11 30 27 32 | 22,65                  | FI-RSWND-18LM-WD-B-W3       |
|        | .71                | 3625            | 1.10 1.06 1.42 .77 1.75 .85 .43 1.18 1.06 1.26   | 49,84                  |                             |
|        | 22                 | 160             | M 26 x 1,5 32,5 32 41 24,5 49 24 13 36 32 36     | 30,84                  | FI-RSWND-22LM-WD-B-W3       |
|        | .87                | 2320            | 1.28 1.26 1.61 .96 1.93 .94 .51 1.42 1.26 1.42   | 67,85                  |                             |
| S      | 6                  | 250             | M 12 x 1,5 17,8 21,5 29 14,5 25 12 9 17 17 17    | 5,57                   | FI-RSWND-06SM-WD-B-W3       |
|        | .24                | 3625            | .70 .85 1.14 .57 .98 .47 .35 .67 .67 .67         | 12,25                  |                             |
|        | 8                  | 250             | M 14 x 1,5 19,9 23 31 16 27 13 9 19 19 19        | 7,82                   | FI-RSWND-08SM-WD-B-W3       |
|        | .31                | 3625            | .78 .91 1.22 .63 1.06 .51 .35 .75 .75 .75        | 17,21                  |                             |
|        | 10                 | 250             | M 16 x 1,5 22,8 23,5 32,5 16 32 15 9 22 22 22    | 10,71                  | FI-RSWND-10SM-WD-B-W3       |
|        | .39                | 3625            | .90 .93 1.28 .63 1.26 .59 .35 .87 .87 .87        | 23,56                  |                             |
|        | 12                 | 250             | M 18 x 1,5 24,9 25 34 17,5 37 18 9 24 24 24      | 14,12                  | FI-RSWND-12SM-WD-B-W3       |
|        | .47                | 3625            | .98 .98 1.34 .69 1.46 .71 .35 .94 .94 .94        | 31,07                  |                             |
|        | 16                 | 160             | M 22 x 1,5 27,9 30 40 21,5 44,5 21,5 11 30 27 30 | 23,66                  | FI-RSWND-16SM-WD-B-W3       |
|        | .63                | 2320            | 1.10 1.18 1.57 .85 1.75 .85 .43 1.18 1.06 1.18   | 52,05                  |                             |
|        | 20                 | 160             | M 27 x 2 32,9 34 45 23,5 49 24 13 36 32 36       | 33,01                  | FI-RSWND-20SM-WD-B-W3       |
|        | .79                | 2320            | 1.30 1.34 1.77 .93 1.93 .94 .51 1.42 1.26 1.42   | 72,62                  |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is NBR (Buna-N®).

Port acc. to DIN 3852-1 (Form X) / ISO 9974-1

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

\*FI-RSWND\*-10\*L\*M\*-WD\*-B\*-W3\*-MS

\* Banjo Elbow (Medium-Pressure Version) FI-RSWND

\* Outside Tube Diameter D1 (in mm) -10

\* Series Extra-Light Series LL  
Light Series L  
Heavy Series S

\* Thread Type Metric Parallel Thread M

If required, please indicate special sizes, e.g. M12x1.5!

\* Seal Type Retaining Ring with Captive Seal -WD

\* Seal Material NBR (Buna-N®) -B  
FKM (Viton®) -V  
EPDM -E

\* Material Code Steel, zinc/nickel-plated -W3

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only —

Fitting body supplied with cutting ring and union nut -MS

Fitting body supplied with soft-sealing cutting ring and union nut -MSV

### Connecting Parts

|  |                                            |         |
|--|--------------------------------------------|---------|
|  | Cutting Ring<br>Type FI-DS                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type FI-WDDS  | Page 29 |
|  | Support Sleeve<br>Type FI-VH               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type FI-FD | Page 32 |
|  | Union Nut<br>Type FI-M                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type FI-AB  | Page 37 |

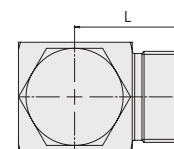
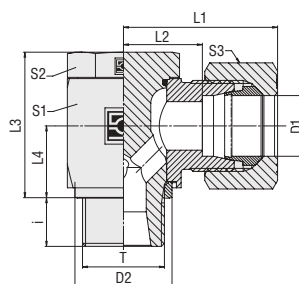
### Spare Parts / Accessories

|  |                                                 |          |
|--|-------------------------------------------------|----------|
|  | Retaining Ring with Captive Seal<br>Type FI-DIR | Page 245 |
|  | O-Ring<br>Type O-RING                           | Page 239 |





## Banjo Elbow (High-Pressure Version) Type FI-RSW-...-R-DK ■ Series L / S



### Whitworth Parallel Pipe Thread (BSPP)

### External Metallic Sealing Ring

#### Ordering Codes

#### \*FI-RSW\*-10\*L\*R\*-DK\*-B\*-W3\*-MS

\* Banjo Elbow (High-Pressure Version) **FI-RSW**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Whitworth Parallel Pipe Thread (BSPP) **R**

If required, please indicate special sizes, e.g. R1/8!

\* Seal Type External Metallic Sealing Ring **-DK**

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only **—**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

#### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

#### Spare Parts / Accessories



External Metallic Sealing Ring  
Type **FI-DKR** Page 245



O-Ring  
Type **O-RING** Page 239

| Series | Tube OD<br>(mm/in) | PB<br>(mm/psi) | Dimensions<br>(mm/in)                             | Weight<br>(kg/lbs) ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|----------------|---------------------------------------------------|------------------------|-----------------------------|
|        | D1                 |                | Thread T D2 L L1 <sup>1</sup> L2 L3 L4 i S1 S2 S3 | per 100                |                             |
| L      | 6                  | 500            | G 1/8 13 20 28 13 21 10,5 8 14 14 14              | 3,61                   | FI-RSW-06LR-DK-B-W3         |
|        | .24                | 7250           | .51 .79 1.10 .51 .83 .41 .31 .55 .55 .55          | 7.94                   |                             |
|        | 6                  | 500            | G 1/4 17,7 22 30,5 15 27,5 13,3 10 19 19 14       | 7,86                   | FI-RSW-06LR1/4-DK-B-W3      |
|        | .24                | 7250           | .7 .87 1.20 .59 1.08 .52 .39 .75 .75 .55          | 17.33                  |                             |
|        | 8                  | 500            | G 1/4 17,8 21 29 14 27 13,5 10 19 19 17           | 7,93                   | FI-RSW-08LR-DK-B-W3         |
|        | .31                | 7250           | .70 .83 1.14 .55 1.06 .53 .39 .75 .75 .67         | 17.44                  |                             |
|        | 10                 | 500            | G 1/4 17,8 22 30 15 27 13,5 10 19 19 19           | 8,15                   | FI-RSW-10LR-DK-B-W3         |
|        | .39                | 7250           | .70 .87 1.18 .59 1.06 .53 .39 .75 .75 .75         | 17.93                  |                             |
|        | 12                 | 400            | G 1/4 17,7 22 35 15 30,5 15,3 10 27 22 19         | 9,92                   | FI-RSW-12LR1/4-DK-B-W3      |
|        | .47                | 5800           | .7 .87 1.38 .59 1.20 .6 .39 1.06 .87 .75          | 21.87                  |                             |
|        | 12                 | 400            | G 3/8 22 24,5 32,5 17,5 32,5 16 12 24 22 22       | 13,75                  | FI-RSW-12LR-DK-B-W3         |
|        | .47                | 5800           | .87 .96 1.28 .69 1.28 .63 .47 .94 .87 .87         | 30.24                  |                             |
|        | 15                 | 400            | G 1/2 26 27 35 21 43 19,5 14 30 27 27             | 25,80                  | FI-RSW-15LR-DK-B-W3         |
|        | .59                | 5800           | 1.02 1.06 1.38 .83 1.69 .77 .55 1.18 1.06 1.06    | 56.76                  |                             |
|        | 18                 | 400            | G 1/2 26 28 37 20,5 43 21,5 12 30 27 32           | 26,56                  | FI-RSW-18LR-DK-B-W3         |
|        | .71                | 5800           | 1.02 1.10 1.46 .81 1.69 .85 .47 1.18 1.06 1.26    | 58.44                  |                             |
|        | 22                 | 250            | G 3/4 32 34,5 43,5 27 48 24 16 36 32 36           | 43,25                  | FI-RSW-22LR-DK-B-W3         |
|        | .87                | 3625           | 1.26 1.36 1.71 1.06 1.89 .94 .63 1.42 1.26 1.42   | 95.14                  |                             |
|        | 28                 | 250            | G 1 39 39 48 31,5 59 30,5 18 46 41 41             | 83,60                  | FI-RSW-28LR-DK-B-W3         |
|        | 1.10               | 3625           | 1.54 1.54 1.89 1.24 2.32 1.20 .71 1.81 1.61 1.61  | 183.92                 |                             |
|        | 35                 | 250            | G 1 1/4 49 46 57 35,5 70 35,5 20 55 50 50         | 140,80                 | FI-RSW-35LR-DK-B-W3         |
|        | 1.38               | 3625           | 1.93 1.81 2.24 1.40 2.76 1.40 .79 2.17 1.97 1.97  | 309.76                 |                             |
|        | 42                 | 250            | G 1 1/2 55 51 63 40 80 40,5 22 65 55 60           | 211,80                 | FI-RSW-42LR-DK-B-W3         |
|        | 1.65               | 3625           | 2.17 2.01 2.48 1.57 3.15 1.59 .87 2.56 2.17 2.36  | 465.96                 |                             |
| S      | 6                  | 500            | G 1/4 17,8 23 31 16 27 13,5 10 19 19 17           | 8,36                   | FI-RSW-06SR-DK-B-W3         |
|        | .24                | 7250           | .70 .91 1.22 .63 1.06 .53 .39 .75 .75 .67         | 18.39                  |                             |
|        | 8                  | 500            | G 1/4 17,8 23 31 16 27 13,5 10 19 19 19           | 8,62                   | FI-RSW-08SR-DK-B-W3         |
|        | .31                | 7250           | .70 .91 1.22 .63 1.06 .53 .39 .75 .75 .75         | 18.96                  |                             |
|        | 10                 | 500            | G 3/8 22 25,5 34,5 18 32,5 16 10 24 22 22         | 14,57                  | FI-RSW-10SR-DK-B-W3         |
|        | .39                | 7250           | .87 1.00 1.36 .71 1.28 .63 .39 .94 .87 .87        | 32.06                  |                             |
|        | 12                 | 400            | G 3/8 22 27 36 18 32,5 16 10 24 22 24             | 14,59                  | FI-RSW-12SR-DK-B-W3         |
|        | .47                | 5800           | .87 1.06 1.42 .71 1.28 .63 .39 .94 .87 .94        | 32.09                  |                             |
|        | 14                 | 400            | G 1/2 26 30 40 22 41 19,5 14 30 27 27             | 26,55                  | FI-RSW-14SR-DK-B-W3         |
|        | .55                | 5800           | 1.02 1.18 1.57 .87 1.61 .77 .55 1.18 1.06 1.06    | 58.41                  |                             |
|        | 16                 | 400            | G 1/2 26 30 40 21,5 43 21,5 12 30 27 30           | 26,86                  | FI-RSW-16SR-DK-B-W3         |
|        | .63                | 5800           | 1.02 1.18 1.57 .85 1.69 .85 .47 1.18 1.06 1.18    | 59.10                  |                             |
|        | 20                 | 315            | G 3/4 32 36,5 47,5 26 48 24 16 36 32 36           | 44,88                  | FI-RSW-20SR-DK-B-W3         |
|        | .79                | 4568           | 1.26 1.44 1.87 1.02 1.89 .94 .63 1.42 1.26 1.42   | 98.74                  |                             |
|        | 25                 | 250            | G 1 39 43 55 31 59 30,5 18 46 41 46               | 87,00                  | FI-RSW-25SR-DK-B-W3         |
|        | .98                | 3625           | 1.54 1.69 2.17 1.22 2.32 1.20 .71 1.81 1.61 1.81  | 191.40                 |                             |
|        | 30                 | 250            | G 1 1/4 49 50 63 36,5 70 35,5 20 55 50 50         | 145,00                 | FI-RSW-30SR-DK-B-W3         |
|        | 1.18               | 3625           | 1.93 1.97 2.48 1.44 2.76 1.40 .79 2.17 1.97 1.97  | 319.00                 |                             |
|        | 38                 | 250            | G 1 1/2 55 57 72 41 80 40,5 22 65 55 60           | 223,40                 | FI-RSW-38SR-DK-B-W3         |
|        | 1.50               | 3625           | 2.17 2.24 2.83 1.61 3.15 1.59 .87 2.56 2.17 2.36  | 491.48                 |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is NBR (Buna-N®).



For use with aggressive media and/or at elevated temperatures, please remove the o-ring from the groove located on the banjo bolt prior to installation.

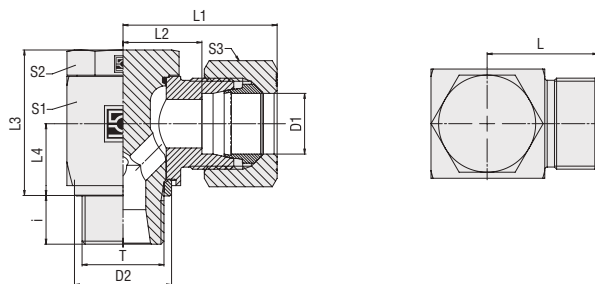
Port acc. to DIN 3852-2 (Form X) / ISO 1179-1

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.







## Banjo Elbow (High-Pressure Version) Type FI-RSW-...-M-DK ■ Series L / S



### External Metallic Sealing Ring

### Metric Parallel Thread

| Series | Tube OD<br>(mm/in) | PB<br>(bar/psi) | Dimensions<br>(mm/in) | Thread | T    | D2   | L    | L1 <sup>1</sup> | L2   | L3  | L4   | i    | S1   | S2   | S3   | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|--------|------|------|------|-----------------|------|-----|------|------|------|------|------|-----------------------------------|-----------------------------|
| L      | 6                  | 500             | M10x1                 | 13     | 20   | 28   | 13   | 21              | 10   | 8   | 14   | 14   | 14   | 14   | 14   | 3,66                              | FI-RSW-06LM-DK-B-W3         |
|        | .24                | 7250            |                       | .51    | .79  | 1.10 | .51  | .83             | .39  | .31 | .55  | .55  | .55  | .55  | .55  | 8.05                              |                             |
|        | 8                  | 500             | M12x1,5               | 17,8   | 21   | 29   | 14   | 27              | 13,5 | 10  | 19   | 19   | 19   | 19   | 17   | 7,70                              | FI-RSW-08LM-DK-B-W3         |
|        | .31                | 7250            |                       | .70    | .83  | 1.14 | .55  | 1.06            | .53  | .39 | .75  | .75  | .75  | .67  | .67  | 16.94                             |                             |
|        | 10                 | 500             | M14x1,5               | 17,8   | 22   | 30   | 15   | 27              | 13,5 | 10  | 19   | 19   | 19   | 19   | 19   | 8,21                              | FI-RSW-10LM-DK-B-W3         |
|        | .39                | 7250            |                       | .70    | .87  | 1.18 | .59  | 1.06            | .53  | .39 | .75  | .75  | .75  | .75  | .75  | 18.06                             |                             |
|        | 12                 | 400             | M16x1,5               | 21     | 24,5 | 32,5 | 17,5 | 32,5            | 16   | 10  | 24   | 22   | 22   | 22   | 22   | 13,72                             | FI-RSW-12LM-DK-B-W3         |
|        | .47                | 5800            |                       | .83    | .96  | 1.28 | .69  | 1.28            | .63  | .39 | .94  | .87  | .87  | .87  | .87  | 30.19                             |                             |
|        | 12                 | 315             | M18x1,5               | 17,7   | 22   | 35   | 15   | 30,5            | 15,3 | 10  | 27   | 22   | 19   | 19   | 19   | 18,48                             | FI-RSW-12LM18x1,5-DK-B-W3   |
|        | .47                | 4568            |                       | .7     | .87  | 1.38 | .59  | 1.20            | .6   | .39 | 1.06 | .87  | .75  | .75  | .75  | 40.74                             |                             |
|        | 15                 | 400             | M18x1,5               | 23     | 27   | 35   | 20   | 37              | 18,5 | 10  | 27   | 24   | 27   | 24   | 27   | 17,73                             | FI-RSW-15LM-DK-B-W3         |
|        | .59                | 5800            |                       | .91    | 1.06 | 1.38 | .79  | 1.46            | .73  | .39 | 1.06 | .94  | 1.06 | 1.06 | 1.06 | 39.00                             |                             |
|        | 18                 | 400             | M22x1,5               | 27     | 28   | 37   | 20,5 | 43              | 21,5 | 12  | 30   | 27   | 32   | 27   | 32   | 27,01                             | FI-RSW-18LM-DK-B-W3         |
|        | .71                | 5800            |                       | 1.06   | 1.10 | 1.46 | .81  | 1.69            | .85  | .47 | 1.18 | 1.06 | 1.26 | 1.26 | 1.26 | 59.41                             |                             |
|        | 22                 | 250             | M26x1,5               | 31     | 34,5 | 43,5 | 27   | 48              | 24   | 16  | 36   | 32   | 36   | 32   | 36   | 42,27                             | FI-RSW-22LM-DK-B-W3         |
|        | .87                | 3625            |                       | 1.22   | 1.36 | 1.71 | 1.06 | 1.89            | .94  | .63 | 1.42 | 1.26 | 1.42 | 1.42 | 1.42 | 93.00                             |                             |
|        | 28                 | 250             | M33x2                 | 39     | 39   | 48   | 31,5 | 59              | 30,5 | 18  | 46   | 41   | 41   | 41   | 41   | 83,30                             | FI-RSW-28LM-DK-B-W3         |
|        | 1.10               | 3625            |                       | 1.54   | 1.54 | 1.89 | 1.24 | 2.32            | 1.20 | .71 | 1.81 | 1.61 | 1.61 | 1.61 | 1.61 | 183.26                            |                             |
|        | 35                 | 250             | M42x2                 | 49     | 46   | 57   | 35,5 | 70              | 35,5 | 20  | 55   | 50   | 50   | 50   | 50   | 146,51                            | FI-RSW-35LM-DK-B-W3         |
|        | 1.38               | 3625            |                       | 1.93   | 1.81 | 2.24 | 1.40 | 2.76            | 1.40 | .79 | 2.17 | 1.97 | 1.97 | 1.97 | 1.97 | 322.31                            |                             |
| S      | 42                 | 250             | M48x2                 | 55     | 51   | 63   | 40   | 80              | 40,5 | 22  | 65   | 55   | 60   | 55   | 60   | 226,97                            | FI-RSW-42LM-DK-B-W3         |
|        | 1.65               | 3625            |                       | 2.17   | 2.01 | 2.48 | 1.57 | 3.15            | 1.59 | .87 | 2.56 | 2.17 | 2.36 | 2.36 | 2.36 | 499.34                            |                             |
|        | 6                  | 500             | M12x1,5               | 17,8   | 23   | 31   | 16   | 27              | 13,5 | 10  | 19   | 19   | 19   | 19   | 17   | 10,09                             | FI-RSW-06SM-DK-B-W3         |
|        | .24                | 7250            |                       | .70    | .91  | 1.22 | .63  | 1.06            | .53  | .39 | .75  | .75  | .67  | .67  | .67  | 22.20                             |                             |
|        | 8                  | 500             | M14x1,5               | 17,8   | 23   | 31   | 16   | 27              | 13,5 | 10  | 19   | 19   | 19   | 19   | 19   | 8,69                              | FI-RSW-08SM-DK-B-W3         |
|        | .31                | 7250            |                       | .70    | .91  | 1.22 | .63  | 1.06            | .53  | .39 | .75  | .75  | .75  | .75  | .75  | 19.12                             |                             |
|        | 10                 | 500             | M16x1,5               | 21     | 25,5 | 34,5 | 18   | 32,5            | 16   | 10  | 24   | 22   | 22   | 22   | 22   | 14,46                             | FI-RSW-10SM-DK-B-W3         |
|        | .39                | 7250            |                       | .83    | 1.00 | 1.36 | .71  | 1.28            | .63  | .39 | .94  | .87  | .87  | .87  | .87  | 31.81                             |                             |
|        | 12                 | 400             | M18x1,5               | 23     | 27   | 36   | 19,5 | 37              | 18,5 | 10  | 27   | 24   | 24   | 24   | 24   | 19,33                             | FI-RSW-12SM-DK-B-W3         |
|        | .47                | 5800            |                       | .91    | 1.06 | 1.42 | .77  | 1.46            | .73  | .39 | 1.06 | .94  | .94  | .94  | .94  | 42.52                             |                             |
|        | 14                 | 400             | M20x1,5               | 25     | 30   | 40   | 22   | 41              | 19,5 | 12  | 30   | 27   | 27   | 27   | 27   | 28,76                             | FI-RSW-14SM-DK-B-W3         |
|        | .55                | 5800            |                       | .98    | 1.18 | 1.57 | .87  | 1.61            | .77  | .47 | 1.18 | 1.06 | 1.06 | 1.06 | 1.06 | 63.27                             |                             |
|        | 16                 | 400             | M22x1,5               | 27     | 30   | 40   | 21,5 | 43              | 21,5 | 12  | 30   | 27   | 30   | 27   | 30   | 27,40                             | FI-RSW-16SM-DK-B-W3         |
|        | .63                | 5800            |                       | 1.06   | 1.18 | 1.57 | .85  | 1.69            | .85  | .47 | 1.18 | 1.06 | 1.18 | 1.18 | 1.18 | 60.28                             |                             |
|        | 20                 | 315             | M27x2                 | 32     | 36,5 | 47,5 | 26   | 48              | 24   | 16  | 36   | 32   | 36   | 32   | 36   | 45,17                             | FI-RSW-20SM-DK-B-W3         |
|        | .79                | 4568            |                       | 1.26   | 1.44 | 1.87 | 1.02 | 1.89            | .94  | .63 | 1.42 | 1.26 | 1.42 | 1.42 | 1.42 | 99.58                             |                             |
|        | 25                 | 250             | M33x2                 | 39     | 43   | 55   | 31   | 59              | 30,5 | 18  | 46   | 41   | 46   | 41   | 46   | 30,63                             | FI-RSW-25SM-DK-B-W3         |
|        | .98                | 3625            |                       | 1.54   | 1.69 | 2.17 | 1.22 | 2.32            | 1.20 | .71 | 1.81 | 1.61 | 1.61 | 1.61 | 1.61 | 67.39                             |                             |
|        | 30                 | 250             | M42x2                 | 49     | 50   | 63   | 36,5 | 70              | 35,5 | 20  | 55   | 50   | 50   | 50   | 50   | 149,83                            | FI-RSW-30SM-DK-B-W3         |
|        | 1.18               | 3625            |                       | 1.93   | 1.97 | 2.48 | 1.44 | 2.76            | 1.40 | .79 | 2.17 | 1.97 | 1.97 | 1.97 | 1.97 | 329.62                            |                             |
|        | 38                 | 250             | M48x2                 | 55     | 57   | 72   | 41   | 80              | 40,5 | 22  | 65   | 55   | 60   | 55   | 60   | 236,07                            | FI-RSW-38SM-DK-B-W3         |
|        | 1.50               | 3625            |                       | 2.17   | 2.24 | 2.83 | 1.61 | 3.15            | 1.59 | .87 | 2.56 | 2.17 | 2.36 | 2.36 | 2.36 | 519.36                            |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is NBR (Buna-N®).



For use with aggressive media and/or at elevated temperatures, please remove the O-ring from the groove located on the banjo bolt prior to installation.

Port acc. to DIN 3852-1 (Form X) / ISO 9974-1

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

**\*FI-RSW\*-10\*L\*M\*-DK\*-B\*-W3\*-MS**

\* Banjo Elbow (High-Pressure Version) **FI-RSW**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Metric Parallel Thread **M**

If required, please indicate special sizes, e.g. M12x1.5!

\* Seal Type External Metallic Sealing Ring **-DK**

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only **—**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

### Spare Parts / Accessories



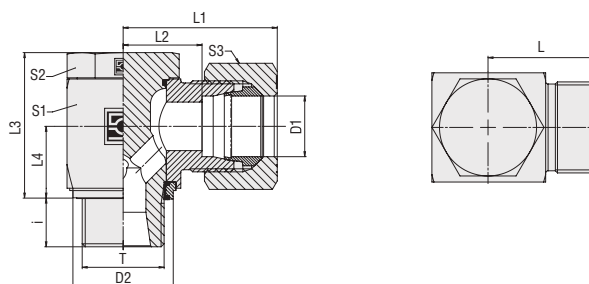
External Metallic Sealing Ring  
Type **FI-DKR** Page 245



O-Ring  
Type **O-RING** Page 239



## Banjo Elbow (High-Pressure Version) Type FI-RSW-...-R-WD ■ Series L / S



### Whitworth Parallel Pipe Thread (BSPP)

### Retaining Ring with Captive Seal

#### Ordering Codes

#### \*FI-RSW\*-10\*L\*R\*-WD\*-B\*-W3\*-MS

\* Banjo Elbow (High-Pressure Version) **FI-RSW**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Whitworth Parallel Pipe Thread (BSPP) **R**

If required, please indicate special sizes, e.g. R1/8!

\* Seal Type Retaining Ring with Captive Seal **-WD**

\* Seal Material NBR (Buna-N®) **-B**

FKM (Viton®) **-V**

EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only **—**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

#### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

#### Spare Parts / Accessories



Retaining Ring with Captive Seal  
Type **FI-DIR** Page 245



O-Ring  
Type **O-RING** Page 239

| Series | Tube OD<br>(mm/in) | PB<br>(bar/psi) | Dimensions<br>(mm/in)                             | Weight<br>(kg/lbs) ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|---------------------------------------------------|------------------------|-----------------------------|
|        | D1                 |                 | Thread T D2 L L1 <sup>1</sup> L2 L3 L4 i S1 S2 S3 | per 100                |                             |
| L      | 6                  | 500             | G 1/8 14,9 20 28 13 21 10,5 8 14 14 14            | 3,65                   | FI-RSW-06LR-WD-B-W3         |
|        | .24                | 7250            | .59 .79 1.10 .51 .83 .41 .31 .55 .55 .55          | 8.04                   |                             |
|        | 6                  | 500             | 18,8 22 28 15 27,7 13,5 9,8 19 19 14              | 7,88                   | FI-RSW-06LR1/4-WD-B-W3      |
|        | .24                | 7250            | .74 .87 1.10 .59 1.09 .53 .39 .75 .75 .55         | 17.37                  |                             |
|        | 8                  | 500             | 18,8 21 29 14 27 13,5 10 19 19 17                 | 7,92                   | FI-RSW-08LR-WD-B-W3         |
|        | .31                | 7250            | .74 .83 1.14 .55 1.06 .53 .39 .75 .75 .67         | 17.43                  |                             |
|        | 10                 | 500             | 18,8 22 30 15 27 13,5 10 19 19 19                 | 8,16                   | FI-RSW-10LR-WD-B-W3         |
|        | .39                | 7250            | .74 .87 1.18 .59 1.06 .53 .39 .75 .75 .75         | 17.95                  |                             |
|        | 12                 | 400             | 18,8 22 31 15 30,7 15,5 9,8 22 19 22              | 10,06                  | FI-RSW-12LR1/4-WD-B-W3      |
|        | .47                | 5800            | .74 .87 1.22 .59 1.21 .61 .39 .87 .75 .87         | 22.18                  |                             |
|        | 12                 | 400             | 22,8 24,5 32,5 17,5 32,5 16 12 24 22 22           | 13,94                  | FI-RSW-12LR-WD-B-W3         |
|        | .47                | 5800            | .90 .96 1.28 .69 1.28 .63 .47 .94 .87 .87         | 30.67                  |                             |
|        | 15                 | 400             | 27,9 27 35 21 43 19,5 14 30 27 27                 | 26,03                  | FI-RSW-15LR-WD-B-W3         |
|        | .59                | 5800            | 1.10 1.06 1.38 .83 1.69 .77 .55 1.18 1.06 1.06    | 57.26                  |                             |
|        | 18                 | 400             | 27,9 28 37 20,5 43 21,5 12 30 27 32               | 26,75                  | FI-RSW-18LR-WD-B-W3         |
|        | .71                | 5800            | 1.10 1.10 1.46 .81 1.69 .85 .47 1.18 1.06 1.26    | 58.86                  |                             |
|        | 22                 | 250             | 32,9 34,5 43,5 27 48 24 16 36 32 36               | 42,37                  | FI-RSW-22LR-WD-B-W3         |
|        | .87                | 3625            | 1.30 1.36 1.71 1.06 1.89 .94 .63 1.42 1.26 1.42   | 93.21                  |                             |
|        | 28                 | 250             | 40,9 39 48 31,5 59 30,5 18 46 41 41               | 84,00                  | FI-RSW-28LR-WD-B-W3         |
|        | 1.10               | 3625            | 1.61 1.54 1.89 1.24 2.32 1.20 .71 1.81 1.61 1.61  | 184.80                 |                             |
|        | 35                 | 250             | 50,9 46 57 35,5 70 35,5 20 55 50 50               | 140,00                 | FI-RSW-35LR-WD-B-W3         |
|        | 1.38               | 3625            | 2.00 1.81 2.24 1.40 2.76 1.40 .79 2.17 1.97 1.97  | 308.00                 |                             |
|        | 42                 | 250             | 55,9 51 63 40 80 40,5 22 65 55 60                 | 214,30                 | FI-RSW-42LR-WD-B-W3         |
|        | 1.65               | 3625            | 2.20 2.01 2.48 1.57 3.15 1.59 .87 2.56 2.17 2.36  | 471.46                 |                             |
| S      | 6                  | 500             | 18,8 23 31 16 27 13,5 10 19 19 17                 | 8,36                   | FI-RSW-06SR-WD-B-W3         |
|        | .24                | 7250            | .74 .91 1.22 .63 1.06 .53 .39 .75 .75 .67         | 18.40                  |                             |
|        | 8                  | 500             | 18,8 23 31 16 27 13,5 10 19 19 19                 | 8,63                   | FI-RSW-08SR-WD-B-W3         |
|        | .31                | 7250            | .74 .91 1.22 .63 1.06 .53 .39 .75 .75 .75         | 18.99                  |                             |
|        | 10                 | 500             | 22,8 25,5 34,5 18 32,5 16 10 24 22 22             | 14,36                  | FI-RSW-10SR-WD-B-W3         |
|        | .39                | 7250            | .90 1.00 1.36 .71 1.28 .63 .39 .94 .87 .87        | 31.60                  |                             |
|        | 12                 | 400             | 22,8 27 36 18 32,5 16 10 24 22 24                 | 14,86                  | FI-RSW-12SR-WD-B-W3         |
|        | .47                | 5800            | .90 1.06 1.42 .71 1.28 .63 .39 .94 .87 .94        | 32.70                  |                             |
|        | 14                 | 400             | 27,9 30 40 22 41 19,5 14 30 27 27                 | 26,74                  | FI-RSW-14SR-WD-B-W3         |
|        | .55                | 5800            | 1.10 1.18 1.57 .87 1.61 .77 .55 1.18 1.06 1.06    | 58.83                  |                             |
|        | 16                 | 400             | 27,9 30 40 21,5 43 21,5 12 30 27 30               | 27,23                  | FI-RSW-16SR-WD-B-W3         |
|        | .63                | 5800            | 1.10 1.18 1.57 .85 1.69 .85 .47 1.18 1.06 1.18    | 59.91                  |                             |
|        | 20                 | 315             | 32,9 36,5 47,5 26 48 24 16 36 32 36               | 44,33                  | FI-RSW-20SR-WD-B-W3         |
|        | .79                | 4568            | 1.30 1.44 1.87 1.02 1.89 .94 .63 1.42 1.26 1.42   | 97.53                  |                             |
|        | 25                 | 250             | 40,9 43 55 31 59 30,5 18 46 41 46                 | 86,90                  | FI-RSW-25SR-WD-B-W3         |
|        | .98                | 3625            | 1.61 1.69 2.17 1.22 2.32 1.20 .71 1.81 1.61 1.81  | 191.18                 |                             |
|        | 30                 | 250             | 50,9 50 63 36,5 70 35,5 20 55 50 50               | 144,70                 | FI-RSW-30SR-WD-B-W3         |
|        | 1.18               | 3625            | 2.00 1.97 2.48 1.44 2.76 1.40 .79 2.17 1.97 1.97  | 318.34                 |                             |
|        | 38                 | 250             | 55,9 57 72 41 80 40,5 22 65 55 60                 | 223,60                 | FI-RSW-38SR-WD-B-W3         |
|        | 1.50               | 3625            | 2.20 2.24 2.83 1.61 3.15 1.59 .87 2.56 2.17 2.36  | 491.92                 |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

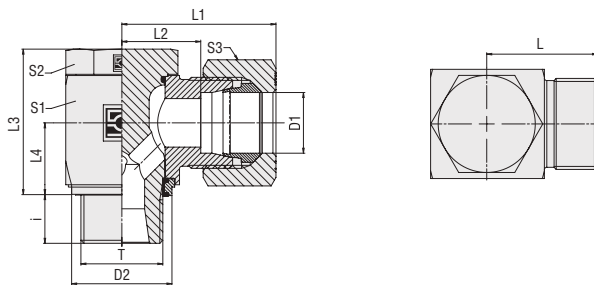
Standard seal material is NBR (Buna-N®).

Port acc. to DIN 3852-2 (Form X) / ISO 1179-1

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.





## Banjo Elbow (High-Pressure Version) Type FI-RSW-...-M-WD ■ Series L / S



### Retaining Ring with Captive Seal

### Metric Parallel Thread

| Series | Tube OD | PB        | Dimensions |      |      |      |                 |      |      |      |      |      |        |                     |                           | Weight | Ordering Codes <sup>3</sup> |
|--------|---------|-----------|------------|------|------|------|-----------------|------|------|------|------|------|--------|---------------------|---------------------------|--------|-----------------------------|
|        | (mm/in) | (bar/psi) | (mm/in)    | D1   | D2   | L    | L1 <sup>1</sup> | L2   | L3   | L4   | i    | S1   | S2     | S3                  | (kg/lbs) ca.<br>per 100   |        |                             |
| L      | 6       | 500       | M10x1      | 14,9 | 20   | 28   | 13              | 21   | 10   | 8    | 14   | 14   | 14     | 3,68                | FI-RSW-06LM-WD-B-W3       |        |                             |
|        | .24     | 7250      |            | .59  | .79  | 1.10 | .51             | .83  | .39  | .31  | .55  | .55  | .55    | 8.09                |                           |        |                             |
|        | 8       | 500       | M12x1,5    | 17,8 | 21   | 29   | 14              | 27   | 13,5 | 10   | 19   | 19   | 17     | 7,68                | FI-RSW-08LM-WD-B-W3       |        |                             |
|        | .31     | 7250      |            | .70  | .83  | 1.14 | .55             | 1.06 | .53  | .39  | .75  | .75  | .67    | 16.90               |                           |        |                             |
|        | 10      | 500       | M14x1,5    | 19,9 | 22   | 30   | 15              | 27   | 13,5 | 10   | 19   | 19   | 19     | 8,28                | FI-RSW-10LM-WD-B-W3       |        |                             |
|        | .39     | 7250      |            | .78  | .87  | 1.18 | .59             | 1.06 | .53  | .39  | .75  | .75  | .75    | 18.22               |                           |        |                             |
|        | 12      | 400       | M16x1,5    | 22,8 | 24,5 | 32,5 | 17,5            | 32,5 | 16   | 10   | 24   | 22   | 22     | 13,60               | FI-RSW-12LM-WD-B-W3       |        |                             |
|        | .47     | 5800      |            | .90  | .96  | 1.28 | .69             | 1.28 | .63  | .39  | .94  | .87  | .87    | 29.92               |                           |        |                             |
|        | 12      | 400       | M18x1,5    | 24,5 | 26   | 32,5 | 19              | 37,8 | 13,6 | 14,7 | 27   | 24   | 22     | 18,73               | FI-RSW-12LM18x1,5-WD-B-W3 |        |                             |
|        | .47     | 5800      |            | .96  | 1.02 | 1.28 | .75             | 1.49 | .54  | .58  | 1.06 | .94  | .87    | 41.29               |                           |        |                             |
|        | 15      | 400       | M18x1,5    | 24,9 | 27   | 35   | 20              | 37   | 18,5 | 10   | 27   | 24   | 27     | 19,21               | FI-RSW-15LM-WD-B-W3       |        |                             |
|        | .59     | 5800      |            | .98  | 1.06 | 1.38 | .79             | 1.46 | .73  | .39  | 1.06 | .94  | 1.06   | 42.26               |                           |        |                             |
|        | 18      | 400       | M22x1,5    | 27,9 | 28   | 37   | 20,5            | 43   | 21,5 | 12   | 30   | 27   | 32     | 27,12               | FI-RSW-18LM-WD-B-W3       |        |                             |
|        | .71     | 5800      |            | 1.10 | 1.10 | 1.46 | .81             | 1.69 | .85  | .47  | 1.18 | 1.06 | 1.26   | 59.67               |                           |        |                             |
|        | 22      | 250       | M26x1,5    | 32,5 | 34,5 | 43,5 | 27              | 48   | 24   | 16   | 36   | 32   | 36     | 42,64               | FI-RSW-22LM-WD-B-W3       |        |                             |
|        | .87     | 3625      |            | 1.28 | 1.36 | 1.71 | 1.06            | 1.89 | .94  | .63  | 1.42 | 1.26 | 1.42   | 93.82               |                           |        |                             |
|        | 28      | 250       | M33x2      | 40,9 | 39   | 48   | 31,5            | 59   | 30,5 | 18   | 46   | 41   | 41     | 95,43               | FI-RSW-28LM-WD-B-W3       |        |                             |
|        | 1.10    | 3625      |            | 1.61 | 1.54 | 1.89 | 1.24            | 2.32 | 1.20 | .71  | 1.81 | 1.61 | 1.61   | 209.95              |                           |        |                             |
|        | 35      | 250       | M42x2      | 50,9 | 46   | 57   | 35,5            | 70   | 35,5 | 20   | 55   | 50   | 50     | 146,83              | FI-RSW-35LM-WD-B-W3       |        |                             |
|        | 1.38    | 3625      |            | 2.0  | 1.81 | 2.24 | 1.40            | 2.76 | 1.40 | .79  | 2.17 | 1.97 | 1.97   | 323.03              |                           |        |                             |
| 42     | 250     | M48x2     | 55,9       | 51   | 63   | 40   | 80              | 40,5 | 22   | 65   | 55   | 60   | 221,72 | FI-RSW-42LM-WD-B-W3 |                           |        |                             |
| 1.65   | 3625    |           | 2.20       | 2.01 | 2.48 | 1.57 | 3.15            | 1.59 | .87  | 2.56 | 2.17 | 2.36 | 487.79 |                     |                           |        |                             |
| S      | 6       | 500       | M12x1,5    | 17,8 | 23   | 31   | 16              | 27   | 13,5 | 10   | 19   | 19   | 17     | 8,10                | FI-RSW-06SM-WD-B-W3       |        |                             |
|        | .24     | 7250      |            | .70  | .91  | 1.22 | .63             | 1.06 | .53  | .39  | .75  | .75  | .67    | 17.82               |                           |        |                             |
|        | 8       | 500       | M14x1,5    | 19,9 | 23   | 31   | 16              | 27   | 13,5 | 10   | 19   | 19   | 19     | 8,80                | FI-RSW-08SM-WD-B-W3       |        |                             |
|        | .31     | 7250      |            | .78  | .91  | 1.22 | .63             | 1.06 | .53  | .39  | .75  | .75  | .75    | 19.36               |                           |        |                             |
|        | 10      | 500       | M16x1,5    | 22,8 | 25,5 | 34,5 | 18              | 32,5 | 16   | 10   | 24   | 22   | 22     | 14,19               | FI-RSW-10SM-WD-B-W3       |        |                             |
|        | .39     | 7250      |            | .90  | 1.00 | 1.36 | .71             | 1.28 | .63  | .39  | .94  | .87  | .87    | 31.21               |                           |        |                             |
|        | 12      | 400       | M18x1,5    | 24,9 | 27   | 36   | 19,5            | 37   | 18,5 | 10   | 27   | 24   | 24     | 19,53               | FI-RSW-12SM-WD-B-W3       |        |                             |
|        | .47     | 5800      |            | .98  | 1.06 | 1.42 | .77             | 1.46 | .73  | .39  | 1.06 | .94  | .94    | 42.97               |                           |        |                             |
|        | 14      | 400       | M20x1,5    | 27,5 | 30   | 40   | 22              | 41   | 19,5 | 12   | 30   | 27   | 27     | 29,38               | FI-RSW-14SM-WD-B-W3       |        |                             |
|        | .55     | 5800      |            | 1.08 | 1.18 | 1.57 | .87             | 1.61 | .77  | .47  | 1.18 | 1.06 | 1.06   | 64.63               |                           |        |                             |
|        | 16      | 400       | M22x1,5    | 27,9 | 30   | 40   | 21,5            | 43   | 21,5 | 12   | 30   | 27   | 30     | 27,53               | FI-RSW-16SM-WD-B-W3       |        |                             |
|        | .63     | 5800      |            | 1.10 | 1.18 | 1.57 | .85             | 1.69 | .85  | .47  | 1.18 | 1.06 | 1.18   | 60.56               |                           |        |                             |
|        | 20      | 315       | M27x2      | 32,9 | 36,5 | 47,5 | 26              | 48   | 24   | 16   | 36   | 32   | 36     | 44,30               | FI-RSW-20SM-WD-B-W3       |        |                             |
|        | .79     | 4568      |            | 1.30 | 1.44 | 1.87 | 1.02            | 1.89 | .94  | .63  | 1.42 | 1.26 | 1.42   | 97.47               |                           |        |                             |
|        | 25      | 250       | M33x2      | 40,9 | 43   | 55   | 31              | 59   | 30,5 | 18   | 46   | 41   | 46     | 224,50              | FI-RSW-25SM-WD-B-W3       |        |                             |
|        | .98     | 3625      |            | 1.61 | 1.69 | 2.17 | 1.22            | 2.32 | 1.20 | .71  | 1.81 | 1.61 | 1.81   | 493.90              |                           |        |                             |
|        | 30      | 250       | M42x2      | 50,9 | 50   | 63   | 36,5            | 70   | 35,5 | 20   | 55   | 50   | 50     | 150,16              | FI-RSW-30SM-WD-B-W3       |        |                             |
|        | 1.18    | 3625      |            | 2.00 | 1.97 | 2.48 | 1.44            | 2.76 | 1.40 | .79  | 2.17 | 1.97 | 1.97   | 330.36              |                           |        |                             |
|        | 38      | 250       | M48x2      | 55,9 | 57   | 72   | 41              | 80   | 40,5 | 22   | 65   | 55   | 60     | 224,90              | FI-RSW-38SM-WD-B-W3       |        |                             |
|        | 1.50    | 3625      |            | 2.20 | 2.24 | 2.83 | 1.61            | 3.15 | 1.59 | .87  | 2.56 | 2.17 | 2.36   | 494.78              |                           |        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is NBR (Buna-N®).

Port acc. to DIN 3852-1 (Form X) / ISO 9974-1

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

\*FI-RSW\*-10\*L\*M\*-WD\*-B\*-W3\*-MS

\* Banjo Elbow (High-Pressure Version) FI-RSW

\* Outside Tube Diameter D1 (in mm) -10

\* Series Light Series L  
Heavy Series S

\* Thread Type Metric Parallel Thread M

If required, please indicate special sizes, e.g. M12x1.5!

\* Seal Type Retaining Ring with Captive Seal -WD

\* Seal Material NBR (Buna-N®) -B  
FKM (Viton®) -V  
EPDM -E

\* Material Code Steel, zinc/nickel-plated -W3

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only —

Fitting body supplied with cutting ring and union nut -MS

Fitting body supplied with soft-sealing cutting ring and union nut -MSV

### Connecting Parts

Cutting Ring Type FI-DS Page 28

Soft-Sealing Cutting Ring Type FI-WDDS Page 29

Support Sleeve Type FI-VH Page 31

STAUFF Form EVO Sealing Ring Type FI-FD Page 32

Union Nut Type FI-M Page 33

37° Flared Tube Fitting Set Type FI-AB Page 37

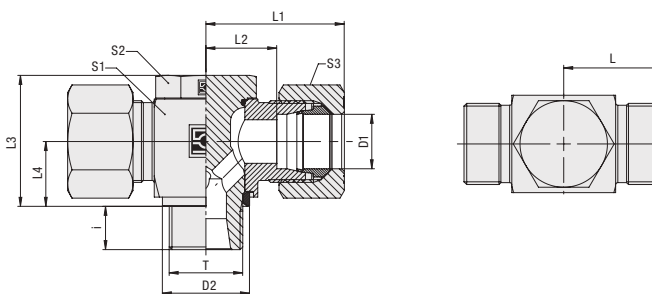
### Spare Parts / Accessories

Retaining Ring with Captive Seal Type FI-DIR Page 245

O-Ring Type O-RING Page 239



## Banjo Tee (High-Pressure Version) Type FI-RST-...-R-DK • Series L / S



### Ordering Codes

#### \*FI-RST\*-10\*L\*R\*-DK\*-B\*-W3\*-MS

|                                                                         |                                                                                                                                                                                  |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * Banjo Tee (High-Pressure Version)                                     | <b>FI-RST</b>                                                                                                                                                                    |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                                                                                                                       |
| * Series                                                                | Light Series <b>L</b><br>Heavy Series <b>S</b>                                                                                                                                   |
| * Thread Type                                                           | Whitworth Parallel Pipe Thread (BSPP) <b>R</b>                                                                                                                                   |
| If required, please indicate special sizes, e.g. R1/8!                  |                                                                                                                                                                                  |
| * Seal Type                                                             | External Metallic Sealing Ring <b>-DK</b>                                                                                                                                        |
| * Seal Material                                                         | NBR (Buna-N®) <b>-B</b><br>FKM (Viton®) <b>-V</b><br>EPDM <b>-E</b>                                                                                                              |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                                                                                                                             |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                                                                                                                  |
| * Assembling / Kitting                                                  | Fitting body only <b>—</b><br>Fitting body supplied with cutting ring and union nut <b>-MS</b><br>Fitting body supplied with soft-sealing cutting ring and union nut <b>-MSV</b> |

### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

### Spare Parts / Accessories

|  |                                                      |          |
|--|------------------------------------------------------|----------|
|  | External Metallic Sealing Ring<br>Type <b>FI-DKR</b> | Page 245 |
|  | O-Ring<br>Type <b>O-RING</b>                         | Page 239 |

### Whitworth Parallel Pipe Thread (BSPP)

### External Metallic Sealing Ring

| Series | Tube OD<br>( <sup>mm</sup> / <sub>in</sub> ) | PB<br>( <sup>bar</sup> / <sub>psi</sub> ) | Dimensions<br>( <sup>mm</sup> / <sub>in</sub> ) |        |      |      |      |                 |      |     |      |      |      |        |                     | Weight<br>( <sup>kg</sup> / <sub>lbs</sub> ) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|----------------------------------------------|-------------------------------------------|-------------------------------------------------|--------|------|------|------|-----------------|------|-----|------|------|------|--------|---------------------|-------------------------------------------------------------|-----------------------------|
|        |                                              |                                           | D1                                              | Thread | T    | D2   | L    | L1 <sup>1</sup> | L2   | L3  | L4   | i    | S1   | S2     | S3                  |                                                             |                             |
| L      | 6                                            | 500                                       | G 1/8                                           | 13     | 20   | 28   | 13   | 21              | 10,5 | 8   | 14   | 14   | 14   | 4,57   | FI-RST-06LR-DK-B-W3 |                                                             |                             |
|        | .24                                          | 7250                                      |                                                 | .51    | .79  | 1.10 | .51  | .83             | .41  | .31 | .55  | .55  | .55  | 10.04  |                     |                                                             |                             |
|        | 8                                            | 500                                       | G 1/4                                           | 17,8   | 21   | 29   | 14   | 27              | 13,5 | 10  | 19   | 19   | 17   | 8,60   | FI-RST-08LR-DK-B-W3 |                                                             |                             |
|        | .31                                          | 7250                                      |                                                 | .70    | .83  | 1.14 | .55  | 1.06            | .53  | .39 | .75  | .75  | .67  | 18.92  |                     |                                                             |                             |
|        | 10                                           | 500                                       | G 1/4                                           | 17,8   | 22   | 30   | 15   | 27              | 13,5 | 10  | 19   | 19   | 19   | 8,93   | FI-RST-10LR-DK-B-W3 |                                                             |                             |
|        | .39                                          | 7250                                      |                                                 | .70    | .87  | 1.18 | .59  | 1.06            | .53  | .39 | .75  | .75  | .75  | 19.65  |                     |                                                             |                             |
|        | 12                                           | 400                                       | G 3/8                                           | 22     | 24,5 | 32,5 | 17,5 | 32,5            | 16   | 12  | 24   | 22   | 22   | 15,04  | FI-RST-12LR-DK-B-W3 |                                                             |                             |
|        | .47                                          | 5800                                      |                                                 | .87    | .96  | 1.28 | .69  | 1.28            | .63  | .47 | .94  | .87  | .87  | 33.08  |                     |                                                             |                             |
|        | 15                                           | 400                                       | G 1/2                                           | 26     | 27   | 35   | 21   | 43              | 19,5 | 14  | 30   | 27   | 27   | 30,15  | FI-RST-15LR-DK-B-W3 |                                                             |                             |
|        | .59                                          | 5800                                      |                                                 | 1.02   | 1.06 | 1.38 | .83  | 1.69            | .77  | .55 | 1.18 | 1.06 | 1.06 | 66.33  |                     |                                                             |                             |
|        | 18                                           | 400                                       | G 1/2                                           | 26     | 28   | 37   | 20,5 | 43              | 21,5 | 12  | 30   | 27   | 32   | 31,25  | FI-RST-18LR-DK-B-W3 |                                                             |                             |
|        | .71                                          | 5800                                      |                                                 | 1.02   | 1.10 | 1.46 | .81  | 1.69            | .85  | .47 | 1.18 | 1.06 | 1.26 | 68.75  |                     |                                                             |                             |
|        | 22                                           | 250                                       | G 3/4                                           | 32     | 34,5 | 43,5 | 27   | 48              | 24   | 16  | 36   | 32   | 36   | 46,23  | FI-RST-22LR-DK-B-W3 |                                                             |                             |
|        | .87                                          | 3625                                      |                                                 | 1.26   | 1.36 | 1.71 | 1.06 | 1.89            | .94  | .63 | 1.42 | 1.26 | 1.42 | 101.70 |                     |                                                             |                             |
|        | 28                                           | 250                                       | G 1                                             | 39     | 39   | 48   | 31,5 | 59              | 30,5 | 18  | 46   | 41   | 41   | 80,19  | FI-RST-28LR-DK-B-W3 |                                                             |                             |
|        | 1.10                                         | 3625                                      |                                                 | 1.54   | 1.54 | 1.89 | 1.24 | 2.32            | 1.20 | .71 | 1.81 | 1.61 | 1.61 | 176.41 |                     |                                                             |                             |
|        | 35                                           | 250                                       | G 1 1/4                                         | 49     | 46   | 57   | 35,5 | 70              | 35,5 | 20  | 55   | 50   | 50   | 145,46 | FI-RST-35LR-DK-B-W3 |                                                             |                             |
|        | 1.38                                         | 3625                                      |                                                 | 1.93   | 1.81 | 2.24 | 1.40 | 2.76            | 1.40 | .79 | 2.17 | 1.97 | 1.97 | 320.00 |                     |                                                             |                             |
|        | 42                                           | 250                                       | G 1 1/2                                         | 55     | 51   | 63   | 40   | 80              | 40,5 | 22  | 65   | 55   | 60   | 217,14 | FI-RST-42LR-DK-B-W3 |                                                             |                             |
|        | 1.65                                         | 3625                                      |                                                 | 2.17   | 2.01 | 2.48 | 1.57 | 3.15            | 1.59 | .87 | 2.56 | 2.17 | 2.36 | 477.71 |                     |                                                             |                             |
| S      | 6                                            | 500                                       | G 1/4                                           | 17,8   | 23   | 31   | 16   | 27              | 13,5 | 10  | 19   | 19   | 17   | 9,48   | FI-RST-06SR-DK-B-W3 |                                                             |                             |
|        | .24                                          | 7250                                      |                                                 | .70    | .91  | 1.22 | .63  | 1.06            | .53  | .39 | .75  | .75  | .67  | 20.86  |                     |                                                             |                             |
|        | 8                                            | 500                                       | G 1/4                                           | 17,8   | 23   | 31   | 16   | 27              | 13,5 | 10  | 19   | 19   | 19   | 9,97   | FI-RST-08SR-DK-B-W3 |                                                             |                             |
|        | .31                                          | 7250                                      |                                                 | .70    | .91  | 1.22 | .63  | 1.06            | .53  | .39 | .75  | .75  | .75  | 21.93  |                     |                                                             |                             |
|        | 10                                           | 500                                       | G 3/8                                           | 22     | 25,5 | 34,5 | 18   | 32,5            | 16   | 10  | 24   | 22   | 22   | 19,10  | FI-RST-10SR-DK-B-W3 |                                                             |                             |
|        | .39                                          | 7250                                      |                                                 | .87    | 1.00 | 1.36 | .71  | 1.28            | .63  | .39 | .94  | .87  | .87  | 42.02  |                     |                                                             |                             |
|        | 12                                           | 400                                       | G 3/8                                           | 22     | 27   | 36   | 18   | 32,5            | 16   | 10  | 24   | 22   | 24   | 16,38  | FI-RST-12SR-DK-B-W3 |                                                             |                             |
|        | .47                                          | 5800                                      |                                                 | .87    | 1.06 | 1.42 | .71  | 1.28            | .63  | .39 | .94  | .87  | .94  | 36.03  |                     |                                                             |                             |
|        | 14                                           | 400                                       | G 1/2                                           | 26     | 30   | 40   | 22   | 41              | 19,5 | 14  | 30   | 27   | 27   | 91,00  | FI-RST-14SR-DK-B-W3 |                                                             |                             |
|        | .55                                          | 5800                                      |                                                 | 1.02   | 1.18 | 1.57 | .87  | 1.61            | .77  | .55 | 1.18 | 1.06 | 1.06 | 200.20 |                     |                                                             |                             |
|        | 16                                           | 400                                       | G 1/2                                           | 26     | 30   | 40   | 21,5 | 43              | 21,5 | 12  | 30   | 27   | 30   | 31,85  | FI-RST-16SR-DK-B-W3 |                                                             |                             |
|        | .63                                          | 5800                                      |                                                 | 1.02   | 1.18 | 1.57 | .85  | 1.69            | .85  | .47 | 1.18 | 1.06 | 1.18 | 70.08  |                     |                                                             |                             |
|        | 20                                           | 315                                       | G 3/4                                           | 32     | 36,5 | 47,5 | 26   | 48              | 24   | 16  | 36   | 32   | 36   | 48,45  | FI-RST-20SR-DK-B-W3 |                                                             |                             |
|        | .79                                          | 4568                                      |                                                 | 1.26   | 1.44 | 1.87 | 1.02 | 1.89            | .94  | .63 | 1.42 | 1.26 | 1.42 | 106.58 |                     |                                                             |                             |
|        | 25                                           | 250                                       | G 1                                             | 39     | 43   | 55   | 31   | 59              | 30,5 | 18  | 46   | 41   | 46   | 93,55  | FI-RST-25SR-DK-B-W3 |                                                             |                             |
|        | .98                                          | 3625                                      |                                                 | 1.54   | 1.69 | 2.17 | 1.22 | 2.32            | 1.20 | .71 | 1.81 | 1.61 | 1.81 | 205.80 |                     |                                                             |                             |
|        | 30                                           | 250                                       | G 1 1/4                                         | 49     | 50   | 63   | 36,5 | 70              | 35,5 | 20  | 55   | 50   | 50   | 153,59 | FI-RST-30SR-DK-B-W3 |                                                             |                             |
|        | 1.18                                         | 3625                                      |                                                 | 1.93   | 1.97 | 2.48 | 1.44 | 2.76            | 1.40 | .79 | 2.17 | 1.97 | 1.97 | 337.91 |                     |                                                             |                             |
|        | 38                                           | 250                                       | G 1 1/2                                         | 55     | 57   | 72   | 41   | 80              | 40,5 | 22  | 65   | 55   | 60   | 236,22 | FI-RST-38SR-DK-B-W3 |                                                             |                             |
|        | 1.50                                         | 3625                                      |                                                 | 2.17   | 2.24 | 2.83 | 1.61 | 3.15            | 1.59 | .87 | 2.56 | 2.17 | 2.36 | 519.69 |                     |                                                             |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is NBR (Buna-N®).



For use with aggressive media and/or at elevated temperatures, please remove the O-ring from the groove located on the banjo bolt prior to installation.

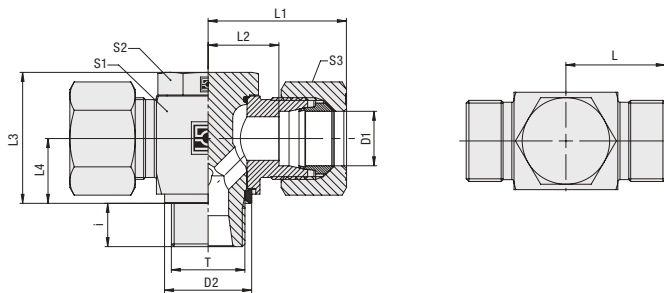
Port acc. to DIN 3852-2 (Form X) / ISO 1179-1

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.







## Banjo Tee (High-Pressure Version) Type FI-RST-...-M-DK ■ Series L / S



### External Metallic Sealing Ring

### Metric Parallel Thread

| Series | Tube OD<br>( <sup>mm</sup> / <sub>in</sub> ) | PB<br>( <sup>bar</sup> / <sub>psi</sub> ) | Dimensions<br>( <sup>mm</sup> / <sub>in</sub> ) |         |      |      |      |                 |      |      |      |      |      |        |                     | Weight<br>( <sup>kg</sup> / <sub>lbs</sub> ) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|----------------------------------------------|-------------------------------------------|-------------------------------------------------|---------|------|------|------|-----------------|------|------|------|------|------|--------|---------------------|-------------------------------------------------------------|-----------------------------|
|        |                                              |                                           | D1                                              | Thread  | T    | D2   | L    | L1 <sup>1</sup> | L2   | L3   | L4   | i    | S1   | S2     | S3                  |                                                             |                             |
| L      | 6                                            | 500                                       | M10x1                                           | 13      | 20   | 28   | 13   | 21              | 10   | 8    | 14   | 14   | 14   | 4,59   | FI-RST-06LM-DK-B-W3 |                                                             |                             |
|        | .24                                          | 7250                                      |                                                 | .51     | .79  | 1.10 | .51  | .83             | .39  | .31  | .55  | .55  | .55  | 10.10  |                     |                                                             |                             |
|        | 8                                            | 500                                       |                                                 | M12x1,5 | 17,8 | 21   | 29   | 14              | 27   | 13,5 | 10   | 19   | 19   | 17     |                     | 9,66                                                        | FI-RST-08LM-DK-B-W3         |
|        | .31                                          | 7250                                      | .70                                             |         | .83  | 1.14 | .55  | 1.06            | .53  | .39  | .75  | .75  | .67  | 21.25  |                     |                                                             |                             |
|        | 10                                           | 500                                       | M14x1,5                                         | 17,8    | 22   | 30   | 15   | 27              | 13,5 | 10   | 19   | 19   | 19   | 11,05  | FI-RST-10LM-DK-B-W3 |                                                             |                             |
|        | .39                                          | 7250                                      |                                                 | .70     | .87  | 1.18 | .59  | 1.06            | .53  | .39  | .75  | .75  | .75  | 24.30  |                     |                                                             |                             |
|        | 12                                           | 400                                       | M16x1,5                                         | 21      | 24,5 | 32,5 | 17,5 | 32,5            | 16   | 10   | 24   | 22   | 22   | 14,71  | FI-RST-12LM-DK-B-W3 |                                                             |                             |
|        | .47                                          | 5800                                      |                                                 | .83     | .96  | 1.28 | .69  | 1.28            | .63  | .39  | .94  | .87  | .87  | 32.35  |                     |                                                             |                             |
|        | 15                                           | 400                                       | M18x1,5                                         | 23      | 27   | 35   | 20   | 37              | 18,5 | 10   | 27   | 24   | 27   | 10,80  | FI-RST-15LM-DK-B-W3 |                                                             |                             |
|        | .59                                          | 5800                                      |                                                 | .91     | 1.06 | 1.38 | .79  | 1.46            | .73  | .39  | 1.06 | .94  | 1.06 | 23.76  |                     |                                                             |                             |
|        | 18                                           | 400                                       | M22x1,5                                         | 27      | 28   | 37   | 20,5 | 43              | 21,5 | 12   | 30   | 27   | 32   | 31,81  | FI-RST-18LM-DK-B-W3 |                                                             |                             |
|        | .71                                          | 5800                                      |                                                 | 1.06    | 1.10 | 1.46 | .81  | 1.69            | .85  | .47  | 1.18 | 1.06 | 1.26 | 69.97  |                     |                                                             |                             |
|        | 22                                           | 250                                       | M26x1,5                                         | 31      | 34,5 | 43,5 | 27   | 48              | 24   | 16   | 36   | 32   | 36   | 44,90  | FI-RST-22LM-DK-B-W3 |                                                             |                             |
|        | .87                                          | 3625                                      |                                                 | 1.22    | 1.36 | 1.71 | 1.06 | 1.89            | .94  | .63  | 1.42 | 1.26 | 1.42 | 98.78  |                     |                                                             |                             |
|        | 28                                           | 250                                       | M33x2                                           | 39      | 39   | 48   | 31,5 | 59              | 30,5 | 18   | 46   | 41   | 41   | 85,11  | FI-RST-28LM-DK-B-W3 |                                                             |                             |
|        | 1.10                                         | 3625                                      |                                                 | 1.54    | 1.54 | 1.89 | 1.24 | 2.32            | 1.20 | .71  | 1.81 | 1.61 | 1.61 | 187.23 |                     |                                                             |                             |
|        | 35                                           | 250                                       | M42x2                                           | 49      | 46   | 57   | 35,5 | 70              | 35,5 | 20   | 55   | 50   | 50   | 145,36 | FI-RST-35LM-DK-B-W3 |                                                             |                             |
|        | 1.38                                         | 3625                                      |                                                 | 1.93    | 1.81 | 2.24 | 1.40 | 2.76            | 1.40 | .79  | 2.17 | 1.97 | 1.97 | 319.78 |                     |                                                             |                             |
|        | 42                                           | 250                                       | M48x2                                           | 55      | 51   | 63   | 40   | 80              | 40,5 | 22   | 65   | 55   | 60   | 218,24 | FI-RST-42LM-DK-B-W3 |                                                             |                             |
|        | 1.65                                         | 3625                                      |                                                 | 2.17    | 2.01 | 2.48 | 1.57 | 3.15            | 1.59 | .87  | 2.56 | 2.17 | 2.36 | 480.13 |                     |                                                             |                             |
| S      | 6                                            | 500                                       | M12x1,5                                         | 17,8    | 23   | 31   | 16   | 27              | 13,5 | 10   | 19   | 19   | 17   | 11,23  | FI-RST-06SM-DK-B-W3 |                                                             |                             |
|        | .24                                          | 7250                                      |                                                 | .70     | .91  | 1.22 | .63  | 1.06            | .53  | .39  | .75  | .75  | .67  | 24.71  |                     |                                                             |                             |
|        | 8                                            | 500                                       | M14x1,5                                         | 17,8    | 23   | 31   | 16   | 27              | 13,5 | 10   | 19   | 19   | 19   | 12,02  | FI-RST-08SM-DK-B-W3 |                                                             |                             |
|        | .31                                          | 7250                                      |                                                 | .70     | .91  | 1.22 | .63  | 1.06            | .53  | .39  | .75  | .75  | .75  | 26.45  |                     |                                                             |                             |
|        | 10                                           | 500                                       | M16x1,5                                         | 21      | 25,5 | 34,5 | 18   | 32,5            | 16   | 10   | 24   | 22   | 22   | 19,01  | FI-RST-10SM-DK-B-W3 |                                                             |                             |
|        | .39                                          | 7250                                      |                                                 | .83     | 1.00 | 1.36 | .71  | 1.28            | .63  | .39  | .94  | .87  | .87  | 41.81  |                     |                                                             |                             |
|        | 12                                           | 400                                       | M18x1,5                                         | 23      | 27   | 36   | 19,5 | 37              | 18,5 | 10   | 27   | 24   | 24   | 21,32  | FI-RST-12SM-DK-B-W3 |                                                             |                             |
|        | .47                                          | 5800                                      |                                                 | .91     | 1.06 | 1.42 | .77  | 1.46            | .73  | .39  | 1.06 | .94  | .94  | 46.90  |                     |                                                             |                             |
|        | 14                                           | 400                                       | M20x1,5                                         | 25      | 30   | 40   | 22   | 41              | 19,5 | 12   | 30   | 27   | 27   | 30,96  | FI-RST-14SM-DK-B-W3 |                                                             |                             |
|        | .55                                          | 5800                                      |                                                 | .98     | 1.18 | 1.57 | .87  | 1.61            | .77  | .47  | 1.18 | 1.06 | 1.06 | 68.11  |                     |                                                             |                             |
|        | 16                                           | 400                                       | M22x1,5                                         | 27      | 30   | 40   | 21,5 | 43              | 21,5 | 12   | 30   | 27   | 30   | 32,41  | FI-RST-16SM-DK-B-W3 |                                                             |                             |
|        | .63                                          | 5800                                      |                                                 | 1.06    | 1.18 | 1.57 | .85  | 1.69            | .85  | .47  | 1.18 | 1.06 | 1.18 | 71.29  |                     |                                                             |                             |
|        | 20                                           | 315                                       | M27x2                                           | 32      | 36,5 | 47,5 | 26   | 48              | 24   | 16   | 36   | 32   | 36   | 16,50  | FI-RST-20SM-DK-B-W3 |                                                             |                             |
|        | .79                                          | 4568                                      |                                                 | 1.26    | 1.44 | 1.87 | 1.02 | 1.89            | .94  | .63  | 1.42 | 1.26 | 1.42 | 36.29  |                     |                                                             |                             |
|        | 25                                           | 250                                       | M33x2                                           | 39      | 43   | 55   | 31   | 59              | 30,5 | 18   | 46   | 41   | 46   | 93,47  | FI-RST-25SM-DK-B-W3 |                                                             |                             |
|        | .98                                          | 3625                                      |                                                 | 1.54    | 1.69 | 2.17 | 1.22 | 2.32            | 1.20 | .71  | 1.81 | 1.61 | 1.81 | 205.62 |                     |                                                             |                             |
|        | 30                                           | 250                                       | M42x2                                           | 49      | 50   | 63   | 36,5 | 70              | 35,5 | 20   | 55   | 50   | 50   | 153,16 | FI-RST-30SM-DK-B-W3 |                                                             |                             |
|        | 1.18                                         | 3625                                      |                                                 | 1.93    | 1.97 | 2.48 | 1.44 | 2.76            | 1.40 | .79  | 2.17 | 1.97 | 1.97 | 336.94 |                     |                                                             |                             |
|        | 38                                           | 250                                       | M48x2                                           | 55      | 57   | 72   | 41   | 80              | 40,5 | 22   | 65   | 55   | 60   | 237,04 | FI-RST-38SM-DK-B-W3 |                                                             |                             |
|        | 1.50                                         | 3625                                      |                                                 | 2.17    | 2.24 | 2.83 | 1.61 | 3.15            | 1.59 | .87  | 2.56 | 2.17 | 2.36 | 521.49 |                     |                                                             |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is NBR (Buna-N®).



For use with aggressive media and/or at elevated temperatures, please remove the O-ring from the groove located on the banjo bolt prior to installation.

Port acc. to DIN 3852-1 (Form X) / ISO 9974-1

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.  
Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

**\*FI-RST\*-10\*L\*M\*-DK\*-B\*-W3\*-MS**

\* Banjo Tee (High-Pressure Version) **FI-RST**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Metric Parallel Thread **M**

If required, please indicate special sizes, e.g. M12x1.5!

\* Seal Type External Metallic Sealing Ring **-DK**

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only **—**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

### Spare Parts / Accessories



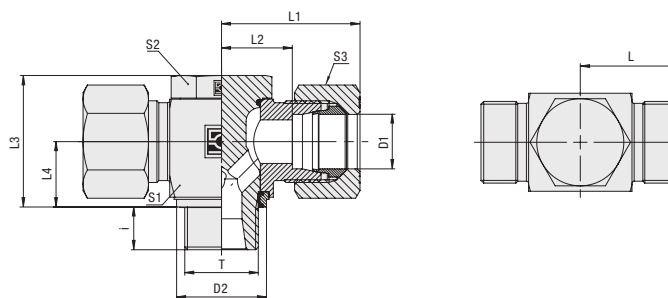
External Metallic Sealing Ring  
Type **FI-DKR** Page 245



O-Ring  
Type **O-RING** Page 239



## Banjo Tee (High-Pressure Version) Type FI-RST-...-R-WD • Series L / S



### Whitworth Parallel Pipe Thread (BSPP)

### Retaining Ring with Captive Seal

#### Ordering Codes

#### \*FI-RST\*-10\*L\*R\*-WD\*-B\*-W3\*-MS

\* Banjo Tee (High-Pressure Version) **FI-RST**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Whitworth Parallel  
Pipe Thread (BSPP) **R**

If required, please indicate special sizes, e.g. R1/8!

\* Seal Type Retaining Ring with Captive Seal **-WD**

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only **—**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

#### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

#### Spare Parts / Accessories



Retaining Ring with Captive Seal  
Type **FI-DIR** Page 245



O-Ring  
Type **O-RING** Page 239

| Series | Tube OD<br>(mm/in) | PB<br>(bar/psi) | Dimensions<br>(mm/in)                                   | Weight<br>(kg/lbs) ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|---------------------------------------------------------|------------------------|-----------------------------|
|        | D1                 |                 | Thread T D2 L L1 <sup>1</sup> L2 L3 L4 i S1 S2 S3       | per 100                |                             |
| L      | 6                  | 500             | G 1/8 14,9 20 28 13 21 10,5 8 14 14 14 4,31             | 4,31                   | FI-RST-06LR-WD-B-W3         |
|        | .24                | 7250            | .59 .79 1.10 .51 .83 .41 .31 .55 .55 .55 9.48           | 9.48                   |                             |
|        | 8                  | 500             | G 1/4 18,8 21 29 14 27 13,5 10 19 19 17 8,60            | 8,60                   | FI-RST-08LR-WD-B-W3         |
|        | .31                | 7250            | .74 .83 1.14 .55 1.06 .53 .39 .75 .75 .67 18.92         | 18.92                  |                             |
|        | 10                 | 500             | G 1/4 18,8 22 30 15 27 13,5 10 19 19 19 8,92            | 8,92                   | FI-RST-10LR-WD-B-W3         |
|        | .39                | 7250            | .74 .87 1.18 .59 1.06 .53 .39 .75 .75 .75 19.63         | 19.63                  |                             |
|        | 12                 | 400             | G 3/8 22,8 24,5 32,5 17,5 32,5 16 12 24 22 22 14,78     | 14,78                  | FI-RST-12LR-WD-B-W3         |
|        | .47                | 5800            | .90 .96 1.28 .69 1.28 .63 .47 .94 .87 .87 32.52         | 32.52                  |                             |
|        | 15                 | 400             | G 1/2 27,9 27 35 21 43 19,5 14 30 27 27 27,43           | 27,43                  | FI-RST-15LR-WD-B-W3         |
|        | .59                | 5800            | 1.10 1.06 1.38 .83 1.69 .77 .55 1.18 1.06 1.06 60.35    | 60.35                  |                             |
|        | 18                 | 400             | G 1/2 27,9 28 37 20,5 43 21,5 12 30 27 32 1,52          | 1,52                   | FI-RST-18LR-WD-B-W3         |
|        | .71                | 5800            | 1.10 1.10 1.46 .81 1.69 .85 .47 1.18 1.06 1.26 3.34     | 3.34                   |                             |
|        | 22                 | 250             | G 3/4 32,9 34,5 43,5 27 48 24 16 36 32 36 45,42         | 45,42                  | FI-RST-22LR-WD-B-W3         |
|        | .87                | 3625            | 1.30 1.36 1.71 1.06 1.89 .94 .63 1.42 1.26 1.42 99.91   | 99.91                  |                             |
|        | 28                 | 250             | G 1 40,9 39 48 31,5 59 30,5 18 46 41 41 85,48           | 85,48                  | FI-RST-28LR-WD-B-W3         |
|        | 1.10               | 3625            | 1.61 1.54 1.89 1.24 2.32 1.20 .71 1.81 1.61 1.61 188.06 | 188.06                 |                             |
|        | 35                 | 250             | G 1 1/4 50,9 46 57 35,5 70 35,5 20 55 50 50 145,79      | 145,79                 | FI-RST-35LR-WD-B-W3         |
|        | 1.38               | 3625            | 2.00 1.81 2.24 1.40 2.76 1.40 .79 2.17 1.97 1.97 320.75 | 320.75                 |                             |
|        | 42                 | 250             | G 1 1/2 55,9 51 63 40 80 40,5 22 65 55 60 217,42        | 217,42                 | FI-RST-42LR-WD-B-W3         |
|        | 1.65               | 3625            | 2.20 2.01 2.48 1.57 3.15 1.59 .87 2.56 2.17 2.36 478.33 | 478.33                 |                             |
| S      | 6                  | 500             | G 1/4 18,8 23 31 16 27 13,5 10 19 19 19 9,30            | 9,30                   | FI-RST-06SR-WD-B-W3         |
|        | .24                | 7250            | .74 .91 1.22 .63 1.06 .53 .39 .75 .75 .67 20.46         | 20.46                  |                             |
|        | 8                  | 500             | G 1/4 18,8 23 31 16 27 13,5 10 19 19 19 9,97            | 9,97                   | FI-RST-08SR-WD-B-W3         |
|        | .31                | 7250            | .74 .91 1.22 .63 1.06 .53 .39 .75 .75 .75 21.93         | 21.93                  |                             |
|        | 10                 | 500             | G 3/8 22,8 25,5 34,5 18 32,5 16 10 24 22 22 19,08       | 19,08                  | FI-RST-10SR-WD-B-W3         |
|        | .39                | 7250            | .90 1.00 1.36 .71 1.28 .63 .39 .94 .87 .87 41.98        | 41.98                  |                             |
|        | 12                 | 400             | G 3/8 22,8 27 36 18 32,5 16 10 24 22 24 16,36           | 16,36                  | FI-RST-12SR-WD-B-W3         |
|        | .47                | 5800            | .90 1.06 1.42 .71 1.28 .63 .39 .94 .87 .94 35.99        | 35.99                  |                             |
|        | 14                 | 400             | G 1/2 27,9 30 40 22 41 19,5 14 30 27 30 31,86           | 31,86                  | FI-RST-14SR-WD-B-W3         |
|        | .55                | 5800            | 1.10 1.18 1.57 .87 1.61 .77 .55 1.18 1.06 1.06 70.09    | 70.09                  |                             |
|        | 16                 | 400             | G 1/2 27,9 30 40 21,5 43 21,5 12 30 27 30 29,20         | 29,20                  | FI-RST-16SR-WD-B-W3         |
|        | .63                | 5800            | 1.10 1.18 1.57 .85 1.69 .85 .47 1.18 1.06 1.18 64.24    | 64.24                  |                             |
|        | 20                 | 315             | G 3/4 32,9 36,5 47,5 26 48 24 16 36 32 36 48,66         | 48,66                  | FI-RST-20SR-WD-B-W3         |
|        | .79                | 4568            | 1.30 1.44 1.87 1.02 1.89 .94 .63 1.42 1.26 1.42 107.05  | 107.05                 |                             |
|        | 25                 | 250             | G 1 40,9 43 55 31 59 30,5 18 46 41 46 93,55             | 93,55                  | FI-RST-25SR-WD-B-W3         |
|        | .98                | 3625            | 1.61 1.69 2.17 1.22 2.32 1.20 .71 1.81 1.61 1.81 205.80 | 205.80                 |                             |
|        | 30                 | 250             | G 1 1/4 50,9 50 63 36,5 70 35,5 20 55 50 50 153,59      | 153,59                 | FI-RST-30SR-WD-B-W3         |
|        | 1.18               | 3625            | 2.00 1.97 2.48 1.44 2.76 1.40 .79 2.17 1.97 1.97 337.91 | 337.91                 |                             |
|        | 38                 | 250             | G 1 1/2 55,9 57 72 41 80 40,5 22 65 55 60 236,22        | 236,22                 | FI-RST-38SR-WD-B-W3         |
|        | 1.50               | 3625            | 2.20 2.24 2.83 1.61 3.15 1.59 .87 2.56 2.17 2.36 519.69 | 519.69                 |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is NBR (Buna-N®).

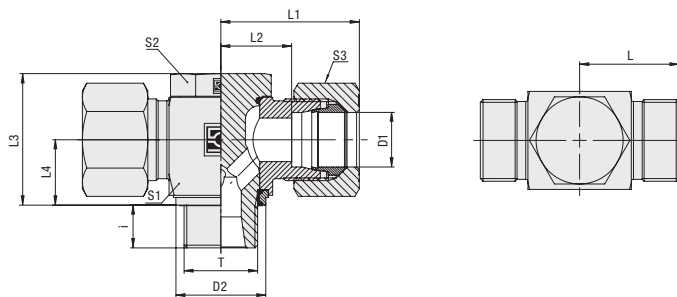
Port acc. to DIN 3852-2 (Form X) / ISO 1179-1

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.







## Banjo Tee (High-Pressure Version) Type FI-RST-...-M-WD ■ Series L / S



### Retaining Ring with Captive Seal

### Metric Parallel Thread

| Series | Tube OD<br>( <sup>mm</sup> / <sub>in</sub> ) | PB<br>( <sup>bar</sup> / <sub>psi</sub> ) | Dimensions |      |      |                 |      |      |      |     |      |      |      |        |                     | Weight<br>( <sup>kg</sup> / <sub>lbs</sub> ) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|----------------------------------------------|-------------------------------------------|------------|------|------|-----------------|------|------|------|-----|------|------|------|--------|---------------------|-------------------------------------------------------------|-----------------------------|
|        |                                              |                                           | D1         | D2   | L    | L1 <sup>1</sup> | L2   | L3   | L4   | i   | S1   | S2   | S3   |        |                     |                                                             |                             |
| L      | 6                                            | 500                                       | M10x1      | 14,9 | 20   | 28              | 13   | 21   | 10   | 8   | 14   | 14   | 14   | 5,83   | FI-RST-06LM-WD-B-W3 |                                                             |                             |
|        | .24                                          | 7250                                      |            | .59  | .79  | 1.10            | .51  | .83  | .39  | .31 | .55  | .55  | .55  | 12.83  |                     |                                                             |                             |
|        | 8                                            | 500                                       | M12x1,5    | 17,8 | 21   | 29              | 14   | 27   | 13,5 | 10  | 19   | 19   | 17   | 9,66   | FI-RST-08LM-WD-B-W3 |                                                             |                             |
|        | .31                                          | 7250                                      |            | .70  | .83  | 1.14            | .55  | 1.06 | .53  | .39 | .75  | .75  | .67  | 21.25  |                     |                                                             |                             |
|        | 10                                           | 500                                       | M14x1,5    | 19,9 | 22   | 30              | 15   | 27   | 13,5 | 10  | 19   | 19   | 19   | 13,25  | FI-RST-10LM-WD-B-W3 |                                                             |                             |
|        | .39                                          | 7250                                      |            | .78  | .87  | 1.18            | .59  | 1.06 | .53  | .39 | .75  | .75  | .75  | 29.15  |                     |                                                             |                             |
|        | 12                                           | 400                                       | M16x1,5    | 22,8 | 24,5 | 32,5            | 17,5 | 32,5 | 16   | 10  | 24   | 22   | 22   | 14,78  | FI-RST-12LM-WD-B-W3 |                                                             |                             |
|        | .47                                          | 5800                                      |            | .90  | .96  | 1.28            | .69  | 1.28 | .63  | .39 | .94  | .87  | .87  | 32.52  |                     |                                                             |                             |
|        | 15                                           | 400                                       | M18x1,5    | 24,9 | 27   | 35              | 20   | 37   | 18,5 | 10  | 27   | 24   | 27   | 23,90  | FI-RST-15LM-WD-B-W3 |                                                             |                             |
|        | .59                                          | 5800                                      |            | .98  | 1.06 | 1.38            | .79  | 1.46 | .73  | .39 | 1.06 | .94  | 1.06 | 52.58  |                     |                                                             |                             |
|        | 18                                           | 400                                       | M22x1,5    | 27,9 | 28   | 37              | 20,5 | 43   | 21,5 | 12  | 30   | 27   | 32   | 29,91  | FI-RST-18LM-WD-B-W3 |                                                             |                             |
|        | .71                                          | 5800                                      |            | 1.10 | 1.10 | 1.46            | .81  | 1.69 | .85  | .47 | 1.18 | 1.06 | 1.26 | 65.79  |                     |                                                             |                             |
|        | 22                                           | 250                                       | M26x1,5    | 32,5 | 34,5 | 43,5            | 27   | 48   | 24   | 16  | 36   | 32   | 36   | 42,56  | FI-RST-22LM-WD-B-W3 |                                                             |                             |
|        | .87                                          | 3625                                      |            | 1.28 | 1.36 | 1.71            | 1.06 | 1.89 | .94  | .63 | 1.42 | 1.26 | 1.42 | 93.64  |                     |                                                             |                             |
|        | 28                                           | 250                                       | M33x2      | 40,9 | 39   | 48              | 31,5 | 59   | 30,5 | 18  | 46   | 41   | 41   | 95,43  | FI-RST-28LM-WD-B-W3 |                                                             |                             |
|        | 1.10                                         | 3625                                      |            | 1.61 | 1.54 | 1.89            | 1.24 | 2.32 | 1.20 | .71 | 1.81 | 1.61 | 1.61 | 209.95 |                     |                                                             |                             |
|        | 35                                           | 250                                       | M42x2      | 50,9 | 46   | 57              | 35,5 | 70   | 35,5 | 20  | 55   | 50   | 50   | 145,36 | FI-RST-35LM-WD-B-W3 |                                                             |                             |
|        | 1.38                                         | 3625                                      |            | 2.00 | 1.81 | 2.24            | 1.40 | 2.76 | 1.40 | .79 | 2.17 | 1.97 | 1.97 | 319.78 |                     |                                                             |                             |
|        | 42                                           | 250                                       | M48x2      | 55,9 | 51   | 63              | 40   | 80   | 40,5 | 22  | 65   | 55   | 60   | 221,72 | FI-RST-42LM-WD-B-W3 |                                                             |                             |
|        | 1.65                                         | 3625                                      |            | 2.20 | 2.01 | 2.48            | 1.57 | 3.15 | 1.59 | .87 | 2.56 | 2.17 | 2.36 | 487.79 |                     |                                                             |                             |
| S      | 6                                            | 500                                       | M12x1,5    | 17,8 | 23   | 31              | 16   | 27   | 13,5 | 10  | 19   | 19   | 17   | 10,08  | FI-RST-06SM-WD-B-W3 |                                                             |                             |
|        | .24                                          | 7250                                      |            | .70  | .91  | 1.22            | .63  | 1.06 | .53  | .39 | .75  | .75  | .67  | 22.17  |                     |                                                             |                             |
|        | 8                                            | 500                                       | M14x1,5    | 19,9 | 23   | 31              | 16   | 27   | 13,5 | 10  | 19   | 19   | 19   | 10,12  | FI-RST-08SM-WD-B-W3 |                                                             |                             |
|        | .31                                          | 7250                                      |            | .78  | .91  | 1.22            | .63  | 1.06 | .53  | .39 | .75  | .75  | .75  | 22.26  |                     |                                                             |                             |
|        | 10                                           | 500                                       | M16x1,5    | 22,8 | 25,5 | 34,5            | 18   | 32,5 | 16   | 10  | 24   | 22   | 22   | 14,18  | FI-RST-10SM-WD-B-W3 |                                                             |                             |
|        | .39                                          | 7250                                      |            | .90  | 1.00 | 1.36            | .71  | 1.28 | .63  | .39 | .94  | .87  | .87  | 31.19  |                     |                                                             |                             |
|        | 12                                           | 400                                       | M18x1,5    | 24,9 | 27   | 36              | 19,5 | 37   | 18,5 | 10  | 27   | 24   | 24   | 19,66  | FI-RST-12SM-WD-B-W3 |                                                             |                             |
|        | .47                                          | 5800                                      |            | .98  | 1.06 | 1.42            | .77  | 1.46 | .73  | .39 | 1.06 | .94  | .94  | 43.26  |                     |                                                             |                             |
|        | 14                                           | 400                                       | M20x1,5    | 27,5 | 30   | 40              | 22   | 41   | 19,5 | 12  | 30   | 27   | 27   | 29,38  | FI-RST-14SM-WD-B-W3 |                                                             |                             |
|        | .55                                          | 5800                                      |            | 1.08 | 1.18 | 1.57            | .87  | 1.61 | .77  | .47 | 1.18 | 1.06 | 1.06 | 64.63  |                     |                                                             |                             |
|        | 16                                           | 400                                       | M22x1,5    | 27,9 | 30   | 40              | 21,5 | 43   | 21,5 | 12  | 30   | 27   | 30   | 35,10  | FI-RST-16SM-WD-B-W3 |                                                             |                             |
|        | .63                                          | 5800                                      |            | 1.10 | 1.18 | 1.57            | .85  | 1.69 | .85  | .47 | 1.18 | 1.06 | 1.18 | 77.22  |                     |                                                             |                             |
|        | 20                                           | 315                                       | M27x2      | 32,9 | 36,5 | 47,5            | 26   | 48   | 24   | 16  | 36   | 32   | 36   | 45,86  | FI-RST-20SM-WD-B-W3 |                                                             |                             |
|        | .79                                          | 4568                                      |            | 1.30 | 1.44 | 1.87            | 1.02 | 1.89 | .94  | .63 | 1.42 | 1.26 | 1.42 | 100.89 |                     |                                                             |                             |
|        | 25                                           | 250                                       | M33x2      | 40,9 | 43   | 55              | 31   | 59   | 30,5 | 18  | 46   | 41   | 46   | 82,57  | FI-RST-25SM-WD-B-W3 |                                                             |                             |
|        | .98                                          | 3625                                      |            | 1.61 | 1.69 | 2.17            | 1.22 | 2.32 | 1.20 | .71 | 1.81 | 1.61 | 1.81 | 181.64 |                     |                                                             |                             |
|        | 30                                           | 250                                       | M42x2      | 50,9 | 50   | 63              | 36,5 | 70   | 35,5 | 20  | 55   | 50   | 50   | 150,16 | FI-RST-30SM-WD-B-W3 |                                                             |                             |
|        | 1.18                                         | 3625                                      |            | 2.00 | 1.97 | 2.48            | 1.44 | 2.76 | 1.40 | .79 | 2.17 | 1.97 | 1.97 | 330.36 |                     |                                                             |                             |
|        | 38                                           | 250                                       | M48x2      | 55,9 | 57   | 72              | 41   | 80   | 40,5 | 22  | 65   | 55   | 60   | 236,35 | FI-RST-38SM-WD-B-W3 |                                                             |                             |
|        | 1.50                                         | 3625                                      |            | 2.20 | 2.24 | 2.83            | 1.61 | 3.15 | 1.59 | .87 | 2.56 | 2.17 | 2.36 | 519.97 |                     |                                                             |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is NBR (Buna-N®).

Port acc. to DIN 3852-1 (Form X) / ISO 9974-1

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

#### \*FI-RST\*-10\*L\*M\*-WD\*-B\*-W3\*-MS

\* Banjo Tee (High-Pressure Version) **FI-RST**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Metric Parallel Thread **M**

If required, please indicate special sizes, e.g. M12x1.5!

\* Seal Type Retaining Ring with Captive Seal **-WD**

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only **—**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts

 Cutting Ring Type **FI-DS** Page 28

 Soft-Sealing Cutting Ring Type **FI-WDDS** Page 29

 Support Sleeve Type **FI-VH** Page 31

 STAUFF Form EVO Sealing Ring Type **FI-FD** Page 32

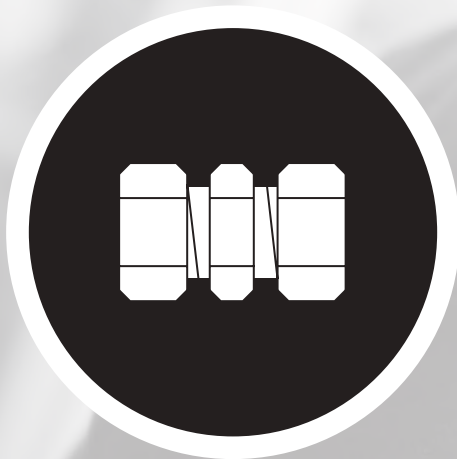
 Union Nut Type **FI-M** Page 33

 37° Flared Tube Fitting Set Type **FI-AB** Page 37

### Spare Parts / Accessories

 Retaining Ring with Captive Seal Type **FI-DIR** Page 245

 O-Ring Type **O-RING** Page 239

## Swivel Elbow

FI-DGWE

196-197



**Whitworth Parallel Pipe Thread (BSPP) /  
Retaining Ring with Captive Seal**  
FI-DGWE-...-R-WD

196



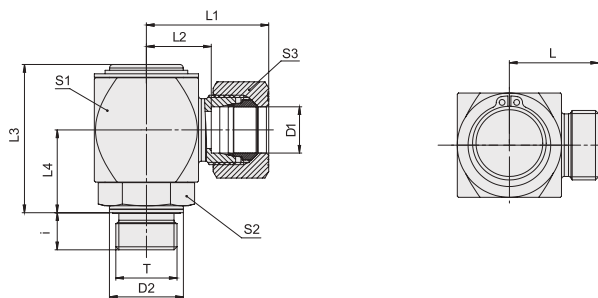
**Metric Parallel Thread /  
Retaining Ring with Captive Seal**  
FI-DGWE-...-M-WD

197



## Swivel Elbow

### Type FI-DGWE-...-R-WD ▪ Series L / S



### Ordering Codes

#### \*FI-DGWE\*-10\*L\*R\*-WD\*-B\*-W66\*-MS

\* Swivel Elbow **FI-DGWE**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Whitworth Parallel Pipe Thread (BSPP) **R**

If required, please indicate special sizes, e.g. R1/8!

\* Seal Type Profile Sealing Ring **-WD**

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc-plated and thick-film-passivated **-W66**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only **—**  
Fitting body supplied with cutting ring and union nut **-MS**  
Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

### Spare Parts / Accessories

|  |                                         |          |
|--|-----------------------------------------|----------|
|  | Profile Sealing Ring<br>Type <b>WDG</b> | Page 238 |
|--|-----------------------------------------|----------|

### Whitworth Parallel Pipe Thread (BSPP)

### Profile Sealing Ring

| Series | Tube OD<br>(mm/in) | PN<br>(bar/psi) | Dimensions<br>(mm/in)                                       | Torque<br>(Nm/ft-lb)                                          | Weight<br>(kg/lbs) ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-------------------------------------------------------------|---------------------------------------------------------------|------------------------|-----------------------------|
|        | D1                 |                 | T D2 L L1 <sup>1</sup> L2 L3 L4 i S1 S2 S3 Thread T per 100 |                                                               |                        |                             |
| L      | 6                  | 250             | G 1/8                                                       | 14 23 31 16 40 21 8 27 19 14 18 16,00                         |                        | FI-DGWE-06LR-WD-B-W66       |
|        | .24                | 3625            |                                                             | .55 .91 1.22 .63 1.57 .83 .31 1.06 .75 .55 13.3 35.20         |                        |                             |
|        | 6                  | 250             | G 1/4                                                       | 19 23 27 16 41 22 12 27 19 14 40 16,8                         |                        | FI-DGWE-06LR1/4-WD-B-W66    |
|        | .24                | 3625            |                                                             | .75 .91 1.06 .63 1.61 .87 .47 1.06 .75 .55 29.6 36.96         |                        |                             |
|        | 8                  | 250             | G 1/4                                                       | 19 25 33 18 46 25 12 30 22 17 40 23,00                        |                        | FI-DGWE-08LR-WD-B-W66       |
|        | .31                | 3625            |                                                             | .75 .98 1.30 .71 1.81 .98 .47 1.18 .87 .67 29.6 50.60         |                        |                             |
|        | 10                 | 250             | G 1/4                                                       | 19 26 34 19 46 25 12 30 22 19 40 23,40                        |                        | FI-DGWE-10LR-WD-B-W66       |
|        | .39                | 3625            |                                                             | .75 1.02 1.34 .75 1.81 .98 .47 1.18 .87 .75 29.6 51.48        |                        |                             |
|        | 10                 | 250             | G 3/8                                                       | 22 27 35 20 48 27 12 32 24 19 80 27,50                        |                        | FI-DGWE-10LR3/8-WD-B-W66    |
|        | .39                | 3625            |                                                             | .87 1.06 1.38 .79 1.89 1.06 .47 1.26 .94 .75 59.2 60.50       |                        |                             |
|        | 12                 | 250             | G 3/8                                                       | 22 27 35 20 48 27 12 32 24 22 80 28,00                        |                        | FI-DGWE-12LR-WD-B-W66       |
|        | .47                | 3625            |                                                             | .87 1.06 1.38 .79 1.89 1.06 .47 1.26 .94 .87 59.2 61.60       |                        |                             |
|        | 12                 | 250             | G 1/2                                                       | 27 29 37 22 55 30 14 36 27 22 110 38,80                       |                        | FI-DGWE-12LR1/2-WD-B-W66    |
|        | .47                | 3625            |                                                             | 1.06 1.14 1.46 .87 2.17 1.18 .55 1.42 1.06 .87 81.4 85.36     |                        |                             |
|        | 15                 | 250             | G 1/2                                                       | 27 32 40 25 59 33 14 40 32 27 110 52,80                       |                        | FI-DGWE-15LR-WD-B-W66       |
|        | .59                | 3625            |                                                             | 1.06 1.26 1.57 .98 2.32 1.30 .55 1.57 1.26 1.06 81.4 116.16   |                        |                             |
|        | 18                 | 160             | G 1/2                                                       | 27 32 41 24,5 59 33 14 40 32 32 110 52,60                     |                        | FI-DGWE-18LR-WD-B-W66       |
|        | .71                | 2320            |                                                             | 1.06 1.26 1.61 .96 2.32 1.30 .55 1.57 1.26 1.26 81.40 115.72  |                        |                             |
|        | 22                 | 160             | G 3/4                                                       | 32 36 45 28,5 66 35 16 45 36 36 180 72,00                     |                        | FI-DGWE-22LR-WD-B-W66       |
|        | .87                | 2320            |                                                             | 1.26 1.42 1.77 1.12 2.60 1.38 .63 1.77 1.42 1.42 133.2 158.40 |                        |                             |
|        | 28                 | 100             | G 1                                                         | 40 41 50 33,5 78 41 18 55 41 41 300 126,70                    |                        | FI-DGWE-28LR-WD-B-W66       |
|        | 1.10               | 1450            |                                                             | 1.57 1.61 1.97 1.32 3.07 1.61 .71 2.17 1.61 1.61 222.0 278.74 |                        |                             |
|        | 35                 | 100             | G 1 1/4                                                     | 50 48 59 37,5 92 51 20 65 50 50 470 208,00                    |                        | FI-DGWE-35LR-WD-B-W66       |
|        | 1.38               | 1450            |                                                             | 1.97 1.89 2.32 1.48 3.62 2.01 .79 2.56 1.97 1.97 347.8 457.60 |                        |                             |
|        | 42                 | 100             | G 1 1/2                                                     | 55 53 65 42 102 56 22 75 55 60 540 294,00                     |                        | FI-DGWE-42LR-WD-B-W66       |
|        | 1.65               | 1450            |                                                             | 2.17 2.09 2.56 1.65 4.02 2.20 .87 2.95 2.17 2.36 399.6 646.80 |                        |                             |
|        | 6                  | 400             | G 1/4                                                       | 19 25 33 18 41 22 12 27 19 17 50 17,40                        |                        | FI-DGWE-06SR-WD-B-W66       |
|        | .24                | 5800            |                                                             | .75 .98 1.30 .71 1.61 .87 .47 1.06 .75 .67 37.0 38.28         |                        |                             |
| S      | 8                  | 400             | G 1/4                                                       | 19 25 33 18 41 22 12 27 19 19 50 18,00                        |                        | FI-DGWE-08SR-WD-B-W66       |
|        | .31                | 5800            |                                                             | .75 .98 1.30 .71 1.61 .87 .47 1.06 .75 .75 37.0 39.60         |                        |                             |
|        | 10                 | 400             | G 3/8                                                       | 22 27 36 19,5 46 25 12 30 22 22 80 24,20                      |                        | FI-DGWE-10SR-WD-B-W66       |
|        | .39                | 5800            |                                                             | .87 1.06 1.42 .77 1.81 .98 .47 1.18 .87 .87 59.2 53.24        |                        |                             |
|        | 12                 | 400             | G 3/8                                                       | 22 28 37 20,5 48 27 12 32 24 24 80 28,80                      |                        | FI-DGWE-12SR-WD-B-W66       |
|        | .47                | 5800            |                                                             | .87 1.10 1.46 .81 1.89 1.06 .47 1.26 .94 .94 59.2 63.36       |                        |                             |
|        | 14                 | 400             | G 1/2                                                       | 27 32 42 24 55 30 14 36 27 30 120 38,00                       |                        | FI-DGWE-14SR-WD-B-W66       |
|        | .55                | 5800            |                                                             | 1.06 1.26 1.65 .94 2.17 1.18 .55 1.42 1.06 1.18 88.8 83.60    |                        |                             |
|        | 16                 | 400             | G 1/2                                                       | 27 34 44 25,5 59 33 14 40 32 30 120 52,80                     |                        | FI-DGWE-16SR-WD-B-W66       |
|        | .63                | 5800            |                                                             | 1.06 1.34 1.73 1.00 2.32 1.30 .55 1.57 1.26 1.18 88.8 116.16  |                        |                             |
|        | 20                 | 250             | G 3/4                                                       | 32 38 49 27,5 66 35 16 45 36 36 180 74,00                     |                        | FI-DGWE-20SR-WD-B-W66       |
|        | .79                | 3625            |                                                             | 1.26 1.50 1.93 1.08 2.60 1.38 .63 1.77 1.42 1.42 133.2 162.80 |                        |                             |
|        | 25                 | 250             | G 1                                                         | 40 45 57 33 78 41 18 55 41 46 300 128,00                      |                        | FI-DGWE-25SR-WD-B-W66       |
|        | .98                | 3625            |                                                             | 1.57 1.77 2.24 1.30 3.07 1.61 .71 2.17 1.61 1.81 222.0 281.60 |                        |                             |
|        | 30                 | 250             | G 1 1/4                                                     | 50 52 65 38,5 92 51 20 65 50 50 470 214,00                    |                        | FI-DGWE-30SR-WD-B-W66       |
|        | 1.18               | 3625            |                                                             | 1.97 2.05 2.56 1.52 3.62 2.01 .79 2.56 1.97 1.97 347.8 470.80 |                        |                             |
|        | 38                 | 250             | G 1 1/2                                                     | 55 59 74 43 102 56 22 75 55 60 560 298,00                     |                        | FI-DGWE-38SR-WD-B-W66       |
|        | 1.50               | 3625            |                                                             | 2.17 2.32 2.91 1.69 4.02 2.20 .87 2.95 2.17 2.36 414.4 655.60 |                        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is NBR (Buna-N®).

Male stud acc. to ISO 1179-2 (Type E)

Port acc. to ISO 1179-1

Torque recommendations for Steel mating material.

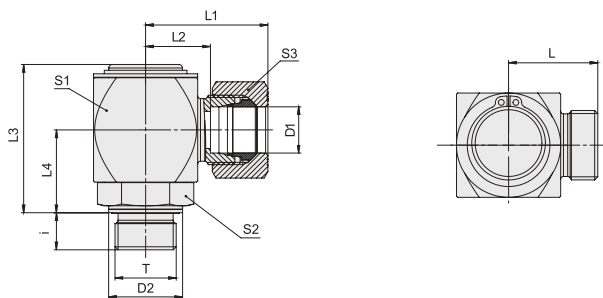
### Maximum Number of Revolutions per Minute for Permanent Operation

| Dimension S1           | (mm) | 27   | 30   | 32   | 36   | 40   | 45   | 55   | 65   | 75   |
|------------------------|------|------|------|------|------|------|------|------|------|------|
|                        | (in) | 1.06 | 1.18 | 1.26 | 1.42 | 1.57 | 1.77 | 2.17 | 2.56 | 2.95 |
| Revolutions Per Minute |      | 6    | 3    | 3    | 1    | 0,6  | 0,5  | 0,4  | 0,2  | 0,2  |

Higher number of revolutions per minute possible when used temporarily / non-permanently.  
Recommendations for use with hydraulic oil at a static working pressure not exceeding 200 bar / 2900 PSI.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended. Please contact STAUFF prior to the assembly for further information.





## Swivel Elbow Type FI-DGWE-...-M-WD • Series L / S



### Profile Sealing Ring

### Metric Parallel Thread

| Series | Tube OD | PN        | Dimensions                                                     | Torque      | Weight       | Ordering Codes <sup>3</sup> |
|--------|---------|-----------|----------------------------------------------------------------|-------------|--------------|-----------------------------|
|        | (mm/in) | (bar/PSI) | (mm/in)                                                        | (N·m/lb·ft) | (kg/lbs) Ca. |                             |
|        | D1      | T         | D2 L L1 L2 L3 L4 i S1 S2 S3 Thread T per 100                   |             |              |                             |
| L      | 6       | 250       | M 10 x 1                                                       | 14          | 23.5         | FI-DGWE-06LM-WD-B-W66       |
|        | .24     | 3625      | .55 .93 1.24 .65 1.57 .83 .31 1.06 .75 .55 13.32 34.32         |             |              |                             |
|        | 6       | 250       | M 12 x 1.5                                                     | 17          | 23.5         | FI-DGWE-06LM12x1.5-WD-B-W66 |
|        | .24     | 3625      | .67 .93 1.24 .65 1.61 .87 .47 1.06 .75 .55 18.50 35.20         |             |              |                             |
|        | 8       | 250       | M 12 x 1.5                                                     | 17          | 23.5         | FI-DGWE-08LM-WD-B-W66       |
|        | .31     | 3625      | .67 .93 1.24 .65 1.61 .87 .47 1.06 .75 .67 18.50 36.96         |             |              |                             |
|        | 8       | 250       | M 14 x 1.5                                                     | 19          | 25           | FI-DGWE-08LM14x1.5-WD-B-W66 |
|        | .31     | 3625      | .75 .98 1.30 .71 1.81 .98 .47 1.18 .87 .67 33.30 51.26         |             |              |                             |
|        | 10      | 250       | M 14 x 1.5                                                     | 19          | 26           | FI-DGWE-10LM-WD-B-W66       |
|        | .39     | 3625      | .75 1.02 1.34 .75 1.81 .98 .47 1.18 .87 .75 33.30 50.60        |             |              |                             |
|        | 10      | 250       | M 16 x 1.5                                                     | 22          | 27           | FI-DGWE-10LM16x1.5-WD-B-W66 |
|        | .39     | 3625      | .87 1.06 1.38 .79 1.89 1.06 .47 1.26 .94 .75 44.40 54.56       |             |              |                             |
|        | 12      | 250       | M 16 x 1.5                                                     | 22          | 27           | FI-DGWE-12LM-WD-B-W66       |
|        | .47     | 3625      | .87 1.06 1.38 .79 1.89 1.06 .47 1.26 .94 .87 44.40 60.50       |             |              |                             |
|        | 12      | 250       | M 18 x 1.5                                                     | 24          | 29           | FI-DGWE-12LM18x1.5-WD-B-W66 |
|        | .47     | 3625      | .94 1.14 1.46 .87 2.17 1.18 .47 1.42 1.06 .87 74.00 86.24      |             |              |                             |
|        | 15      | 250       | M 18 x 1.5                                                     | 24          | 30           | FI-DGWE-15LM-WD-B-W66       |
|        | .59     | 3625      | .94 1.18 1.50 .91 2.17 1.18 .47 1.42 1.06 1.06 74.00 85.80     |             |              |                             |
|        | 15      | 250       | M 22 x 1.5                                                     | 27          | 32           | FI-DGWE-15LM22x1.5-WD-B-W66 |
|        | .59     | 3625      | 1.06 1.26 1.57 .98 2.32 1.30 .55 1.57 1.26 1.06 92.50 115.50   |             |              |                             |
|        | 18      | 160       | M 22 x 1.5                                                     | 27          | 32           | FI-DGWE-18LM-WD-B-W66       |
|        | .71     | 2320      | 1.06 1.26 1.61 .96 2.32 1.30 .55 1.57 1.26 1.26 92.50 117.70   |             |              |                             |
|        | 22      | 160       | M 26 x 1.5                                                     | 32          | 36           | FI-DGWE-22LM-WD-B-W66       |
|        | .87     | 2320      | 1.26 1.44 1.79 1.14 2.60 1.38 .63 1.77 1.42 1.42 133.20 154.00 |             |              |                             |
|        | 28      | 100       | M 33 x 2                                                       | 40          | 41           | FI-DGWE-28LM-WD-B-W66       |
|        | 1.10    | 1450      | 1.57 1.63 2.01 1.34 3.07 1.61 .71 2.17 1.61 1.61 222.00 281.60 |             |              |                             |
|        | 35      | 100       | M 42 x 2                                                       | 50          | 48           | FI-DGWE-35LM-WD-B-W66       |
|        | 1.38    | 1450      | 1.97 1.91 2.34 1.50 3.62 1.97 .79 2.56 1.97 1.97 333.00 453.20 |             |              |                             |
|        | 42      | 100       | M 48 x 2                                                       | 55          | 53           | FI-DGWE-42LM-WD-B-W66       |
|        | 1.65    | 1450      | 2.17 2.11 2.58 1.67 4.02 2.20 .87 2.95 2.17 2.36 399.60 646.80 |             |              |                             |
| S      | 6       | 400       | M 12 x 1.5                                                     | 17          | 25.5         | FI-DGWE-06SM-WD-B-W66       |
|        | .24     | 5800      | .67 1.00 1.32 .73 1.61 .87 .47 1.06 .75 .67 25.90 37.84        |             |              |                             |
|        | 8       | 400       | M 14 x 1.5                                                     | 19          | 25.5         | FI-DGWE-08SM-WD-B-W66       |
|        | .31     | 5800      | .75 1.00 1.32 .73 1.61 .87 .47 1.06 .75 .75 40.70 40.04        |             |              |                             |
|        | 10      | 400       | M 16 x 1.5                                                     | 22          | 27           | FI-DGWE-10SM-WD-B-W66       |
|        | .39     | 5800      | .87 1.06 1.42 .77 1.81 .98 .47 1.18 .87 .87 51.80 52.36        |             |              |                             |
|        | 12      | 400       | M 18 x 1.5                                                     | 24          | 28           | FI-DGWE-12SM-WD-B-W66       |
|        | .47     | 5800      | .94 1.10 1.46 .81 1.89 1.06 .47 1.26 .94 .94 66.60 62.04       |             |              |                             |
|        | 14      | 400       | M 20 x 1.5                                                     | 26          | 32           | FI-DGWE-14SM-WD-B-W66       |
|        | .55     | 5800      | 1.02 1.26 1.65 .94 2.17 1.18 .55 1.42 1.06 1.18 92.50 99.00    |             |              |                             |
|        | 16      | 400       | M 22 x 1.5                                                     | 27          | 34           | FI-DGWE-16SM-WD-B-W66       |
|        | .63     | 5800      | 1.06 1.34 1.73 1.00 2.32 1.30 .55 1.57 1.26 1.18 99.90 117.92  |             |              |                             |
|        | 20      | 250       | M 27 x 2                                                       | 32          | 38           | FI-DGWE-20SM-WD-B-W66       |
|        | .79     | 3625      | 1.26 1.52 1.95 1.10 2.60 1.38 .63 1.77 1.42 1.42 133.20 157.30 |             |              |                             |
|        | 25      | 250       | M 33 x 2                                                       | 40          | 45           | FI-DGWE-25SM-WD-B-W66       |
|        | .98     | 3625      | 1.57 1.79 2.26 1.32 3.07 1.61 .71 2.17 1.61 1.81 229.40 282.04 |             |              |                             |
|        | 30      | 250       | M 42 x 2                                                       | 50          | 52           | FI-DGWE-30SM-WD-B-W66       |
|        | 1.18    | 3625      | 1.97 2.07 2.58 1.54 3.62 2.01 .79 2.56 1.97 1.97 347.80 462.00 |             |              |                             |
|        | 38      | 250       | M 48 x 2                                                       | 55          | 59           | FI-DGWE-38SM-WD-B-W66       |
|        | 1.50    | 3625      | 2.17 2.34 2.93 1.71 4.02 2.20 .87 2.95 2.17 2.36 592.00 660.00 |             |              |                             |

### Ordering Codes

**\*FI-DGWE\*-10\*L\*M\*-WD\*-B\*-W66\*-MS**

\* Swivel Elbow **FI-DGWE**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Metric Parallel Thread **M**

If required, please indicate special sizes, e.g. M27x2!

\* Seal Type Profile Sealing Ring **-WD**

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc-plated and thick-film-passivated **-W66**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Fitting body only **—**

Fitting body supplied with cutting ring and union nut **-MS**

Fitting body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

### Spare Parts / Accessories

|  |                                         |          |
|--|-----------------------------------------|----------|
|  | Profile Sealing Ring<br>Type <b>WDG</b> | Page 238 |
|--|-----------------------------------------|----------|

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Fitting body only.

Standard seal material is NBR (Buna-N®).

Male stud acc. to ISO 9974-2 (Type E)

Port acc. to ISO 9974-1

Torque recommendations for Steel mating material.

### Maximum Number of Revolutions per Minute for Permanent Operation

| Dimension S1           | (mm) | 27   | 30   | 32   | 36   | 40   | 45   | 55   | 65   | 75   |
|------------------------|------|------|------|------|------|------|------|------|------|------|
|                        | (in) | 1.06 | 1.18 | 1.26 | 1.42 | 1.57 | 1.77 | 2.17 | 2.56 | 2.95 |
| Revolutions Per Minute |      | 6    | 3    | 3    | 1    | 0,6  | 0,5  | 0,4  | 0,2  | 0,2  |

Higher number of revolutions per minute possible when used temporarily / non-permanently. Recommendations for use with hydraulic oil at a static working pressure not exceeding 200 bar / 2900 PSI.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.





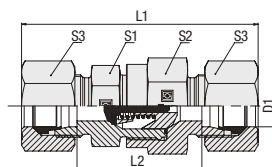




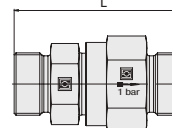
|                                                                                     |                                                                                                                        |         |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|---------|
|    | <b>Check Valve<br/>High-Pressure Version</b><br>FI-RV                                                                  | 200     |
|    | <b>Check Valve<br/>Standard Version</b><br>FI-RVA                                                                      | 201     |
|                                                                                     | <b>Male Stud Check Valve<br/>(Flow from Stud End)</b><br>FI-RVV / FI-RVVA                                              | 202-205 |
|    | <b>Whitworth Parallel Pipe Thread (BSPP) /<br/>Profile Sealing Ring<br/>(High-Pressure Version)</b><br>FI-RVV-...-R-WD | 202     |
|    | <b>Metric Parallel Thread /<br/>Profile Sealing Ring<br/>(High-Pressure Version)</b><br>FI-RVV-...-M-WD                | 203     |
|    | <b>Whitworth Parallel Pipe Thread (BSPP) /<br/>Profile Sealing Ring<br/>(Standard Version)</b><br>FI-RVVA-...-R-WD     | 204     |
|    | <b>Metric Parallel Thread /<br/>Profile Sealing Ring<br/>(Standard Version)</b><br>FI-RVVA-...-M-WD                    | 205     |
|                                                                                     | <b>Male Stud Check Valve<br/>(Flow to Stud End)</b><br>FI-RVZ / FI-RVZA                                                | 206-209 |
|  | <b>Whitworth Parallel Pipe Thread (BSPP) /<br/>Profile Sealing Ring<br/>(High-Pressure Version)</b><br>FI-RVZ-...-R-WD | 206     |
|  | <b>Metric Parallel Thread /<br/>Profile Sealing Ring<br/>(High-Pressure Version)</b><br>FI-RVZ-...-M-WD                | 207     |
|  | <b>Whitworth Parallel Pipe Thread (BSPP) /<br/>Profile Sealing Ring<br/>(Standard Version)</b><br>FI-RVZA-...-R-WD     | 208     |
|  | <b>Metric Parallel Thread /<br/>Profile Sealing Ring<br/>(Standard Version)</b><br>FI-RVZA-...-M-WD                    | 209     |
|                                                                                     | <b>Female Stud Check Valve</b><br>FI-RVI / FI-RVIA                                                                     | 210-211 |
|  | <b>Female Whitworth Parallel Pipe Thread (BSPP)<br/>(High-Pressure Version)</b><br>FI-RVI-...-R                        | 210     |
|  | <b>Female Whitworth Parallel Pipe Thread (BSPP)<br/>(Standard Version)</b><br>FI-RVIA-...-R                            | 211     |
|  | <b>Check Valve Installation Kit</b><br>FI-VES                                                                          | 212     |
|  | <b>Alternating Valve</b><br>FI-WV                                                                                      | 213     |



## Check Valve High-Pressure Version Type FI-RV • Series L / S



Standard Opening Pressure: 1 bar / 14.5 PSI



### Ordering Codes

**\*FI-RV\*-10\*L\*-W3\*-1\*-MS**

\* Check Valve

**FI-RV**

\* Outside Tube Diameter D1 (in mm)

**-10**

\* Series

Light Series

**L**

Heavy Series

**S**

\* Material Code

Steel, zinc/nickel-plated

**-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Opening Pressure 1 bar / 14.5 PSI

**1**

Contact STAUFF for alternative opening pressures.

\* Assembling / Kitting Valve body only

**—**

Valve body supplied with cutting rings and union nuts

**-MS**

Valve body supplied with soft-sealing cutting rings and union nuts

**-MSV**

### Connecting Parts



Cutting Ring  
Type **FI-DS**

Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS**

Page 29



Support Sleeve  
Type **FI-VH**

Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD**

Page 32



Union Nut  
Type **FI-M**

Page 33



37° Flared Tube Fitting Set  
Type **FI-AB**

Page 37

| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in) |                 |      |      |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|-----------------|------|------|------|------|-----------------------------------|-----------------------------|
|        | D1                 |                 | L                     | L1 <sup>1</sup> | L2   | S1   | S2   | S3   |                                   |                             |
| L      | 6                  | 400             | 52                    | 67              | 38   | 22   | 27   | 14   | 11,93                             | FI-RV-06L-W3-1              |
|        | .24                | 5800            | 2,05                  | 2,64            | 1,50 | .87  | 1,06 | .55  | 26,24                             |                             |
|        | 8                  | 400             | 52                    | 67              | 38   | 22   | 27   | 17   | 12,41                             | FI-RV-08L-W3-1              |
|        | .31                | 5800            | 2,05                  | 2,64            | 1,50 | .87  | 1,06 | .67  | 27,30                             |                             |
|        | 10                 | 400             | 52                    | 67              | 38   | 22   | 27   | 19   | 11,65                             | FI-RV-10L-W3-1              |
|        | .39                | 5800            | 2,05                  | 2,64            | 1,50 | .87  | 1,06 | .75  | 25,64                             |                             |
|        | 12                 | 400             | 53                    | 68              | 39   | 22   | 27   | 22   | 12,31                             | FI-RV-12L-W3-1              |
|        | .47                | 5800            | 2,09                  | 2,68            | 1,54 | .87  | 1,06 | .87  | 27,07                             |                             |
|        | 15                 | 400             | 58                    | 74              | 44   | 27   | 32   | 27   | 18,29                             | FI-RV-15L-W3-1              |
|        | .59                | 5800            | 2,28                  | 2,91            | 1,73 | 1,06 | 1,26 | 1,06 | 40,25                             |                             |
|        | 18                 | 400             | 63                    | 80              | 48   | 27   | 32   | 32   | 22,54                             | FI-RV-18L-W3-1              |
|        | .71                | 5800            | 2,48                  | 3,15            | 1,89 | 1,06 | 1,26 | 1,26 | 49,59                             |                             |
|        | 22                 | 250             | 75                    | 92              | 60   | 41   | 46   | 36   | 48,21                             | FI-RV-22L-W3-1              |
|        | .87                | 3625            | 2,95                  | 3,62            | 2,36 | 1,61 | 1,81 | 1,42 | 106,05                            |                             |
|        | 28                 | 250             | 81                    | 99              | 66   | 41   | 46   | 41   | 57,90                             | FI-RV-28L-W3-1              |
|        | 1.10               | 3625            | 3,19                  | 3,90            | 2,60 | 1,61 | 1,81 | 1,61 | 127,38                            |                             |
|        | 35                 | 250             | 92                    | 114             | 71   | 60   | 70   | 50   | 129,80                            | FI-RV-35L-W3-1              |
|        | 1.38               | 3625            | 3,62                  | 4,49            | 2,80 | 2,36 | 2,76 | 1,97 | 285,56                            |                             |
|        | 42                 | 250             | 87                    | 111             | 65   | 60   | 70   | 60   | 122,60                            | FI-RV-42L-W3-1              |
|        | 1.65               | 3625            | 3,43                  | 4,37            | 2,56 | 2,36 | 2,76 | 2,36 | 269,72                            |                             |
| S      | 6                  | 400             | 56                    | 71              | 42   | 22   | 27   | 17   | 13,12                             | FI-RV-06S-W3-1              |
|        | .24                | 5800            | 2,20                  | 2,80            | 1,65 | .87  | 1,06 | .67  | 28,87                             |                             |
|        | 8                  | 400             | 52                    | 67              | 38   | 22   | 27   | 19   | 11,98                             | FI-RV-08S-W3-1              |
|        | .31                | 5800            | 2,05                  | 2,64            | 1,50 | .87  | 1,06 | .75  | 26,35                             |                             |
|        | 10                 | 400             | 54                    | 71              | 39   | 22   | 27   | 22   | 13,20                             | FI-RV-10S-W3-1              |
|        | .39                | 5800            | 2,13                  | 2,80            | 1,54 | .87  | 1,06 | .87  | 29,04                             |                             |
|        | 12                 | 400             | 55                    | 72              | 40   | 22   | 27   | 24   | 13,61                             | FI-RV-12S-W3-1              |
|        | .47                | 5800            | 2,17                  | 2,83            | 1,57 | .87  | 1,06 | .94  | 29,94                             |                             |
|        | 14                 | 400             | 62                    | 81              | 46   | 27   | 32   | 27   | 19,98                             | FI-RV-14S-W3-1              |
|        | .55                | 5800            | 2,44                  | 3,19            | 1,81 | 1,06 | 1,26 | 1,06 | 43,96                             |                             |
|        | 16                 | 400             | 65                    | 84              | 48   | 27   | 32   | 30   | 21,56                             | FI-RV-16S-W3-1              |
|        | .63                | 5800            | 2,56                  | 3,31            | 1,89 | 1,06 | 1,26 | 1,18 | 47,44                             |                             |
|        | 20                 | 400             | 78                    | 100             | 57   | 41   | 46   | 36   | 50,20                             | FI-RV-20S-W3-1              |
|        | .79                | 5800            | 3,07                  | 3,94            | 2,24 | 1,61 | 1,81 | 1,42 | 110,45                            |                             |
|        | 25                 | 250             | 81                    | 105             | 57   | 41   | 46   | 46   | 52,60                             | FI-RV-25S-W3-1              |
|        | .98                | 3625            | 3,19                  | 4,13            | 2,24 | 1,61 | 1,81 | 1,81 | 115,72                            |                             |
|        | 30                 | 250             | 91                    | 117             | 64   | 50   | 55   | 50   | 80,70                             | FI-RV-30S-W3-1              |
|        | 1.18               | 3625            | 3,58                  | 4,61            | 2,52 | 1,97 | 2,17 | 1,97 | 177,54                            |                             |
|        | 38                 | 250             | 99                    | 129             | 67   | 60   | 70   | 60   | 136,00                            | FI-RV-38S-W3-1              |
|        | 1.50               | 3625            | 3,90                  | 5,08            | 2,64 | 2,36 | 2,76 | 2,36 | 299,20                            |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Valve body only.

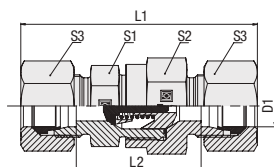
Opening pressure tolerance  $\pm 20\%$ .

Please note: Internal seals are made of FKM (Viton®).

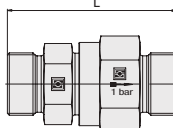
In order to make sure that the valves will be suitable for your particular application, please contact STAUFF with details on media, operating pressure, pressure peaks, operating temperature and the expected frequency of valve actuations.



## Check Valve Standard Version Type FI-RVA • Series L / S



Standard Opening Pressure: 1 bar / 14.5 PSI



| Series | Tube OD<br>(mm/in) | PB<br>(bar/PSI) | Dimensions<br>(mm/in) |                 |      |      |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|-----------------|------|------|------|------|-----------------------------------|-----------------------------|
|        | D1                 |                 | L                     | L1 <sup>1</sup> | L2   | S1   | S2   | S3   |                                   |                             |
| L      | 6                  | 250             | 43                    | 58              | 29   | 17   | 17   | 14   | 4,4                               | FI-RVA-06L-W3-1             |
|        | .24                | 3625            | 1.69                  | 2.28            | 1.14 | .67  | .67  | .55  | 9.7                               | FI-RVA-08L-W3-1             |
|        | 8                  | 250             | 44                    | 59              | 30   | 19   | 19   | 17   | 5,5                               | FI-RVA-10L-W3-1             |
|        | .31                | 3625            | 1.73                  | 2.32            | 1.18 | .75  | .75  | .67  | 12.1                              | FI-RVA-12L-W3-1             |
|        | 10                 | 250             | 54,5                  | 69,5            | 40,5 | 22   | 24   | 19   | 9,8                               | FI-RVA-15L-W3-1             |
|        | .39                | 3625            | 2.15                  | 2.74            | 1.59 | .87  | .94  | .75  | 21.6                              | FI-RVA-18L-W3-1             |
|        | 12                 | 250             | 57,5                  | 72,5            | 43,5 | 27   | 30   | 22   | 16,5                              | FI-RVA-22L-W3-1             |
|        | .47                | 3625            | 2.26                  | 2.85            | 1.71 | 1.06 | 1.18 | .87  | 36.4                              | FI-RVA-28L-W3-1             |
|        | 15                 | 250             | 61,5                  | 77,5            | 47,5 | 30   | 32   | 27   | 20,5                              | FI-RVA-35L-W3-1             |
|        | .59                | 3625            | 2.42                  | 3.05            | 1.87 | 1.18 | 1.26 | 1.06 | 45.2                              | FI-RVA-42L-W3-1             |
|        | 18                 | 160             | 66,5                  | 83,5            | 51,5 | 36   | 36   | 32   | 29,0                              | FI-RVA-22L-W3-1             |
|        | .71                | 2320            | 2.62                  | 3.29            | 2.03 | 1.42 | 1.42 | 1.26 | 63.9                              | FI-RVA-28L-W3-1             |
|        | 22                 | 160             | 76,5                  | 93,5            | 61,5 | 41   | 46   | 36   | 49,5                              | FI-RVA-35L-W3-1             |
|        | .87                | 2320            | 3.01                  | 3.68            | 2.42 | 1.61 | 1.81 | 1.42 | 109.1                             | FI-RVA-42L-W3-1             |
|        | 28                 | 100             | 85                    | 103             | 70   | 50   | 55   | 41   | 78,4                              | FI-RVA-35L-W3-1             |
|        | 1.10               | 1450            | 3.35                  | 4.06            | 2.76 | 1.97 | 2.17 | 1.61 | 172.8                             | FI-RVA-42L-W3-1             |
|        | 35                 | 100             | 95,5                  | 117,5           | 74,5 | 60   | 65   | 50   | 122,7                             | FI-RVA-42L-W3-1             |
|        | 1.38               | 1450            | 3.76                  | 4.63            | 2.93 | 2.36 | 2.56 | 1.97 | 270.5                             | FI-RVA-42L-W3-1             |
|        | 42                 | 100             | 99,5                  | 123,5           | 77,5 | 65   | 75   | 60   | 162,6                             | FI-RVA-42L-W3-1             |
| S      | 1.65               | 1450            | 3.92                  | 4.86            | 3.05 | 2.56 | 2.95 | 2.36 | 358.5                             | FI-RVA-06S-W3-1             |
|        | 6                  | 630             | 48,5                  | 63,5            | 34,5 | 19   | 19   | 17   | 6,6                               | FI-RVA-08S-W3-1             |
|        | .24                | 9137            | 1.91                  | 2,5             | 1,36 | .75  | .75  | .67  | 14,6                              | FI-RVA-10S-W3-1             |
|        | 8                  | 630             | 48,5                  | 63,5            | 34,5 | 19   | 19   | 19   | 6,8                               | FI-RVA-12S-W3-1             |
|        | .31                | 9137            | 1.91                  | 2,5             | 1,36 | .75  | .75  | .75  | 14,9                              | FI-RVA-14S-W3-1             |
|        | 10                 | 630             | 55,5                  | 72,5            | 40,5 | 22   | 24   | 22   | 11,5                              | FI-RVA-16S-W3-1             |
|        | .39                | 9137            | 2.19                  | 2,85            | 1,59 | .87  | .94  | .87  | 25,4                              | FI-RVA-20S-W3-1             |
|        | 12                 | 630             | 57,5                  | 74,5            | 42,5 | 24   | 27   | 24   | 14,5                              | FI-RVA-25S-W3-1             |
|        | .47                | 9137            | 2.26                  | 2,93            | 1,67 | .94  | 1,06 | .94  | 35,0                              | FI-RVA-30S-W3-1             |
|        | 14                 | 630             | 63,5                  | 82,5            | 47,5 | 27   | 32   | 27   | 20,9                              | FI-RVA-38S-W3-1             |
|        | .55                | 9137            | 2,5                   | 3,25            | 1,87 | 1,06 | 1,26 | 1,06 | 46,1                              |                             |
|        | 16                 | 400             | 67,5                  | 86,5            | 50,5 | 32   | 36   | 30   | 27,8                              |                             |
|        | .63                | 5801            | 2,66                  | 3,41            | 1,99 | 1,26 | 1,42 | 1,18 | 61,3                              |                             |
|        | 20                 | 400             | 75,5                  | 97,5            | 54,5 | 41   | 46   | 36   | 49,5                              |                             |
|        | .79                | 5801            | 2,97                  | 3,84            | 2,15 | 1,61 | 1,81 | 1,42 | 109,1                             |                             |
|        | 25                 | 400             | 82,5                  | 106,5           | 58,5 | 46   | 50   | 46   | 62,7                              |                             |
|        | .98                | 5801            | 3,25                  | 4,19            | 2,3  | 1,81 | 1,97 | 1,81 | 138,2                             |                             |
|        | 30                 | 250             | 96                    | 122             | 69   | 55   | 60   | 50   | 107,8                             |                             |
|        | 1.18               | 3625            | 3,78                  | 4,8             | 2,72 | 2,17 | 2,36 | 1,97 | 237,7                             |                             |
|        | 38                 | 250             | 107,5                 | 137,5           | 75,5 | 65   | 70   | 60   | 161,3                             |                             |
|        | 1.50               | 3625            | 4,23                  | 5,41            | 2,97 | 2,56 | 2,76 | 2,36 | 355,6                             |                             |

<sup>1</sup> Approximate dimension in assembled condition.

Opening pressure tolerance  $\pm 20\%$ .

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Valve body only.

Please note: Internal seals are made of FKM (Viton®).

In order to make sure that the valves will be suitable for your particular application, please contact STAUFF with details on media, operating pressure, pressure peaks, operating temperature and the expected frequency of valve actuations.

### Ordering Codes

\*FI-RVA\*-10\*L\*-W3\*-1\*-MS

\* Check Valve

FI-RVA

\* Outside Tube Diameter D1 (in mm)

-10

\* Series

Light Series

L

Heavy Series

S

\* Material Code

Steel, zinc/nickel-plated

-W3

Please contact STAUFF for alternative materials and surface finishings.

\* Opening Pressure 1 bar / 14.5 PSI

1

Contact STAUFF for alternative opening pressures.

\* Assembling / Kitting Valve body only

—

Valve body supplied with cutting rings and union nuts

-MS

Valve body supplied with soft-sealing cutting rings and union nuts

-MSV

### Connecting Parts


Cutting Ring  
Type FI-DS

Page 28


Soft-Sealing Cutting Ring  
Type FI-WDDS

Page 29


Support Sleeve  
Type FI-VH

Page 31


STAUFF Form EVO Sealing Ring  
Type FI-FD

Page 32


Union Nut  
Type FI-M

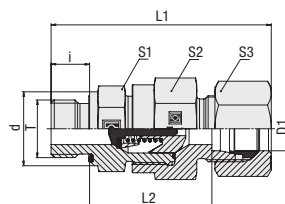
Page 33


37° Flared Tube Fitting Set  
Type FI-AB

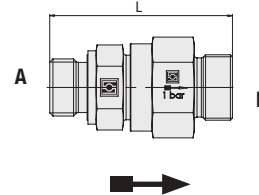
Page 37



## Male Stud Check Valve High-Pressure Version Type FI-RVV-...-R-WD • Series L / S



Flow Direction: A > B (from Stud End)  
Standard Opening Pressure: 1 bar / 14.5 PSI



### Ordering Codes

**\*FI-RVV\*-10\*L\*R\*-WD\*-B\*-W3\*-1\*-MS**

\* Male Stud Check Valve (Flow from Stud End) **FI-RVV**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Whitworth Parallel Pipe Thread (BSPP) **R**

If required, please indicate special sizes, e.g. R1/8!

\* Seal Type Profile Sealing Ring **-WD**

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Opening Pressure 1 bar / 14.5 PSI **1**

Contact STAUFF for alternative opening pressures.

\* Assembling / Kitting Valve body only **—**

Valve body supplied with cutting ring and union nut **-MS**

Valve body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

### Spare Parts / Accessories



Profile Sealing Ring  
Type **WDG** Page 238

### Whitworth Parallel Pipe Thread (BSPP)

### Profile Sealing Ring

| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in) |        |       |       |                 |     |      |      |      |       | Torque<br>(N-m/lb-ft) | Weight<br>(kg/lbs) ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|--------|-------|-------|-----------------|-----|------|------|------|-------|-----------------------|------------------------|-----------------------------|
|        |                    |                 | D1                    | Thread | T d   | L     | L1 <sup>1</sup> | L2  | i    | S1   | S2   | S3    |                       |                        |                             |
| L      | 6                  | 400             | G 1/8                 | 13,9   | 51    | 59    | 36              | 8   | 22   | 27   | 14   | 18    | 11,69                 | FI-RVV-06LR-WD-B-W3-1  |                             |
|        | .24                | 5800            |                       | .55    | 2.01  | 2.32  | 1.42            | .31 | .87  | 1.06 | .55  | 13.3  | 25.71                 |                        |                             |
|        | 8                  | 400             | G 1/4                 | 18,9   | 55    | 63    | 36              | 12  | 22   | 27   | 17   | 35    | 12,54                 | FI-RVV-08LR-WD-B-W3-1  |                             |
|        | .31                | 5800            |                       | .74    | 2.17  | 2.48  | 1.42            | .47 | .87  | 1.06 | .67  | 25.8  | 27.58                 |                        |                             |
|        | 10                 | 400             | G 1/4                 | 18,9   | 53    | 61    | 34              | 12  | 22   | 27   | 19   | 35    | 11,40                 | FI-RVV-10LR-WD-B-W3-1  |                             |
|        | .39                | 5800            |                       | .74    | 2.09  | 2.40  | 1.34            | .47 | .87  | 1.06 | .75  | 25.8  | 25.08                 |                        |                             |
|        | 12                 | 400             | G 3/8                 | 21,9   | 58    | 66    | 39              | 12  | 22   | 27   | 22   | 70    | 13,62                 | FI-RVV-12LR-WD-B-W3-1  |                             |
|        | .47                | 5800            |                       | .86    | 2.28  | 2.60  | 1.54            | .47 | .87  | 1.06 | .87  | 51.8  | 29.97                 |                        |                             |
|        | 15                 | 400             | G 1/2                 | 26,9   | 60    | 68    | 41              | 14  | 27   | 32   | 27   | 90    | 19,68                 | FI-RVV-15LR-WD-B-W3-1  |                             |
|        | .59                | 5800            |                       | 1.06   | 2.36  | 2.68  | 1.61            | .55 | 1.06 | 1.26 | 1.06 | 66.6  | 43.30                 |                        |                             |
|        | 18                 | 400             | G 1/2                 | 26,9   | 67    | 76    | 45,5            | 14  | 27   | 32   | 32   | 90    | 22,68                 | FI-RVV-18LR-WD-B-W3-1  |                             |
|        | .71                | 5800            |                       | 1.06   | 2.64  | 2.99  | 1.79            | .55 | 1.06 | 1.26 | 1.26 | 66.6  | 49.89                 |                        |                             |
|        | 22                 | 250             | G 3/4                 | 31,9   | 77    | 86    | 53,5            | 16  | 41   | 46   | 36   | 180   | 46,49                 | FI-RVV-22LR-WD-B-W3-1  |                             |
|        | .87                | 3625            |                       | 1.26   | 3.03  | 3.39  | 2.11            | .63 | 1.61 | 1.81 | 1.42 | 133.2 | 102.28                |                        |                             |
|        | 28                 | 250             | G 1                   | 39,9   | 86    | 95    | 60,5            | 18  | 41   | 46   | 41   | 310   | 59,70                 | FI-RVV-28LR-WD-B-W3-1  |                             |
|        | 1.10               | 3625            |                       | 1.57   | 3.39  | 3.74  | 2.38            | .71 | 1.61 | 1.81 | 1.61 | 229.4 | 131.34                |                        |                             |
|        | 35                 | 250             | G 1 1/4               | 49,9   | 97,5  | 108,5 | 67              | 20  | 60   | 70   | 50   | 450   | 132,20                | FI-RVV-35LR-WD-B-W3-1  |                             |
|        | 1.38               | 3625            |                       | 1.96   | 3.84  | 4.27  | 2.64            | .79 | 2.36 | 2.76 | 1.97 | 333.0 | 290.84                |                        |                             |
|        | 42                 | 250             | G 1 1/2               | 54,9   | 97,5  | 109,5 | 64,5            | 22  | 60   | 70   | 60   | 540   | 137,40                | FI-RVV-42LR-WD-B-W3-1  |                             |
|        | 1.65               | 3625            |                       | 2.16   | 3.84  | 4.31  | 2.54            | .87 | 2.36 | 2.76 | 2.36 | 399.6 | 302.28                |                        |                             |
| S      | 6                  | 400             | G 1/4                 | 18,9   | 57    | 65    | 38              | 12  | 22   | 27   | 17   | 55    | 12,95                 | FI-RVV-06SR-WD-B-W3-1  |                             |
|        | .24                | 5800            |                       | .74    | 2.24  | 2.56  | 1.50            | .47 | .87  | 1.06 | .67  | 40.7  | 28.49                 |                        |                             |
|        | 8                  | 400             | G 1/4                 | 18,9   | 55    | 63    | 36              | 12  | 22   | 27   | 19   | 55    | 12,12                 | FI-RVV-08SR-WD-B-W3-1  |                             |
|        | .31                | 5800            |                       | .74    | 2.17  | 2.48  | 1.42            | .47 | .87  | 1.06 | .75  | 40.7  | 26.66                 |                        |                             |
|        | 10                 | 400             | G 3/8                 | 21,9   | 57    | 66    | 37,5            | 12  | 22   | 27   | 22   | 80    | 13,32                 | FI-RVV-10SR-WD-B-W3-1  |                             |
|        | .39                | 5800            |                       | .86    | 2.24  | 2.60  | 1.48            | .47 | .87  | 1.06 | .87  | 59.2  | 29.30                 |                        |                             |
|        | 12                 | 400             | G 3/8                 | 21,9   | 59    | 68    | 39,5            | 12  | 22   | 27   | 24   | 80    | 14,64                 | FI-RVV-12SR-WD-B-W3-1  |                             |
|        | .47                | 5800            |                       | .86    | 2.32  | 2.68  | 1.56            | .47 | .87  | 1.06 | .94  | 59.2  | 32.21                 |                        |                             |
|        | 14                 | 400             | G 1/2                 | 26,9   | 64    | 74    | 42              | 14  | 27   | 32   | 27   | 115   | 20,26                 | FI-RVV-14SR-WD-B-W3-1  |                             |
|        | .55                | 5800            |                       | 1.06   | 2.52  | 2.91  | 1.65            | .55 | 1.06 | 1.26 | 1.06 | 85.1  | 44.57                 |                        |                             |
|        | 16                 | 400             | G 1/2                 | 26,9   | 67    | 77    | 44,5            | 14  | 27   | 32   | 30   | 115   | 21,59                 | FI-RVV-16SR-WD-B-W3-1  |                             |
|        | .63                | 5800            |                       | 1.06   | 2.64  | 3.03  | 1.75            | .55 | 1.06 | 1.26 | 1.18 | 85.1  | 47.50                 |                        |                             |
|        | 20                 | 400             | G 3/4                 | 31,9   | 79    | 90    | 52,5            | 16  | 41   | 46   | 36   | 180   | 50,90                 | FI-RVV-20SR-WD-B-W3-1  |                             |
|        | .79                | 5800            |                       | 1.26   | 3.11  | 3.54  | 2.07            | .63 | 1.61 | 1.81 | 1.42 | 133.2 | 111.98                |                        |                             |
|        | 25                 | 250             | G 1                   | 39,9   | 83    | 95    | 53              | 18  | 41   | 46   | 46   | 310   | 53,10                 | FI-RVV-25SR-WD-B-W3-1  |                             |
|        | .98                | 3625            |                       | 1.57   | 3.27  | 3.74  | 2.09            | .71 | 1.61 | 1.81 | 1.81 | 229.4 | 116.82                |                        |                             |
|        | 30                 | 250             | G 1 1/4               | 49,9   | 94    | 107   | 60,5            | 20  | 50   | 55   | 50   | 450   | 86,00                 | FI-RVV-30SR-WD-B-W3-1  |                             |
|        | 1.18               | 3625            |                       | 1.96   | 3.70  | 4.21  | 2.38            | .79 | 1.97 | 2.17 | 1.97 | 333.0 | 189.20                |                        |                             |
|        | 38                 | 250             | G 1 1/2               | 54,9   | 103,5 | 118,5 | 65,5            | 22  | 60   | 70   | 60   | 540   | 143,70                | FI-RVV-38SR-WD-B-W3-1  |                             |
|        | 1.50               | 3625            |                       | 2.16   | 4.07  | 4.67  | 2.58            | .87 | 2.36 | 2.76 | 2.36 | 399.6 | 316.14                |                        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Valve body only.

Standard seal material is NBR (Buna-N®).

Please note: Internal seals are made of FKM (Viton®).

In order to make sure that the valves will be suitable for your particular application, please contact STAUFF with details on media, operating pressure, pressure peaks, operating temperature and the expected frequency of valve actuations.

Male stud acc. to ISO 1179-2 (Type E)

Port acc. to ISO 1179-1

Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

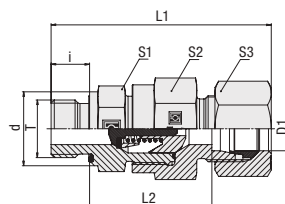
Opening pressure tolerance  $\pm 20\%$ .



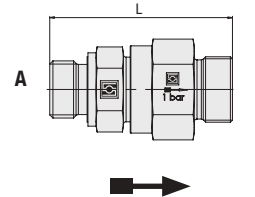




## Male Stud Check Valve Standard Version Type FI-RVVA-...-R-WD • Series L / S



Flow Direction: A > B (from Stud End)  
Standard Opening Pressure: 1 bar / 14.5 PSI



### Whitworth Parallel Pipe Thread (BSPP)

### Profile Sealing Ring

#### Ordering Codes

**\*FI-RVVA\*-10\*L\*-R-WD\*-B\*-W3\*-1\*-MS**

\* Male Stud Check Valve (Flow from Stud End) **FI-RVVA**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Whitworth Parallel Pipe Thread (BSPP) **R**

If required, please indicate special sizes, e.g. R1/8!

\* Seal Type Profile Sealing Ring **-WD**

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Opening Pressure 1 bar / 14.5 PSI **1**  
Contact STAUFF for alternative opening pressures.

\* Assembling / Kitting Valve body only **—**

Valve body supplied with cutting ring and union nut **-MS**

Valve body supplied with soft-sealing cutting ring and union nut **-MSV**

#### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

#### Spare Parts / Accessories



Profile Sealing Ring  
Type **WDG** Page 238

| Series | Tube OD<br>(mm/in) | PB<br>(bar/PSI) | Dimensions<br>(mm/in)                                       | Torque<br>(Nm/lb-ft) | Weight<br>(kg/lbs) ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-------------------------------------------------------------|----------------------|------------------------|-----------------------------|
|        | D1                 |                 | Thread T d L L1 <sup>1</sup> L2 i S1 S2 S3 Thread T per 100 |                      |                        |                             |
| L      | 6                  | 250             | G 1/8 13,9 44 52 29 8 17 17 14 18 5,7                       |                      |                        | FI-RVVA-06LR-WD-B-W3-1      |
|        | .24                | 3625            | .55 1.73 2.05 1.14 .31 .67 .67 .55 13.3 12.57               |                      |                        |                             |
|        | 8                  | 250             | G 1/4 18,9 49 57 30 12 19 19 17 35 6,2                      |                      |                        | FI-RVVA-08LR-WD-B-W3-1      |
|        | .31                | 3625            | .74 1.93 2.24 1.18 .47 .75 .75 .67 25.8 13.67               |                      |                        |                             |
|        | 10                 | 250             | G 1/4 18,9 59,5 67,5 40,5 12 22 24 19 35 10,6               |                      |                        | FI-RVVA-10LR-WD-B-W3-1      |
|        | .39                | 3625            | .74 2.34 2.66 1.59 .47 .87 .94 .75 25.8 23.37               |                      |                        |                             |
|        | 12                 | 250             | G 3/8 21,9 61,5 69,5 42,5 12 27 30 22 70 17,2               |                      |                        | FI-RVVA-12LR-WD-B-W3-1      |
|        | .47                | 3625            | .86 2.42 2.74 1.67 .47 1.06 1.18 .87 51.8 37.92             |                      |                        |                             |
|        | 15                 | 250             | G 1/2 26,9 66,5 74,5 45,5 14 30 32 27 90 21,9               |                      |                        | FI-RVVA-15LR-WD-B-W3-1      |
|        | .59                | 3625            | 1.06 2.61 2.93 1.79 .55 1.18 1.26 1.06 66.6 48.28           |                      |                        |                             |
|        | 18                 | 160             | G 1/2 26,9 72,5 81,5 51 14 36 36 32 90 30,1                 |                      |                        | FI-RVVA-18LR-WD-B-W3-1      |
|        | .71                | 2320            | 1.06 2.85 3.21 2.01 .55 1.42 1.42 1.26 66.6 66.36           |                      |                        |                             |
|        | 22                 | 160             | G 3/4 31,9 80 89 56,5 16 41 46 36 180 48,8                  |                      |                        | FI-RVVA-22LR-WD-B-W3-1      |
|        | .87                | 2320            | 1.26 3.15 3.50 2.22 .63 1.61 1.81 1.42 133.2 107.59         |                      |                        |                             |
|        | 28                 | 100             | G 1 39,9 92 101 66,5 18 50 55 41 310 81,0                   |                      |                        | FI-RVVA-28LR-WD-B-W3-1      |
|        | 1.10               | 1450            | 1.57 3.62 3.98 2.62 .71 1.97 2.17 1.61 229.4 178.57         |                      |                        |                             |
|        | 35                 | 100             | G 1 1/4 49,9 102,5 113,5 72 20 60 65 50 450 126,6           |                      |                        | FI-RVVA-35LR-WD-B-W3-1      |
|        | 1.38               | 1450            | 1.96 4.04 4.47 2.83 .79 2.36 2.56 1.97 333.0 279.11         |                      |                        |                             |
|        | 42                 | 100             | G 1 1/2 54,9 109,5 121,5 76,5 22 65 75 60 540 170,1         |                      |                        | FI-RVVA-42LR-WD-B-W3-1      |
|        | 1.65               | 1450            | 2.16 4.31 4.78 3.01 .87 2.56 2.95 2.36 399.6 375.01         |                      |                        |                             |
| S      | 6                  | 630             | G 1/4 18,9 50,5 58,5 31,5 12 19 19 17 55 7,0                |                      |                        | FI-RVVA-06SR-WD-B-W3-1      |
|        | .24                | 9137            | .74 1.99 2.30 1.24 .47 .75 .75 .67 40.7 15.43               |                      |                        |                             |
|        | 8                  | 630             | G 1/4 18,9 50,5 58,5 31,5 12 19 19 19 55 6,8                |                      |                        | FI-RVVA-08SR-WD-B-W3-1      |
|        | .31                | 9137            | .74 1.99 2.30 1.24 .47 .75 .75 .75 40.7 14.99               |                      |                        |                             |
|        | 10                 | 630             | G 3/8 21,9 57,5 66,5 38 12 22 24 22 80 12,0                 |                      |                        | FI-RVVA-10SR-WD-B-W3-1      |
|        | .39                | 9137            | .86 2.26 2.62 1.50 .47 .87 .94 .87 59.2 26.46               |                      |                        |                             |
|        | 12                 | 630             | G 3/8 21,9 60,5 69,5 41 12 24 27 24 80 14,9                 |                      |                        | FI-RVVA-12SR-WD-B-W3-1      |
|        | .47                | 9137            | .86 2.38 2.74 1.61 .47 .94 1.06 .94 59.2 32.85              |                      |                        |                             |
|        | 14                 | 630             | G 1/2 26,9 66,5 76,5 44,5 14 27 32 27 115 22,2              |                      |                        | FI-RVVA-14SR-WD-B-W3-1      |
|        | .55                | 9137            | 1.06 2.62 3.01 1.75 .55 1.06 1.26 1.06 85.1 48.94           |                      |                        |                             |
|        | 16                 | 400             | G 1/2 26,9 70,5 80,5 48 14 32 36 30 115 28,1                |                      |                        | FI-RVVA-16SR-WD-B-W3-1      |
|        | .63                | 5801            | 1.06 2.78 3.17 1.89 .55 1.26 1.42 1.18 85.1 61.95           |                      |                        |                             |
|        | 20                 | 400             | G 3/4 31,9 78,5 89,5 52 16 41 46 36 180 50,2                |                      |                        | FI-RVVA-20SR-WD-B-W3-1      |
|        | .79                | 5801            | 1.26 3.09 3.52 2.04 .63 1.61 1.81 1.42 133.2 110.67         |                      |                        |                             |
|        | 25                 | 400             | G 1 39,9 87,5 99,5 57,5 18 46 50 46 310 65,7                |                      |                        | FI-RVVA-25SR-WD-B-W3-1      |
|        | .98                | 5801            | 1.57 3.44 3.92 2.26 .71 1.81 1.97 1.81 229.4 144.85         |                      |                        |                             |
|        | 30                 | 250             | G 1 1/4 49,9 97,5 110,5 64 20 55 60 50 450 108,2            |                      |                        | FI-RVVA-30SR-WD-B-W3-1      |
|        | 1.18               | 3625            | 1.96 3.84 4.35 2.52 .79 2.17 2.36 1.97 333.0 238.54         |                      |                        |                             |
|        | 38                 | 250             | G 1 1/2 54,9 109,5 124,5 71,5 22 65 70 60 540 162,1         |                      |                        | FI-RVVA-38SR-WD-B-W3-1      |
|        | 1.50               | 3625            | 2.16 4.31 4.90 2.81 .87 2.56 2.76 2.36 399.6 357.37         |                      |                        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Valve body only.

Standard seal material is NBR (Buna-N®).

Please note: Internal seals are made of FKM (Viton®).

In order to make sure that the valves will be suitable for your particular application, please contact STAUFF with details on media, operating pressure, pressure peaks, operating temperature and the expected frequency of valve actuations.

Male stud acc. to ISO 1179-2 (Type E)

Port acc. to ISO 1179-1

Torque recommendations for Steel mating material.

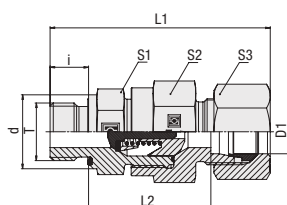
Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

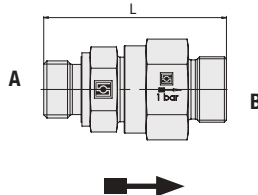
Opening pressure tolerance  $\pm 20\%$ .







Flow Direction: A > B (from Stud End)  
Standard Opening Pressure: 1 bar / 14.5 PSI



## Male Stud Check Valve Standard Version Type FI-RVVA-...-M-WD • Series L / S



### Profile Sealing Ring

### Metric Parallel Thread

| Series | Tube OD<br>(mm/in) | PB<br>(bar/PSI) | Dimensions<br>(mm/in) |      |       |       |      |     |      |      |      |       |        | Torque<br>(N-m/ft-lb) | Weight<br>(kg/lbs) Ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------|-------|-------|------|-----|------|------|------|-------|--------|-----------------------|------------------------|-----------------------------|
|        | D1                 |                 | Thread T              | d    | L     | L1    | L2   | i   | S1   | S2   | S3   |       |        | Thread T              | per 100                |                             |
| L      | 6                  | 250             | M 10 x 1              | 13,9 | 44    | 52    | 29   | 8   | 17   | 17   | 14   | 18    | 4,6    |                       |                        | FI-RVVA-06LM-WD-B-W3-1      |
|        | .24                | 3625            |                       | .55  | 1.73  | 2.05  | 1.14 | .31 | .67  | .67  | .55  | 13.3  | 10.14  |                       |                        |                             |
|        | 8                  | 250             | M 12 x 1,5            | 16,9 | 48    | 56    | 29   | 12  | 19   | 19   | 17   | 25    | 7,5    |                       |                        | FI-RVVA-08LM-WD-B-W3-1      |
|        | .31                | 3625            |                       | .67  | 1.89  | 2.20  | 1.14 | .47 | .75  | .75  | .67  | 18.5  | 16.53  |                       |                        |                             |
|        | 10                 | 250             | M 14 x 1,5            | 18,9 | 59    | 67    | 40   | 12  | 22   | 24   | 19   | 45    | 10,6   |                       |                        | FI-RVVA-10LM-WD-B-W3-1      |
|        | .39                | 3625            |                       | .74  | 2.32  | 2.64  | 1.57 | .47 | .87  | .94  | .75  | 33.3  | 23.37  |                       |                        |                             |
|        | 12                 | 250             | M 16 x 1,5            | 21,9 | 61,5  | 69,5  | 42,5 | 12  | 27   | 30   | 22   | 55    | 17,3   |                       |                        | FI-RVVA-12LM-WD-B-W3-1      |
|        | .47                | 3625            |                       | .86  | 2.42  | 2.74  | 1.67 | .47 | 1.06 | 1.18 | .87  | 40.7  | 38.14  |                       |                        |                             |
|        | 15                 | 250             | M 18 x 1,5            | 23,9 | 64,5  | 72,5  | 45,5 | 12  | 30   | 32   | 27   | 70    | 20,8   |                       |                        | FI-RVVA-15LM-WD-B-W3-1      |
|        | .59                | 3625            |                       | .94  | 2.54  | 2.85  | 1.79 | .47 | 1.18 | 1.26 | 1.06 | 51.8  | 45.86  |                       |                        |                             |
|        | 18                 | 160             | M 22 x 1,5            | 26,9 | 71,5  | 80,5  | 50   | 14  | 36   | 36   | 32   | 125   | 36,6   |                       |                        | FI-RVVA-18LM-WD-B-W3-1      |
|        | .71                | 2320            |                       | 1.06 | 2.81  | 3.17  | 1.96 | .55 | 1.42 | 1.42 | 1.26 | 92.5  | 80.69  |                       |                        |                             |
|        | 22                 | 160             | M 26 x 1,5            | 31,9 | 81    | 90    | 57,5 | 16  | 41   | 46   | 36   | 180   | 49,9   |                       |                        | FI-RVVA-22LM-WD-B-W3-1      |
|        | .87                | 2320            |                       | 1.26 | 3.19  | 3.54  | 2.26 | .63 | 1.61 | 1.81 | 1.42 | 133.2 | 110.01 |                       |                        |                             |
|        | 28                 | 100             | M 33 x 2              | 39,9 | 92    | 101   | 66,5 | 18  | 50   | 55   | 41   | 310   | 81,5   |                       |                        | FI-RVVA-28LM-WD-B-W3-1      |
|        | 1.10               | 1450            |                       | 1.57 | 3.62  | 3.98  | 2.61 | .71 | 1.97 | 2.17 | 1.61 | 229.4 | 179.68 |                       |                        |                             |
|        | 35                 | 100             | M 42 x 2              | 49,9 | 101,5 | 112,5 | 71   | 20  | 60   | 65   | 50   | 450   | 124,8  |                       |                        | FI-RVVA-35LM-WD-B-W3-1      |
|        | 1.38               | 1450            |                       | 1.96 | 3.99  | 4.43  | 2.79 | .79 | 2.36 | 2.56 | 1.97 | 333.0 | 275.14 |                       |                        |                             |
|        | 42                 | 100             | M 48 x 2              | 54,9 | 109,5 | 121,5 | 76,5 | 22  | 65   | 75   | 60   | 540   | 169,6  |                       |                        | FI-RVVA-42LM-WD-B-W3-1      |
|        | 1.65               | 1450            |                       | 2.16 | 4.31  | 4.78  | 3.01 | .87 | 2.56 | 2.95 | 2.36 | 399.6 | 373.90 |                       |                        |                             |
| S      | 6                  | 630             | M 12 x 1,5            | 16,9 | 50,5  | 58,5  | 31,5 | 12  | 19   | 19   | 17   | 35    | 9,0    |                       |                        | FI-RVVA-06SM-WD-B-W3-1      |
|        | .24                | 9137            |                       | .67  | 1.99  | 2.30  | 1.24 | .47 | .75  | .75  | .67  | 25.9  | 19.84  |                       |                        |                             |
|        | 8                  | 630             | M 14 x 1,5            | 18,9 | 50,5  | 58,5  | 31,5 | 12  | 19   | 19   | 19   | 55    | 7,0    |                       |                        | FI-RVVA-08SM-WD-B-W3-1      |
|        | .31                | 9137            |                       | .74  | 1.99  | 2.30  | 1.24 | .47 | .75  | .75  | .75  | 40.7  | 15.43  |                       |                        |                             |
|        | 10                 | 630             | M 16 x 1,5            | 21,9 | 57,5  | 66,5  | 38   | 12  | 22   | 24   | 22   | 70    | 15,6   |                       |                        | FI-RVVA-10SM-WD-B-W3-1      |
|        | .39                | 9137            |                       | .86  | 2.26  | 2.62  | 1.49 | .47 | .87  | .94  | .87  | 51.8  | 34.39  |                       |                        |                             |
|        | 12                 | 630             | M 18 x 1,5            | 23,9 | 60,5  | 69,5  | 41   | 12  | 24   | 27   | 24   | 90    | 15,4   |                       |                        | FI-RVVA-12SM-WD-B-W3-1      |
|        | .47                | 9137            |                       | .94  | 2.38  | 2.74  | 1.61 | .47 | .94  | 1.06 | .94  | 66.6  | 33.95  |                       |                        |                             |
|        | 14                 | 630             | M 20 x 1,5            | 25,9 | 66,5  | 76,5  | 44,5 | 14  | 27   | 32   | 27   | 125   | 27,2   |                       |                        | FI-RVVA-14SM-WD-B-W3-1      |
|        | .55                | 9137            |                       | 1.02 | 2.62  | 3.01  | 1.75 | .55 | 1.06 | 1.26 | 1.06 | 92.5  | 59.97  |                       |                        |                             |
|        | 16                 | 400             | M 22 x 1,5            | 26,9 | 70,5  | 80,5  | 48   | 14  | 32   | 36   | 30   | 135   | 36,0   |                       |                        | FI-RVVA-16SM-WD-B-W3-1      |
|        | .63                | 5801            |                       | 1.06 | 2.78  | 3.17  | 1.89 | .55 | 1.26 | 1.42 | 1.18 | 99.9  | 79.37  |                       |                        |                             |
|        | 20                 | 400             | M 27 x 2              | 31,9 | 78,5  | 89,5  | 52   | 16  | 41   | 46   | 36   | 180   | 50,3   |                       |                        | FI-RVVA-20SM-WD-B-W3-1      |
|        | .79                | 5801            |                       | 1.26 | 3.09  | 3.52  | 2.05 | .63 | 1.61 | 1.81 | 1.42 | 133.2 | 110.89 |                       |                        |                             |
|        | 25                 | 400             | M 33 x 2              | 39,9 | 87    | 99    | 57   | 18  | 46   | 50   | 46   | 310   | 87,3   |                       |                        | FI-RVVA-25SM-WD-B-W3-1      |
|        | .98                | 5801            |                       | 1.57 | 3.43  | 3.90  | 2.24 | .71 | 1.81 | 1.97 | 1.81 | 229.4 | 192.46 |                       |                        |                             |
|        | 30                 | 250             | M 42 x 2              | 49,9 | 99,5  | 112,5 | 66   | 20  | 55   | 60   | 50   | 450   | 113,2  |                       |                        | FI-RVVA-30SM-WD-B-W3-1      |
|        | 1.18               | 3625            |                       | 1.96 | 3.92  | 4.43  | 2.59 | .79 | 2.17 | 2.36 | 1.97 | 333.0 | 249.56 |                       |                        |                             |
|        | 38                 | 250             | M 48 x 2              | 54,9 | 110   | 125   | 72   | 22  | 65   | 70   | 60   | 540   | 197,3  |                       |                        | FI-RVVA-38SM-WD-B-W3-1      |
|        | 1.50               | 3625            |                       | 2.16 | 4.33  | 4.92  | 2.83 | .87 | 2.56 | 2.76 | 2.36 | 399.6 | 434.97 |                       |                        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Valve body only.

Standard seal material is NBR (Buna-N®).

Please note: Internal seals are made of FKM (Viton®).

In order to make sure that the valves will be suitable for your particular application, please contact STAUFF with details on media, operating pressure, pressure peaks, operating temperature and the expected frequency of valve actuations.

Male stud acc. to ISO 9974-2 (Type E)

Port acc. to ISO 9974-1

Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

Opening pressure tolerance  $\pm 20\%$ .

### Ordering Codes

**\*FI-RVVA\*-10\*L\*M\*-WD\*-B\*-W3\*-1\*-MS**

\* Male Stud Check Valve (Flow from Stud End) **FI-RVVA**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Metric Parallel Thread **M**

If required, please indicate special sizes, e.g. M12x1.5!

\* Seal Type Profile Sealing Ring **-WD**

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Opening Pressure 1 bar / 14.5 PSI **1**

Contact STAUFF for alternative opening pressures.

\* Assembling / Kitting Fitting body only **—**

Valve body supplied with cutting ring and union nut **-MS**

Valve body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDs** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

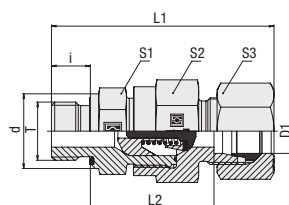
### Spare Parts / Accessories



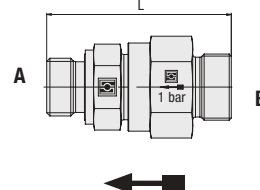
Profile Sealing Ring  
Type **WDG** Page 238



## Male Stud Check Valve High-Pressure Version Type FI-RVZ-...-R-WD • Series L / S



Flow Direction: B > A (to Stud End)  
Standard Opening Pressure: 1 bar / 14.5 PSI



### Ordering Codes

**\*FI-RVZ\*-10\*L\*R\*-WD\*-B\*-W3\*-1\*-MS**

\* Male Stud Check Valve (Flow to Stud End) **FI-RVZ**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Whitworth Parallel Pipe Thread (BSPP) **R**

If required, please indicate special sizes, e.g. R1/8!

\* Seal Type Profile Sealing Ring **-WD**

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Opening Pressure 1 bar / 14.5 PSI **1**

Contact STAUFF for alternative opening pressures.

\* Assembling / Kitting Valve body only **—**

Valve body supplied with cutting ring and union nut **-MS**

Valve body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

### Spare Parts / Accessories



Profile Sealing Ring  
Type **WDG** Page 238

### Whitworth Parallel Pipe Thread (BSPP)

### Profile Sealing Ring

| Series | Tube OD | PN        | Dimensions |      |       |       |                 |     |      |      |      |       | Torque      | Weight       | Ordering Codes <sup>3</sup> |
|--------|---------|-----------|------------|------|-------|-------|-----------------|-----|------|------|------|-------|-------------|--------------|-----------------------------|
|        | (mm/in) | (bar/PSI) | (mm/in)    |      |       |       |                 |     |      |      |      |       | (N-m/lb.ft) | (kg/lbs) ca. |                             |
|        | D1      |           | Thread     | T    | d     | L     | L1 <sup>1</sup> | L2  | i    | S1   | S2   | S3    | Thread      | T per 100    |                             |
| L      | 6       | 400       | G 1/8      | 13,9 | 51    | 59    | 36              | 8   | 22   | 27   | 14   | 18    | 12,07       |              | FI-RVZ-06LR-WD-B-W3-1       |
|        | .24     | 5800      |            | .55  | 2.01  | 2.32  | 1.42            | .31 | .87  | 1.06 | .55  | 13.3  | 26.55       |              |                             |
|        | 8       | 400       | G 1/4      | 18,9 | 55    | 63    | 36              | 12  | 22   | 27   | 17   | 35    | 12,56       |              | FI-RVZ-08LR-WD-B-W3-1       |
|        | .31     | 5800      |            | .74  | 2.17  | 2.48  | 1.42            | .47 | .87  | 1.06 | .67  | 25.8  | 27.63       |              |                             |
|        | 10      | 400       | G 1/4      | 18,9 | 53    | 61    | 34              | 12  | 22   | 27   | 19   | 35    | 11,38       |              | FI-RVZ-10LR-WD-B-W3-1       |
|        | .39     | 5800      |            | .74  | 2.09  | 2.40  | 1.34            | .47 | .87  | 1.06 | .75  | 25.8  | 25.04       |              |                             |
|        | 12      | 400       | G 3/8      | 21,9 | 58    | 66    | 39              | 12  | 22   | 27   | 22   | 70    | 13,64       |              | FI-RVZ-12LR-WD-B-W3-1       |
|        | .47     | 5800      |            | .86  | 2.28  | 2.60  | 1.54            | .47 | .87  | 1.06 | .87  | 51.8  | 30.00       |              |                             |
|        | 15      | 400       | G 1/2      | 26,9 | 62    | 70    | 41              | 14  | 27   | 32   | 27   | 90    | 19,15       |              | FI-RVZ-15LR-WD-B-W3-1       |
|        | .59     | 5800      |            | 1.06 | 2.44  | 2.76  | 1.61            | .55 | 1.06 | 1.26 | 1.06 | 66.6  | 42.12       |              |                             |
|        | 18      | 400       | G 1/2      | 26,9 | 67    | 76    | 45,5            | 14  | 27   | 32   | 32   | 90    | 22,67       |              | FI-RVZ-18LR-WD-B-W3-1       |
|        | .71     | 5800      |            | 1.06 | 2.64  | 2.99  | 1.79            | .55 | 1.06 | 1.26 | 1.26 | 66.6  | 49.88       |              |                             |
|        | 22      | 250       | G 3/4      | 31,9 | 77    | 86    | 53,5            | 16  | 46   | 41   | 36   | 180   | 45,69       |              | FI-RVZ-22LR-WD-B-W3-1       |
|        | .87     | 3625      |            | 1.26 | 3.03  | 3.39  | 2.11            | .63 | 1.81 | 1.61 | 1.42 | 133.2 | 100.53      |              |                             |
|        | 28      | 250       | G 1        | 39,9 | 80    | 89    | 54,5            | 18  | 46   | 41   | 41   | 310   | 52,60       |              | FI-RVZ-28LR-WD-B-W3-1       |
|        | 1.10    | 3625      |            | 1.57 | 3.15  | 3.50  | 2.15            | .71 | 1.81 | 1.61 | 1.61 | 229.4 | 115.72      |              |                             |
|        | 35      | 250       | G 1 1/4    | 49,9 | 97,5  | 108,5 | 67              | 20  | 60   | 70   | 50   | 450   | 130,70      |              | FI-RVZ-35LR-WD-B-W3-1       |
|        | 1.38    | 3625      |            | 1.96 | 3.84  | 4.27  | 2.64            | .79 | 2.36 | 2.76 | 1.97 | 333.0 | 287.54      |              |                             |
|        | 42      | 250       | G 1 1/2    | 54,9 | 97,5  | 109,5 | 64,5            | 22  | 60   | 70   | 60   | 540   | 137,40      |              | FI-RVZ-42LR-WD-B-W3-1       |
|        | 1.65    | 3625      |            | 2.16 | 3.84  | 4.31  | 2.54            | .87 | 2.36 | 2.76 | 2.36 | 399.6 | 302.28      |              |                             |
| S      | 6       | 400       | G 1/4      | 18,9 | 57    | 65    | 38              | 12  | 22   | 27   | 17   | 55    | 12,92       |              | FI-RVZ-06SR-WD-B-W3-1       |
|        | .24     | 5800      |            | .74  | 2.24  | 2.56  | 1.50            | .47 | .87  | 1.06 | .67  | 40.7  | 28.42       |              |                             |
|        | 8       | 400       | G 1/4      | 18,9 | 55    | 63    | 36              | 12  | 22   | 27   | 19   | 55    | 12,18       |              | FI-RVZ-08SR-WD-B-W3-1       |
|        | .31     | 5800      |            | .74  | 2.17  | 2.48  | 1.42            | .47 | .87  | 1.06 | .75  | 40.7  | 26.80       |              |                             |
|        | 10      | 400       | G 3/8      | 21,9 | 57    | 66    | 37,5            | 12  | 22   | 27   | 22   | 80    | 13,30       |              | FI-RVZ-10SR-WD-B-W3-1       |
|        | .39     | 5800      |            | .86  | 2.24  | 2.60  | 1.48            | .47 | .87  | 1.06 | .87  | 59.2  | 29.25       |              |                             |
|        | 12      | 400       | G 3/8      | 21,9 | 59    | 68    | 39,5            | 12  | 22   | 27   | 24   | 80    | 14,64       |              | FI-RVZ-12SR-WD-B-W3-1       |
|        | .47     | 5800      |            | .86  | 2.32  | 2.68  | 1.56            | .47 | .87  | 1.06 | .94  | 59.2  | 32.20       |              |                             |
|        | 14      | 400       | G 1/2      | 26,9 | 64    | 74    | 42              | 14  | 27   | 32   | 27   | 115   | 20,23       |              | FI-RVZ-14SR-WD-B-W3-1       |
|        | .55     | 5800      |            | 1.06 | 2.52  | 2.91  | 1.65            | .55 | 1.06 | 1.26 | 1.06 | 85.1  | 44.50       |              |                             |
|        | 16      | 400       | G 1/2      | 26,9 | 67    | 77    | 44,5            | 14  | 27   | 32   | 30   | 115   | 21,61       |              | FI-RVZ-16SR-WD-B-W3-1       |
|        | .63     | 5800      |            | 1.06 | 2.64  | 3.03  | 1.75            | .55 | 1.06 | 1.26 | 1.18 | 85.1  | 47.55       |              |                             |
|        | 20      | 400       | G 3/4      | 31,9 | 79,5  | 90,5  | 53              | 16  | 46   | 41   | 36   | 180   | 46,63       |              | FI-RVZ-20SR-WD-B-W3-1       |
|        | .79     | 5800      |            | 1.26 | 3.13  | 3.56  | 2.09            | .63 | 1.81 | 1.61 | 1.42 | 133.2 | 102.59      |              |                             |
|        | 25      | 250       | G 1        | 39,9 | 83    | 95    | 53              | 18  | 46   | 41   | 46   | 310   | 53,10       |              | FI-RVZ-25SR-WD-B-W3-1       |
|        | .98     | 3625      |            | 1.57 | 3.27  | 3.74  | 2.09            | .71 | 1.81 | 1.61 | 1.81 | 229.4 | 116.82      |              |                             |
|        | 30      | 250       | G 1 1/4    | 49,9 | 94    | 107   | 60,5            | 20  | 50   | 55   | 50   | 450   | 85,80       |              | FI-RVZ-30SR-WD-B-W3-1       |
|        | 1.18    | 3625      |            | 1.96 | 3.70  | 4.21  | 2.38            | .79 | 1.97 | 2.17 | 1.97 | 333.0 | 188.76      |              |                             |
|        | 38      | 250       | G 1 1/2    | 54,9 | 103,5 | 118,5 | 65,5            | 22  | 60   | 70   | 60   | 540   | 143,40      |              | FI-RVZ-38SR-WD-B-W3-1       |
|        | 1.50    | 3625      |            | 2.16 | 4.07  | 4.67  | 2.58            | .87 | 2.36 | 2.76 | 2.36 | 399.6 | 315.48      |              |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Valve body only.

Standard seal material is NBR (Buna-N®).

Please note: Internal seals are made of FKM (Viton®).

In order to make sure that the valves will be suitable for your particular application, please contact STAUFF with details on media, operating pressure, pressure peaks, operating temperature and the expected frequency of valve actuations.

Male stud acc. to ISO 1179-2 (Type E)

Port acc. to ISO 1179-1

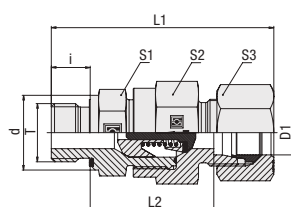
Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

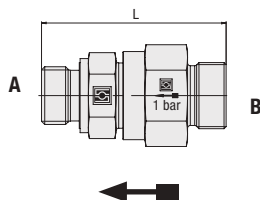
Please contact STAUFF prior to the assembly for further information.

Opening pressure tolerance  $\pm 20\%$ .





Flow Direction: B > A (to Stud End)  
Standard Opening Pressure: 1 bar / 14.5 PSI



## Male Stud Check Valve High-Pressure Version Type FI-RVZ-...-M-WD • Series L / S



### Profile Sealing Ring

### Metric Parallel Thread

| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in) |      |       |       |      |     |      |      |      |       |        | Torque<br>(N·m/ft·lb) | Weight<br>(kg/lbs) Ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------|-------|-------|------|-----|------|------|------|-------|--------|-----------------------|------------------------|-----------------------------|
|        | D1                 |                 | Thread T              | d    | L     | L1    | L2   | i   | S1   | S2   | S3   |       |        | Thread T              | per 100                |                             |
| L      | 6                  | 400             | M 10 x 1              | 13,9 | 51    | 59    | 36   | 8   | 22   | 27   | 14   | 18    | 12,20  |                       |                        | FI-RVZ-06LM-WD-B-W3-1       |
|        | .24                | 5800            |                       | .55  | 2.01  | 2.32  | 1.42 | .31 | .87  | 1.06 | .55  | 13.3  | 26.84  |                       |                        |                             |
|        | 8                  | 400             | M 12 x 1,5            | 16,9 | 55    | 63    | 36   | 12  | 22   | 27   | 17   | 25    | 12,31  |                       |                        | FI-RVZ-08LM-WD-B-W3-1       |
|        | .31                | 5800            |                       | .67  | 2.17  | 2.48  | 1.42 | .47 | .87  | 1.06 | .67  | 18.5  | 27.08  |                       |                        |                             |
|        | 10                 | 400             | M 14 x 1,5            | 18,9 | 53    | 61    | 34   | 12  | 22   | 27   | 19   | 45    | 11,40  |                       |                        | FI-RVZ-10LM-WD-B-W3-1       |
|        | .39                | 5800            |                       | .74  | 2.09  | 2.40  | 1.34 | .47 | .87  | 1.06 | .75  | 33.3  | 25.08  |                       |                        |                             |
|        | 12                 | 400             | M 16 x 1,5            | 21,9 | 58    | 66    | 39   | 12  | 22   | 27   | 22   | 55    | 14,02  |                       |                        | FI-RVZ-12LM-WD-B-W3-1       |
|        | .47                | 5800            |                       | .86  | 2.28  | 2.60  | 1.54 | .47 | .87  | 1.06 | .87  | 40.7  | 30.84  |                       |                        |                             |
|        | 15                 | 400             | M 18 x 1,5            | 23,9 | 60    | 68    | 41   | 12  | 27   | 32   | 27   | 70    | 19,06  |                       |                        | FI-RVZ-15LM-WD-B-W3-1       |
|        | .59                | 5800            |                       | .94  | 2.36  | 2.68  | 1.61 | .47 | 1.06 | 1.26 | 1.06 | 51.8  | 41.92  |                       |                        |                             |
|        | 18                 | 400             | M 22 x 1,5            | 26,9 | 67    | 76    | 45,5 | 14  | 27   | 32   | 32   | 125   | 10,27  |                       |                        | FI-RVZ-18LM-WD-B-W3-1       |
|        | .71                | 5800            |                       | 1.06 | 2.64  | 2.99  | 1.79 | .55 | 1.06 | 1.26 | 1.26 | 92.5  | 22.59  |                       |                        |                             |
|        | 22                 | 250             | M 26 x 1,5            | 31,9 | 78    | 87    | 54,5 | 16  | 46   | 41   | 36   | 180   | 46,73  |                       |                        | FI-RVZ-22LM-WD-B-W3-1       |
|        | .87                | 3625            |                       | 1.26 | 3.07  | 3.43  | 2.15 | .63 | 1.81 | 1.61 | 1.42 | 133.2 | 102.81 |                       |                        |                             |
|        | 28                 | 250             | M 33 x 2              | 39,9 | 80    | 89    | 54,5 | 18  | 46   | 41   | 41   | 310   | 52,70  |                       |                        | FI-RVZ-28LM-WD-B-W3-1       |
|        | 1.10               | 3625            |                       | 1.57 | 3.15  | 3.50  | 2.15 | .71 | 1.81 | 1.61 | 1.61 | 229.4 | 115.94 |                       |                        |                             |
|        | 35                 | 250             | M 42 x 2              | 49,9 | 97,5  | 108,5 | 67   | 20  | 60   | 70   | 50   | 450   | 132,30 |                       |                        | FI-RVZ-35LM-WD-B-W3-1       |
|        | 1.38               | 3625            |                       | 1.96 | 3.84  | 4.27  | 2.64 | .79 | 2.36 | 2.76 | 1.97 | 333.0 | 291.06 |                       |                        |                             |
|        | 42                 | 250             | M 48 x 2              | 54,9 | 97,5  | 109,5 | 64,5 | 22  | 60   | 70   | 60   | 540   | 137,70 |                       |                        | FI-RVZ-42LM-WD-B-W3-1       |
|        | 1.65               | 3625            |                       | 2.16 | 3.84  | 4.31  | 2.54 | .87 | 2.36 | 2.76 | 2.36 | 399.6 | 302.94 |                       |                        |                             |
| S      | 6                  | 400             | M 12 x 1,5            | 16,9 | 57    | 65    | 38   | 12  | 22   | 27   | 17   | 35    | 12,66  |                       |                        | FI-RVZ-06SM-WD-B-W3-1       |
|        | .24                | 5800            |                       | .67  | 2.24  | 2.56  | 1.50 | .47 | .87  | 1.06 | .67  | 25.9  | 27.85  |                       |                        |                             |
|        | 8                  | 400             | M 14 x 1,5            | 18,9 | 55    | 63    | 36   | 12  | 22   | 27   | 19   | 55    | 12,21  |                       |                        | FI-RVZ-08SM-WD-B-W3-1       |
|        | .31                | 5800            |                       | .74  | 2.17  | 2.48  | 1.42 | .47 | .87  | 1.06 | .75  | 40.7  | 26.87  |                       |                        |                             |
|        | 10                 | 400             | M 16 x 1,5            | 21,9 | 57    | 66    | 37,5 | 12  | 22   | 27   | 22   | 70    | 6,64   |                       |                        | FI-RVZ-10SM-WD-B-W3-1       |
|        | .39                | 5800            |                       | .86  | 2.24  | 2.60  | 1.48 | .47 | .87  | 1.06 | .87  | 51.8  | 14.61  |                       |                        |                             |
|        | 12                 | 400             | M 18 x 1,5            | 23,9 | 59    | 68    | 39,5 | 12  | 24   | 27   | 24   | 90    | 15,58  |                       |                        | FI-RVZ-12SM-WD-B-W3-1       |
|        | .47                | 5800            |                       | .94  | 2.32  | 2.68  | 1.56 | .47 | .94  | 1.06 | .94  | 66.6  | 34.28  |                       |                        |                             |
|        | 14                 | 400             | M 20 x 1,5            | 25,9 | 64    | 74    | 42   | 14  | 27   | 32   | 27   | 125   | 19,98  |                       |                        | FI-RVZ-14SM-WD-B-W3-1       |
|        | .55                | 5800            |                       | 1.02 | 2.52  | 2.91  | 1.65 | .55 | 1.06 | 1.26 | 1.06 | 92.5  | 43.96  |                       |                        |                             |
|        | 16                 | 400             | M 22 x 1,5            | 26,9 | 67    | 77    | 44,5 | 14  | 27   | 32   | 30   | 135   | 21,94  |                       |                        | FI-RVZ-16SM-WD-B-W3-1       |
|        | .63                | 5800            |                       | 1.06 | 2.64  | 3.03  | 1.75 | .55 | 1.06 | 1.26 | 1.18 | 99.9  | 48.26  |                       |                        |                             |
|        | 20                 | 400             | M 27 x 2              | 31,9 | 78    | 89    | 51,5 | 16  | 46   | 41   | 36   | 180   | 53,51  |                       |                        | FI-RVZ-20SM-WD-B-W3-1       |
|        | .79                | 5800            |                       | 1.26 | 3.07  | 3.50  | 2.03 | .63 | 1.81 | 1.61 | 1.42 | 133.2 | 117.72 |                       |                        |                             |
|        | 25                 | 250             | M 33 x 2              | 39,9 | 83    | 95    | 53   | 18  | 46   | 41   | 46   | 310   | 53,10  |                       |                        | FI-RVZ-25SM-WD-B-W3-1       |
|        | .98                | 3625            |                       | 1.57 | 3.27  | 3.74  | 2.09 | .71 | 1.81 | 1.61 | 1.81 | 229.4 | 116.82 |                       |                        |                             |
|        | 30                 | 250             | M 42 x 2              | 49,9 | 94    | 107   | 60,5 | 20  | 50   | 55   | 50   | 450   | 86,00  |                       |                        | FI-RVZ-30SM-WD-B-W3-1       |
|        | 1.18               | 3625            |                       | 1.96 | 3.70  | 4.21  | 2.38 | .79 | 1.97 | 2.17 | 1.97 | 333.0 | 189.20 |                       |                        |                             |
|        | 38                 | 250             | M 48 x 2              | 54,9 | 103,5 | 118,5 | 65,5 | 22  | 60   | 70   | 60   | 540   | 143,90 |                       |                        | FI-RVZ-38SM-WD-B-W3-1       |
|        | 1.50               | 3625            |                       | 2.16 | 4.07  | 4.67  | 2.58 | .87 | 2.36 | 2.76 | 2.36 | 399.6 | 316.58 |                       |                        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Valve body only.

Standard seal material is NBR (Buna-N®).

Please note: Internal seals are made of FKM (Viton®).

In order to make sure that the valves will be suitable for your particular application, please contact STAUFF with details on media, operating pressure, pressure peaks, operating temperature and the expected frequency of valve actuations.

Male stud acc. to ISO 9974-2 (Type E)

Port acc. to ISO 9974-1

Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

Opening pressure tolerance ± 20%.

### Ordering Codes

**\*FI-RVZ\*-10\*L\*M\*-WD\*-B\*-W3\*-1\*-MS**

\* Male Stud Check Valve (Flow to Stud End) **FI-RVZ**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Metric Parallel Thread **M**

If required, please indicate special sizes, e.g. M12x1.5!

\* Seal Type Profile Sealing Ring **-WD**

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Opening Pressure 1 bar / 14.5 PSI **1**

Contact STAUFF for alternative opening pressures.

\* Assembling / Kitting Valve body only **—**

Valve body supplied with cutting ring and union nut **-MS**

Valve body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDD** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

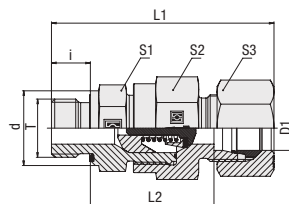
### Spare Parts / Accessories



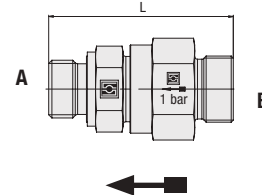
Profile Sealing Ring  
Type **WDG** Page 238



## Male Stud Check Valve Standard Version Type FI-RVZA-...-R-WD • Series L / S



Flow Direction: B > A (to Stud End)  
Standard Opening Pressure: 1 bar / 14.5 PSI



### Ordering Codes

**\*FI-RVZA\*-10\*L\*-R-WD\*-B\*-W3\*-1\*-MS**

\* Male Stud Check Valve (Flow to Stud End) **FI-RVZA**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Whitworth Parallel Pipe Thread (BSPP) **R**

If required, please indicate special sizes, e.g. R1/8!

\* Seal Type Profile Sealing Ring **-WD**

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Opening Pressure 1 bar / 14.5 PSI **1**

Contact STAUFF for alternative opening pressures.

\* Assembling / Kitting Valve body only **—**

Valve body supplied with cutting ring and union nut **-MS**

Valve body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDDS** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

### Spare Parts / Accessories



Profile Sealing Ring  
Type **WDG** Page 238

### Whitworth Parallel Pipe Thread (BSPP)

### Profile Sealing Ring

| Series | Tube OD<br>(mm/in) | PB<br>(bar/PSI) | Dimensions<br>(mm/in)                                       | Torque<br>(Nm/lb.ft) | Weight<br>(kg/lbs) ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-------------------------------------------------------------|----------------------|------------------------|-----------------------------|
|        | D1                 |                 | Thread T d L L1 <sup>1</sup> L2 i S1 S2 S3 Thread T per 100 |                      |                        |                             |
| L      | 6                  | 250             | G 1/8 13,9 43 51 28 8 17 17 14 18 4,5                       |                      |                        | FI-RVZA-06LR-WD-B-W3-1      |
|        | .24                | 3625            | .55 1.69 2.01 1.10 .31 .67 .67 .55 13.3 9.92                |                      |                        |                             |
|        | 8                  | 250             | G 1/4 18,9 47,5 55,5 28,5 12 19 19 17 35 5,8                |                      |                        | FI-RVZA-08LR-WD-B-W3-1      |
|        | .31                | 3625            | .74 1.87 2.19 1.12 .47 .75 .75 .67 25.8 12.79               |                      |                        |                             |
|        | 10                 | 250             | G 1/4 18,9 59 67 40 12 22 24 19 35 10,6                     |                      |                        | FI-RVZA-10LR-WD-B-W3-1      |
|        | .39                | 3625            | .74 2.32 2.64 1.57 .47 .87 .94 .75 25.8 23.37               |                      |                        |                             |
|        | 12                 | 250             | G 3/8 21,9 60,5 68,5 41,5 12 27 30 22 70 16,8               |                      |                        | FI-RVZA-12LR-WD-B-W3-1      |
|        | .47                | 3625            | .86 2.38 2.70 1.63 .47 1.06 1.18 .87 51.8 37.04             |                      |                        |                             |
|        | 15                 | 250             | G 1/2 26,9 65 73 44 14 30 32 27 90 20,8                     |                      |                        | FI-RVZA-15LR-WD-B-W3-1      |
|        | .59                | 3625            | 1.06 2.56 2.87 1.73 .55 1.18 1.26 1.06 66.6 45.86           |                      |                        |                             |
|        | 18                 | 160             | G 1/2 26,9 69,5 78,5 48 14 36 36 32 90 28,0                 |                      |                        | FI-RVZA-18LR-WD-B-W3-1      |
|        | .71                | 2320            | 1.06 2.74 3.09 1.89 .55 1.42 1.42 1.26 66.6 61.73           |                      |                        |                             |
|        | 22                 | 160             | G 3/4 31,9 80,5 89,5 57 16 41 46 36 180 49,4                |                      |                        | FI-RVZA-22LR-WD-B-W3-1      |
|        | .87                | 2320            | 1.26 3.17 3.52 2.24 .63 1.61 1.81 1.42 133.2 108.91         |                      |                        |                             |
|        | 28                 | 100             | G 1 39,9 92,5 101,5 67 18 50 55 41 310 81,9                 |                      |                        | FI-RVZA-28LR-WD-B-W3-1      |
|        | 1.10               | 1450            | 1.57 3.64 4.00 2.64 .71 1.97 2.17 1.61 229.4 180.56         |                      |                        |                             |
|        | 35                 | 100             | G 1 1/4 49,9 102 113 71,5 20 60 65 50 450 121,7             |                      |                        | FI-RVZA-35LR-WD-B-W3-1      |
|        | 1.38               | 1450            | 1.96 4.02 4.45 2.81 .79 2.36 2.56 1.97 333.0 268.30         |                      |                        |                             |
|        | 42                 | 100             | G 1 1/2 54,9 108,5 120,5 75,5 22 65 75 60 540 167,2         |                      |                        | FI-RVZA-42LR-WD-B-W3-1      |
|        | 1.65               | 1450            | 2.16 4.27 4.74 2.97 .87 2.56 2.95 2.36 399.6 368.61         |                      |                        |                             |
| S      | 6                  | 630             | G 1/4 18,9 50,5 58,5 31,5 12 19 19 17 55 7,0                |                      |                        | FI-RVZA-06SR-WD-B-W3-1      |
|        | .24                | 9137            | .74 1.99 2.30 1.24 .47 .75 .75 .67 40.7 15.43               |                      |                        |                             |
|        | 8                  | 630             | G 1/4 18,9 50,5 58,5 31,5 12 19 19 19 55 6,9                |                      |                        | FI-RVZA-08SR-WD-B-W3-1      |
|        | .31                | 9137            | .74 1.99 2.30 1.24 .47 .75 .75 .75 40.7 15.21               |                      |                        |                             |
|        | 10                 | 630             | G 3/8 21,9 57,5 66,5 38 12 22 24 22 80 12,0                 |                      |                        | FI-RVZA-10SR-WD-B-W3-1      |
|        | .39                | 9137            | .86 2.26 2.62 1.49 .47 .87 .94 .87 59.2 26.46               |                      |                        |                             |
|        | 12                 | 630             | G 3/8 21,9 60,5 69,5 41 12 24 27 24 80 15,0                 |                      |                        | FI-RVZA-12SR-WD-B-W3-1      |
|        | .47                | 9137            | .86 2.38 2.74 1.61 .47 .94 1.06 .94 59.2 33.07              |                      |                        |                             |
|        | 14                 | 630             | G 1/2 26,9 65,5 75,5 43,5 14 27 32 27 115 21,6              |                      |                        | FI-RVZA-14SR-WD-B-W3-1      |
|        | .55                | 9137            | 1.06 2.58 2.97 1.71 .55 1.06 1.26 1.06 85.1 47.62           |                      |                        |                             |
|        | 16                 | 400             | G 1/2 26,9 70,5 80,5 48 14 32 36 30 115 28,0                |                      |                        | FI-RVZA-16SR-WD-B-W3-1      |
|        | .63                | 5801            | 1.06 2.76 3.17 1.89 .55 1.26 1.42 1.18 85.1 61.72           |                      |                        |                             |
|        | 20                 | 400             | G 3/4 31,9 78,5 89,5 52 16 41 46 36 180 50,7                |                      |                        | FI-RVZA-20SR-WD-B-W3-1      |
|        | .79                | 5801            | 1.26 3.09 3.52 2.05 .63 1.61 1.81 1.42 133.2 11.77          |                      |                        |                             |
|        | 25                 | 400             | G 1 39,9 87 99 57 18 46 50 46 310 65,6                      |                      |                        | FI-RVZA-25SR-WD-B-W3-1      |
|        | .98                | 5801            | 1.57 3.43 3.90 2.24 .71 1.81 1.97 1.81 229.4 144.62         |                      |                        |                             |
|        | 30                 | 250             | G 1 1/4 49,9 99,5 112,5 66 20 55 60 50 450 108,5            |                      |                        | FI-RVZA-30SR-WD-B-W3-1      |
|        | 1.18               | 3625            | 1.96 3.92 4.43 2.59 .79 2.17 2.36 1.97 333.0 239.20         |                      |                        |                             |
|        | 38                 | 250             | G 1 1/2 54,9 110,5 125,5 72,5 22 65 70 60 540 161,8         |                      |                        | FI-RVZA-38SR-WD-B-W3-1      |
|        | 1.50               | 3625            | 2.16 4.35 4.94 2.85 .87 2.56 2.76 2.36 399.6 356.71         |                      |                        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Valve body only.

Standard seal material is NBR (Buna-N®).

Please note: Internal seals are made of FKM (Viton®).

In order to make sure that the valves will be suitable for your particular application, please contact STAUFF with details on media, operating pressure, pressure peaks, operating temperature and the expected frequency of valve actuations.

Male stud acc. to ISO 1179-2 (Type E)

Port acc. to ISO 1179-1

Torque recommendations for Steel mating material.

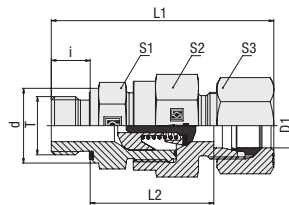
Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

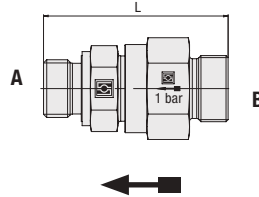
Opening pressure tolerance  $\pm 20\%$ .







Flow Direction: B > A (to Stud End)  
Standard Opening Pressure: 1 bar / 14.5 PSI



## Male Stud Check Valve Standard Version Type FI-RVZA-...-M-WD • Series L / S



### Profile Sealing Ring

### Metric Parallel Thread

| Series | Tube OD<br>(mm/in) | PB<br>(bar/PSI) | Dimensions<br>(mm/in) |      |       |                 |      |     |      |      |      |       |        | Torque<br>(N·m/ft·lb) | Weight<br>(kg/lbs) Ca. | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|------|-------|-----------------|------|-----|------|------|------|-------|--------|-----------------------|------------------------|-----------------------------|
|        | D1                 |                 | Thread T              | d    | L     | L1 <sup>1</sup> | L2   | i   | S1   | S2   | S3   |       |        | Thread T              | per 100                |                             |
| L      | 6                  | 250             | M 10 x 1              | 13,9 | 43    | 51              | 28   | 8   | 17   | 17   | 14   | 18    | 5,7    |                       |                        | FI-RVZA-06LM-WD-B-W3-1      |
|        | .24                | 3625            |                       | .55  | 1.69  | 2.01            | 1.10 | .31 | .67  | .67  | .55  | 13.3  | 12.57  |                       |                        |                             |
|        | 8                  | 250             | M 12 x 1,5            | 16,9 | 47,5  | 55,5            | 28,5 | 12  | 19   | 19   | 17   | 25    | 5,5    |                       |                        | FI-RVZA-08LM-WD-B-W3-1      |
|        | .31                | 3625            |                       | .67  | 1.87  | 2.19            | 1.12 | .47 | .75  | .75  | .67  | 18.5  | 12.13  |                       |                        |                             |
|        | 10                 | 250             | M 14 x 1,5            | 18,9 | 57,5  | 65,5            | 38,5 | 12  | 22   | 24   | 19   | 45    | 10,3   |                       |                        | FI-RVZA-10LM-WD-B-W3-1      |
|        | .39                | 3625            |                       | .74  | 2.26  | 2.58            | 1.53 | .47 | .87  | .94  | .75  | 33.3  | 22.71  |                       |                        |                             |
|        | 12                 | 250             | M 16 x 1,5            | 21,9 | 60    | 68              | 41   | 12  | 27   | 30   | 22   | 55    | 16,5   |                       |                        | FI-RVZA-12LM-WD-B-W3-1      |
|        | .47                | 3625            |                       | .86  | 2.36  | 2.68            | 1.61 | .47 | 1.06 | 1.18 | .87  | 40.7  | 36.38  |                       |                        |                             |
|        | 15                 | 250             | M 18 x 1,5            | 23,9 | 63    | 71              | 44   | 12  | 30   | 32   | 27   | 70    | 19,9   |                       |                        | FI-RVZA-15LM-WD-B-W3-1      |
|        | .59                | 3625            |                       | .94  | 2.48  | 2.80            | 1.73 | .47 | 1.18 | 1.26 | 1.06 | 51.8  | 43.87  |                       |                        |                             |
|        | 18                 | 160             | M 22 x 1,5            | 26,9 | 69,5  | 78,5            | 48   | 14  | 36   | 36   | 32   | 125   | 28,3   |                       |                        | FI-RVZA-18LM-WD-B-W3-1      |
|        | .71                | 2320            |                       | 1.06 | 2.74  | 3.09            | 1.89 | .55 | 1.42 | 1.42 | 1.26 | 92.5  | 62.39  |                       |                        |                             |
|        | 22                 | 160             | M 26 x 1,5            | 31,9 | 79,5  | 88,5            | 56   | 16  | 41   | 46   | 36   | 180   | 47,9   |                       |                        | FI-RVZA-22LM-WD-B-W3-1      |
|        | .87                | 2320            |                       | 1.26 | 3.13  | 3.48            | 2.20 | .63 | 1.61 | 1.81 | 1.42 | 133.2 | 105.60 |                       |                        |                             |
|        | 28                 | 100             | M 33 x 2              | 39,9 | 91    | 100             | 65,5 | 18  | 50   | 55   | 41   | 310   | 79,4   |                       |                        | FI-RVZA-28LM-WD-B-W3-1      |
|        | 1.10               | 1450            |                       | 1.57 | 3.58  | 3.94            | 2.58 | .71 | 1.97 | 2.17 | 1.61 | 229.4 | 175.05 |                       |                        |                             |
|        | 35                 | 100             | M 42 x 2              | 49,9 | 102   | 113             | 71,5 | 20  | 60   | 65   | 50   | 450   | 125,8  |                       |                        | FI-RVZA-35LM-WD-B-W3-1      |
|        | 1.38               | 1450            |                       | 1.96 | 4.02  | 4.45            | 2.81 | .79 | 2.36 | 2.56 | 1.97 | 333.0 | 277.34 |                       |                        |                             |
|        | 42                 | 100             | M 48 x 2              | 54,9 | 108,5 | 120,5           | 75,5 | 22  | 65   | 75   | 60   | 540   | 194,0  |                       |                        | FI-RVZA-42LM-WD-B-W3-1      |
|        | 1.65               | 1450            |                       | 2.16 | 4.27  | 4.74            | 2.97 | .87 | 2.56 | 2.95 | 2.36 | 399.6 | 427.69 |                       |                        |                             |
| S      | 6                  | 630             | M 12 x 1,5            | 16,9 | 50,5  | 58,5            | 31,5 | 12  | 19   | 19   | 17   | 35    | 9,3    |                       |                        | FI-RVZA-06SM-WD-B-W3-1      |
|        | .24                | 9137            |                       | .67  | 1.99  | 2.30            | 1.24 | .47 | .75  | .75  | .67  | 25.9  | 20,50  |                       |                        |                             |
|        | 8                  | 630             | M 14 x 1,5            | 18,9 | 50,5  | 58,5            | 31,5 | 12  | 19   | 19   | 19   | 55    | 9,2    |                       |                        | FI-RVZA-08SM-WD-B-W3-1      |
|        | .31                | 9137            |                       | .74  | 1.99  | 2.30            | 1.24 | .47 | .75  | .75  | .75  | 40.7  | 20.28  |                       |                        |                             |
|        | 10                 | 630             | M 16 x 1,5            | 21,9 | 57,5  | 66,5            | 38   | 12  | 22   | 24   | 22   | 70    | 11,8   |                       |                        | FI-RVZA-10SM-WD-B-W3-1      |
|        | .39                | 9137            |                       | .86  | 2.26  | 2.62            | 1.49 | .47 | .87  | .94  | .87  | 51.8  | 26.01  |                       |                        |                             |
|        | 12                 | 630             | M 18 x 1,5            | 23,9 | 60,5  | 69,5            | 41   | 12  | 24   | 27   | 24   | 90    | 18,9   |                       |                        | FI-RVZA-12SM-WD-B-W3-1      |
|        | .47                | 9137            |                       | .94  | 2.38  | 2.74            | 1.61 | .47 | .94  | 1.06 | .94  | 66.6  | 41.67  |                       |                        |                             |
|        | 14                 | 630             | M 20 x 1,5            | 25,9 | 65,5  | 75,5            | 43,5 | 14  | 27   | 32   | 27   | 125   | 27,9   |                       |                        | FI-RVZA-14SM-WD-B-W3-1      |
|        | .55                | 9137            |                       | 1.02 | 2.58  | 2.97            | 1.71 | .55 | 1.06 | 1.26 | 1.06 | 92.5  | 61.51  |                       |                        |                             |
|        | 16                 | 400             | M 22 x 1,5            | 26,9 | 69    | 79              | 46,5 | 14  | 32   | 36   | 30   | 135   | 27,5   |                       |                        | FI-RVZA-16SM-WD-B-W3-1      |
|        | .63                | 5801            |                       | 1.06 | 2.72  | 3.11            | 1.83 | .55 | 1.26 | 1.42 | 1.18 | 99.9  | 60.63  |                       |                        |                             |
|        | 20                 | 400             | M 27 x 2              | 31,9 | 78,5  | 89,5            | 52   | 16  | 41   | 46   | 36   | 180   | 50,3   |                       |                        | FI-RVZA-20SM-WD-B-W3-1      |
|        | .79                | 5801            |                       | 1.26 | 3.09  | 3.52            | 2.05 | .63 | 1.61 | 1.81 | 1.42 | 133.2 | 110.89 |                       |                        |                             |
|        | 25                 | 400             | M 33 x 2              | 39,9 | 87    | 99              | 57   | 18  | 46   | 50   | 46   | 310   | 65,5   |                       |                        | FI-RVZA-25SM-WD-B-W3-1      |
|        | .98                | 5801            |                       | 1.57 | 3.43  | 3.90            | 2.25 | .71 | 1.81 | 1.97 | 1.81 | 229.4 | 144.40 |                       |                        |                             |
|        | 30                 | 250             | M 42 x 2              | 49,9 | 99,5  | 112,5           | 66   | 20  | 55   | 60   | 50   | 450   | 133,8  |                       |                        | FI-RVZA-30SM-WD-B-W3-1      |
|        | 1.18               | 3625            |                       | 1.96 | 3.92  | 4.43            | 2.60 | .79 | 2.17 | 2.36 | 1.97 | 333.0 | 294.98 |                       |                        |                             |
|        | 38                 | 250             | M 48 x 2              | 54,9 | 110,5 | 125,5           | 72,5 | 22  | 65   | 70   | 60   | 540   | 196,9  |                       |                        | FI-RVZA-38SM-WD-B-W3-1      |
|        | 1.50               | 3625            |                       | 2.16 | 4.35  | 4.94            | 2.85 | .87 | 2.56 | 2.76 | 2.36 | 399.6 | 374.56 |                       |                        |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Valve body only.

Standard seal material is NBR (Buna-N®).

Please note: Internal seals are made of FKM (Viton®).

In order to make sure that the valves will be suitable for your particular application, please contact STAUFF with details on media, operating pressure, pressure peaks, operating temperature and the expected frequency of valve actuations.

Male stud acc. to ISO 9974-2 (Type E)

Port acc. to ISO 9974-1

Torque recommendations for Steel mating material.

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

Opening pressure tolerance ± 20%.

### Ordering Codes

**\*FI-RVZA\*-10\*L\*M\*-WD\*-B\*-W3\*-1\*-MS**

\* Male Stud Check Valve (Flow to Stud End) **FI-RVZA**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

\* Thread Type Metric Parallel Thread **M**

If required, please indicate special sizes, e.g. M12x1.5!

\* Seal Type Profile Sealing Ring **-WD**

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Opening Pressure 1 bar / 14.5 PSI **1**

Contact STAUFF for alternative opening pressures.

\* Assembling / Kitting Valve body only **—**

Valve body supplied with cutting ring and union nut **-MS**

Valve body supplied with soft-sealing cutting ring and union nut **-MSV**

### Connecting Parts



Cutting Ring  
Type **FI-DS** Page 28



Soft-Sealing Cutting Ring  
Type **FI-WDD** Page 29



Support Sleeve  
Type **FI-VH** Page 31



STAUFF Form EVO Sealing Ring  
Type **FI-FD** Page 32



Union Nut  
Type **FI-M** Page 33



37° Flared Tube Fitting Set  
Type **FI-AB** Page 37

### Spare Parts / Accessories



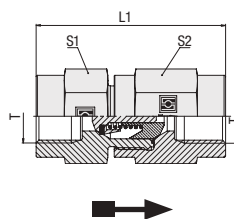
Profile Sealing Ring  
Type **WDG** Page 238



## Female Stud Check Valve High-Pressure Version Type FI-RVI-...-R



Standard Opening Pressure: 1 bar / 14.5 PSI



### Female Whitworth Parallel Pipe Thread (BSPP)

#### Ordering Codes

**\*FI-RVI\*-R\*1/2\*-W3\*-1**

\* Female Stud Check Valve

**FI-RVI**

\* Thread Type Female Whitworth Parallel Pipe Thread (BSPP)

**R**

\* Thread Size acc. to dimension table

**1/2**

Please always indicate thread sizes, e.g. 1/2!

\* Material Code Steel, zinc/nickel-plated

**-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Opening Pressure 1 bar / 14.5 PSI

**1**

Contact STAUFF for alternative opening pressures.

| PN<br>( <sup>bar</sup> / <sub>PSI</sub> ) | Dimensions<br>( <sup>mm</sup> / <sub>in</sub> ) |       | S1   | S2   | Weight<br>( <sup>kg</sup> / <sub>lbs</sub> ) ca.<br>per 100 | Ordering Codes     |
|-------------------------------------------|-------------------------------------------------|-------|------|------|-------------------------------------------------------------|--------------------|
|                                           | Thread T                                        | L1    |      |      |                                                             |                    |
| 400                                       | G 1/8                                           | 53    | 22   | 27   | 17,72                                                       | FI-RVI-R1/8-W3-1   |
| 5800                                      |                                                 | 2.09  | .87  | 1.06 | 38.98                                                       |                    |
| 400                                       | G 1/4                                           | 63    | 22   | 27   | 18,60                                                       | FI-RVI-R1/4-W3-1   |
| 5800                                      |                                                 | 2.48  | .87  | 1.06 | 40.91                                                       |                    |
| 400                                       | G 3/8                                           | 62    | 24   | 27   | 17,69                                                       | FI-RVI-R3/8-W3-1   |
| 5800                                      |                                                 | 2.44  | .94  | 1.06 | 38.92                                                       |                    |
| 315                                       | G 1/2                                           | 73,5  | 32   | 32   | 34,03                                                       | FI-RVI-R1/2-W3-1   |
| 4568                                      |                                                 | 2.89  | 1.26 | 1.26 | 74.87                                                       |                    |
| 250                                       | G 3/4                                           | 94,5  | 41   | 46   | 75,00                                                       | FI-RVI-R3/4-W3-1   |
| 3625                                      |                                                 | 3.72  | 1.61 | 1.81 | 165.00                                                      |                    |
| 250                                       | G 1                                             | 99,5  | 46   | 46   | 84,34                                                       | FI-RVI-R1-W3-1     |
| 3625                                      |                                                 | 3.92  | 1.81 | 1.81 | 185.56                                                      |                    |
| 250                                       | G 1 1/4                                         | 114,5 | 60   | 60   | 168,10                                                      | FI-RVI-R1-1/4-W3-1 |
| 3625                                      |                                                 | 4.51  | 2.36 | 2.36 | 369.82                                                      |                    |
| 250                                       | G 1 1/2                                         | 118,5 | 65   | 70   | 210,90                                                      | FI-RVI-R1-1/2-W3-1 |
| 3625                                      |                                                 | 4.67  | 2.56 | 2.76 | 463.98                                                      |                    |

Please note: Internal seals are made of FKM (Viton®).

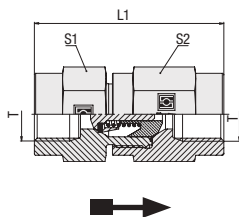
Opening pressure tolerance ± 20%.

In order to make sure that the valves will be suitable for your particular application, please contact STAUFF with details on media, operating pressure, pressure peaks, operating temperature and the expected frequency of valve actuations.





Standard Opening Pressure: 1 bar / 14.5 PSI



## Female Stud Check Valve Standard Version Type FI-RVIA-...-R



### Female Whitworth Parallel Pipe Thread (BSPP)

| PB<br>( <sup>bar</sup> /PSI) | Dimensions<br>( <sup>mm</sup> / <sup>in</sup> ) |      |      |      | Weight<br>( <sup>kg</sup> / <sup>lbs</sup> ) ca.<br>per 100 | Ordering Codes      |
|------------------------------|-------------------------------------------------|------|------|------|-------------------------------------------------------------|---------------------|
|                              | Thread T                                        | L1   | S1   | S2   |                                                             |                     |
| 250                          | G 1/8                                           | 50,5 | 19   | 19   | 10,4                                                        | FI-RVIA-R1/8-W3-1   |
| 3625                         |                                                 | 1.99 | .75  | .75  | 22.93                                                       |                     |
| 250                          | G 1/4                                           | 55   | 19   | 19   | 11,7                                                        | FI-RVIA-R1/4-W3-1   |
| 3625                         |                                                 | 2.16 | .75  | .75  | 25.79                                                       |                     |
| 250                          | G 3/8                                           | 68,5 | 24   | 27   | 21,0                                                        | FI-RVIA-R3/8-W3-1   |
| 3625                         |                                                 | 2.70 | .94  | 1.06 | 46.30                                                       |                     |
| 250                          | G 1/2                                           | 74   | 32   | 36   | 35,5                                                        | FI-RVIA-R1/2-W3-1   |
| 3625                         |                                                 | 2.91 | 1.26 | 1.42 | 78.26                                                       |                     |
| 160                          | G 3/4                                           | 84   | 41   | 46   | 80,7                                                        | FI-RVIA-R3/4-W3-1   |
| 2320                         |                                                 | 3.31 | 1.61 | 1.81 | 177.91                                                      |                     |
| 160                          | G 1                                             | 96,5 | 46   | 50   | 89,2                                                        | FI-RVIA-R1-W3-1     |
| 2320                         |                                                 | 3.80 | 1.81 | 1.97 | 196.65                                                      |                     |
| 100                          | G 1 1/4                                         | 110  | 60   | 60   | 189,0                                                       | FI-RVIA-R1-1/4-W3-1 |
| 1450                         |                                                 | 4.33 | 2.36 | 2.36 | 416.67                                                      |                     |
| 100                          | G 1 1/2                                         | 119  | 65   | 70   | 237,6                                                       | FI-RVIA-R1-1/2-W3-1 |
| 1450                         |                                                 | 4.69 | 2.56 | 2.76 | 523.82                                                      |                     |

### Ordering Codes

#### \*FI-RVIA\*-R\*1/2\*-W3\*-1

\* Female Stud Check Valve FI-RVIA

\* Thread Type Female Whitworth Parallel Pipe Thread (BSPP) R

\* Thread Size acc. to dimension table 1/2

Please always indicate thread sizes, e.g. 1/2!

\* Material Code Steel, zinc/nickel-plated -W3

Please contact STAUFF for alternative materials and surface finishings.

\* Opening Pressure 1 bar / 14.5 PSI 1

Contact STAUFF for alternative opening pressures.

Please note: Internal seals are made of FKM (Viton®).

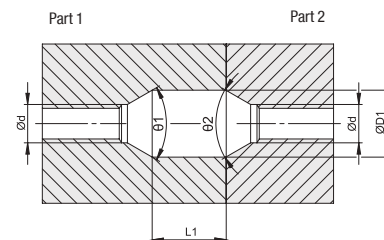
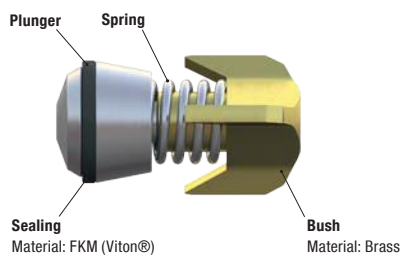
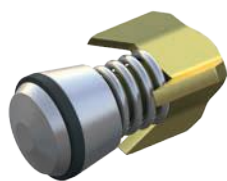
Opening pressure tolerance ± 20%.

In order to make sure that the valves will be suitable for your particular application, please contact STAUFF with details on media, operating pressure, pressure peaks, operating temperature and the expected frequency of valve actuations.



## Check Valve Installation Kit Type FI-VES • Design A

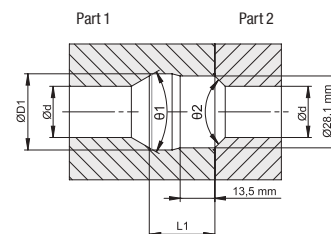
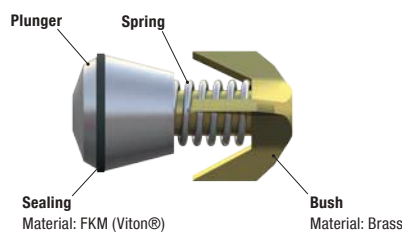
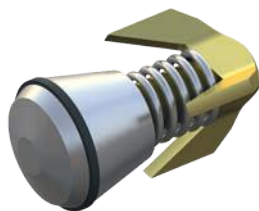
Standard Opening Pressure: 1 bar / 14.5 PSI



| Tube OD<br>(mm/in) |     |     |     | Dimensions<br>(mm/in) |      |      |    |    | Ordering Codes |               |
|--------------------|-----|-----|-----|-----------------------|------|------|----|----|----------------|---------------|
|                    |     |     |     | d                     | D1   | L1   | Ø1 | Ø2 |                |               |
| 6                  | 8   | 10  | 12  | 7,5                   | 13,1 | 14,5 | 60 | 60 |                | FI-VES-NW06-1 |
| .24                | .31 | .39 | .47 | .30                   | .52  | .57  |    |    |                |               |
| 14                 | 15  | 16  | 18  | 11,5                  | 17,6 | 17   | 60 | 60 |                | FI-VES-NW10-1 |
| .55                | .59 | .63 | .71 | .45                   | .69  | .67  |    |    |                |               |

## Check Valve Installation Kit Type FI-VES • Design B

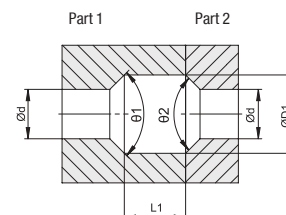
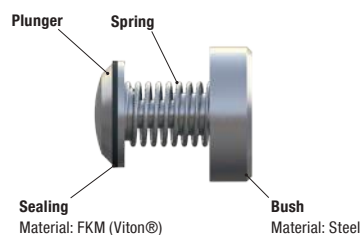
Standard Opening Pressure: 1 bar / 14.5 PSI



| Tube OD<br>( <sup>mm</sup> / <sub>in</sub> ) |     |     |      | Dimensions<br>( <sup>mm</sup> / <sub>in</sub> ) |      |      |    |    | Ordering Codes |               |
|----------------------------------------------|-----|-----|------|-------------------------------------------------|------|------|----|----|----------------|---------------|
|                                              |     |     |      | d                                               | D1   | L1   | Ø1 | Ø2 |                |               |
| 20                                           | 22  | 25  | 28   | 20                                              | 29,8 | 25,7 | 60 | 90 |                | FI-VES-NW16-1 |
| .79                                          | .87 | .98 | 1.10 | .79                                             | 1.17 | 1.01 |    |    |                |               |

## Check Valve Installation Kit Type FI-VES • Design C

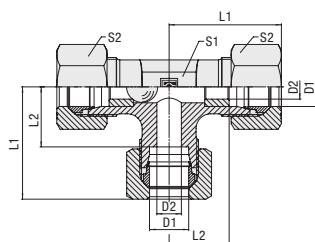
Standard Opening Pressure: 1 bar / 14.5 PSI



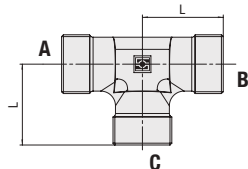
| Tube OD<br>( <sup>mm</sup> / <sub>in</sub> ) |      |      |  | Dimensions                        |      |      |    |    | Ordering Codes |  |
|----------------------------------------------|------|------|--|-----------------------------------|------|------|----|----|----------------|--|
|                                              |      |      |  | ( <sup>mm</sup> / <sub>in</sub> ) |      |      |    |    |                |  |
|                                              |      |      |  | d                                 | D1   | L1   | Ø1 | Ø2 |                |  |
| 30                                           |      |      |  | 24                                | 38   | 33   | 90 | 90 | FI-VES-NW25-1  |  |
| 1.18                                         |      |      |  | .94                               | 1.50 | 1.30 |    |    |                |  |
| 35                                           | 38   | 42   |  | 29                                | 46   | 36   | 90 | 90 | FI-VES-NW32-1  |  |
| 1.38                                         | 1.50 | 1.65 |  | 1.14                              | 1.81 | 1.42 |    |    |                |  |



## Alternating Valve Type FI-WV • Series L / S



Flow Directions:  
A > C (B closed) or B > C (A closed)



Recommended Installation Position



| Series | Tube OD |      | PB        |      | Dimensions |                 |     |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|---------|------|-----------|------|------------|-----------------|-----|------|-----------------------------------|-----------------------------|
|        | (mm/in) |      | (bar/PSI) |      | (mm/in)    |                 |     |      |                                   |                             |
|        | D1      |      |           | D2   | L          | L1 <sup>1</sup> | L2  | S1   | S2                                |                             |
| L      | 8       | 250  | 4         | 21   | 29         | 14              | 14  | 17   | 5,50                              | FI-WV-08L-W3                |
|        | .31     | 3625 | .16       | .83  | 1.14       | .55             | .55 | .67  | 12.09                             |                             |
|        | 10      | 250  | 6         | 22   | 30         | 15              | 17  | 19   | 7,30                              | FI-WV-10L-W3                |
|        | .39     | 3625 | .24       | .87  | 1.18       | .59             | .67 | .75  | 16.07                             |                             |
|        | 12      | 250  | 8         | 24   | 32         | 17              | 19  | 22   | 10,27                             | FI-WV-12L-W3                |
|        | .47     | 3625 | .31       | .94  | 1.26       | .67             | .75 | .87  | 22.59                             |                             |
|        | 15      | 250  | 9         | 28   | 36         | 21              | 19  | 27   | 10,95                             | FI-WV-15L-W3                |
|        | .59     | 3625 | .35       | 1.10 | 1.42       | .83             | .75 | 1.06 | 24.09                             |                             |
| S      | 6       | 630  | 4         | 23   | 31         | 16              | 14  | 17   | 7,04                              | FI-WV-06S-W3                |
|        | .24     | 9135 | .16       | .91  | 1.22       | .63             | .55 | .67  | 15.49                             |                             |
|        | 8       | 630  | 4         | 24   | 32         | 17              | 17  | 19   | 9,49                              | FI-WV-08S-W3                |
|        | .31     | 9135 | .16       | .94  | 1.26       | .67             | .67 | .75  | 20.87                             |                             |
|        | 10      | 630  | 6         | 25   | 34         | 17,5            | 19  | 22   | 12,41                             | FI-WV-10S-W3                |
|        | .39     | 9135 | .24       | .98  | 1.34       | .69             | .75 | .87  | 27.31                             |                             |
|        | 12      | 630  | 8         | 29   | 38         | 21,5            | 22  | 24   | 17,10                             | FI-WV-12S-W3                |
|        | .47     | 9135 | .31       | 1.14 | 1.50       | .85             | .87 | .94  | 37.62                             |                             |
|        | 16      | 400  | 10        | 33   | 43         | 24,5            | 24  | 30   | 19,60                             | FI-WV-16S-W3                |
|        | .63     | 5800 | .39       | 1.30 | 1.69       | .96             | .94 | 1.18 | 43.13                             |                             |

### Ordering Codes

**\*FI-WV\*-10\*L\*-W3\*-MS**

\* Alternating Valve **FI-WV**

\* Outside Tube Diameter D1 (in mm) **-10**

\* Series Light Series **L**  
Heavy Series **S**

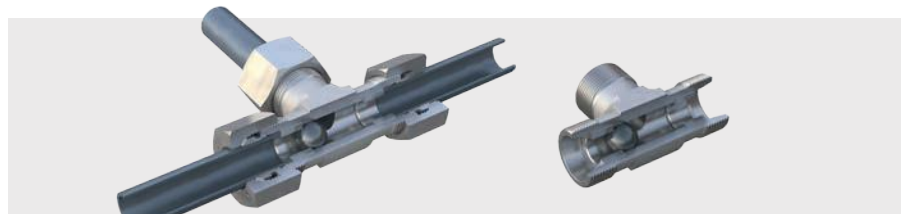
\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

\* Assembling / Kitting Valve body only **—**

Valve body supplied with cutting rings and union nuts **-MS**

Valve body supplied with soft-sealing cutting rings and union nuts **-MSV**



<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting rings and union nuts.

<sup>3</sup> Standard scope of delivery: Valve body only.

In order to make sure that the valves will be suitable for your particular application, please contact STAUFF with details on media, operating pressure, pressure peaks, operating temperature and the expected frequency of valve actuations.

Do not use with compressed air or gas!

Spillage: 1-1,5cm<sup>3</sup>/min at Pmax

Please note: Alternating valves have been designed as switching devices for hydraulic fluids, where the non-pressurized connection of the valve is automatically closed off and sealed by a moving ball made of steel.

Alternating valves are only suitable for connections that fit directly against the tube end stop of the valve body. Do not use in combination with 24° weld cone fittings, 24° DKO taper fittings and other types of fittings with no direct contact to the tube end stop of the valve body.

### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |



## Maximum opening pressure for Hydraulic Valves

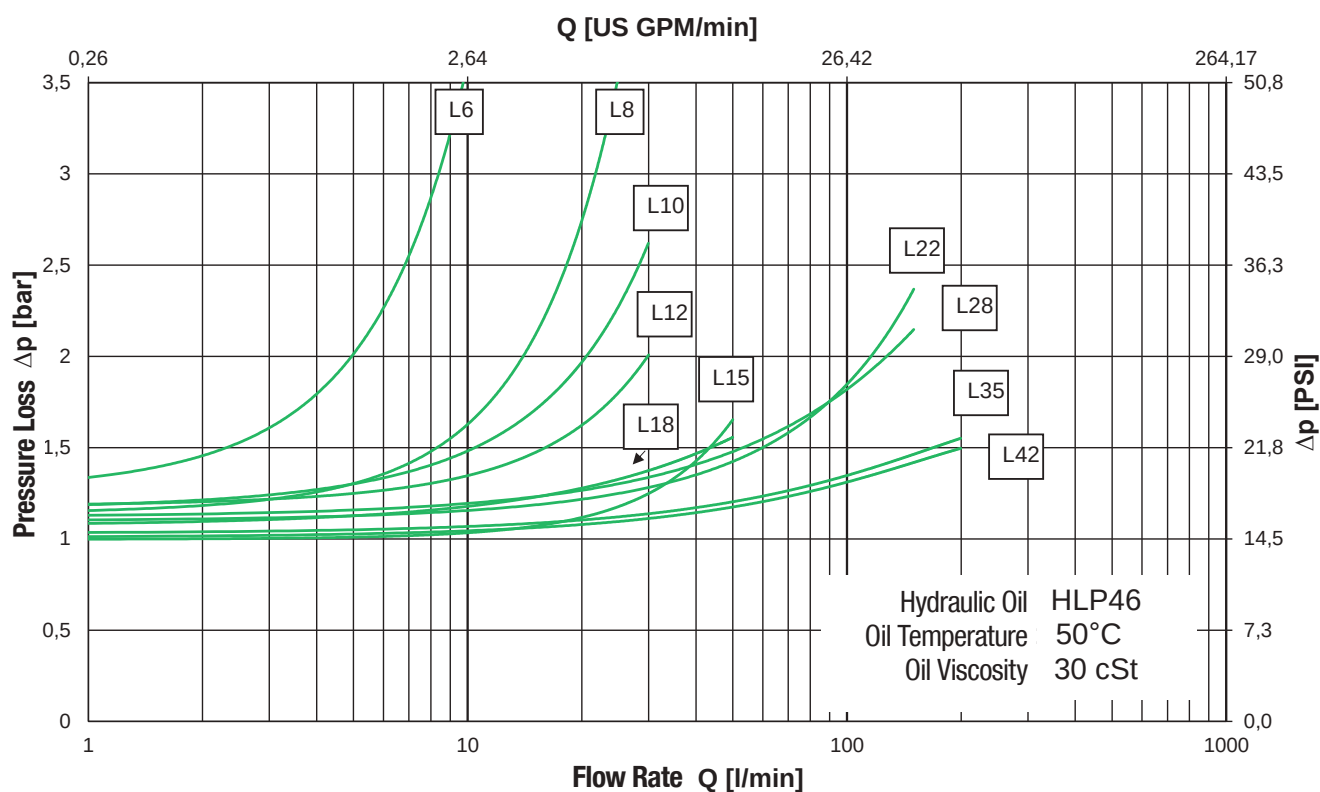
| Series | Tube OD | max. opening pressure (FI-RVA, FI-RVVA, FI-RVZA, FI-RVIA)<br>Standard Version | max. opening pressure (FI-RV, FI-RVV, FI-RVZ, FI-RVI)<br>High-Pressure Version |
|--------|---------|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
|        | (mm/in) | (bar/PSI)                                                                     | (bar/PSI)                                                                      |
| L      | 6       | 6                                                                             | 3                                                                              |
|        | .24     | 87                                                                            | 43.5                                                                           |
|        | 8       | 6                                                                             | 3                                                                              |
|        | .31     | 87                                                                            | 43.5                                                                           |
|        | 10      | 6                                                                             | 3                                                                              |
|        | .39     | 87                                                                            | 43.5                                                                           |
|        | 12      | 6                                                                             | 3                                                                              |
|        | .47     | 87                                                                            | 43.5                                                                           |
|        | 15      | 6                                                                             | 3                                                                              |
|        | .59     | 87                                                                            | 43.5                                                                           |
|        | 18      | 6                                                                             | 3                                                                              |
|        | .71     | 87                                                                            | 43.5                                                                           |
|        | 22      | 6                                                                             | 3                                                                              |
|        | .87     | 87                                                                            | 43.5                                                                           |
|        | 28      | 6                                                                             | 3                                                                              |
|        | 1.10    | 87                                                                            | 43.5                                                                           |
|        | 35      | 5                                                                             | 3                                                                              |
|        | 1.38    | 72.5                                                                          | 43.5                                                                           |
|        | 42      | 2                                                                             | 3                                                                              |
|        | 1.65    | 29                                                                            | 43.5                                                                           |
| S      | 6       | 6                                                                             | 3                                                                              |
|        | .24     | 87                                                                            | 43.5                                                                           |
|        | 8       | 6                                                                             | 3                                                                              |
|        | .31     | 87                                                                            | 43.5                                                                           |
|        | 10      | 6                                                                             | 3                                                                              |
|        | .39     | 87                                                                            | 43.5                                                                           |
|        | 12      | 6                                                                             | 3                                                                              |
|        | .47     | 87                                                                            | 43.5                                                                           |
|        | 14      | 6                                                                             | 3                                                                              |
|        | .55     | 87                                                                            | 43.5                                                                           |
|        | 16      | 6                                                                             | 3                                                                              |
|        | .63     | 87                                                                            | 43.5                                                                           |
|        | 20      | 6                                                                             | 3                                                                              |
|        | .79     | 87                                                                            | 43.5                                                                           |
|        | 25      | 6                                                                             | 3                                                                              |
|        | .98     | 87                                                                            | 43.5                                                                           |
|        | 30      | 6                                                                             | 3                                                                              |
|        | 1.18    | 87                                                                            | 43.5                                                                           |
|        | 38      | 5                                                                             | 3                                                                              |
|        | 1.50    | 72.5                                                                          | 43.5                                                                           |

M



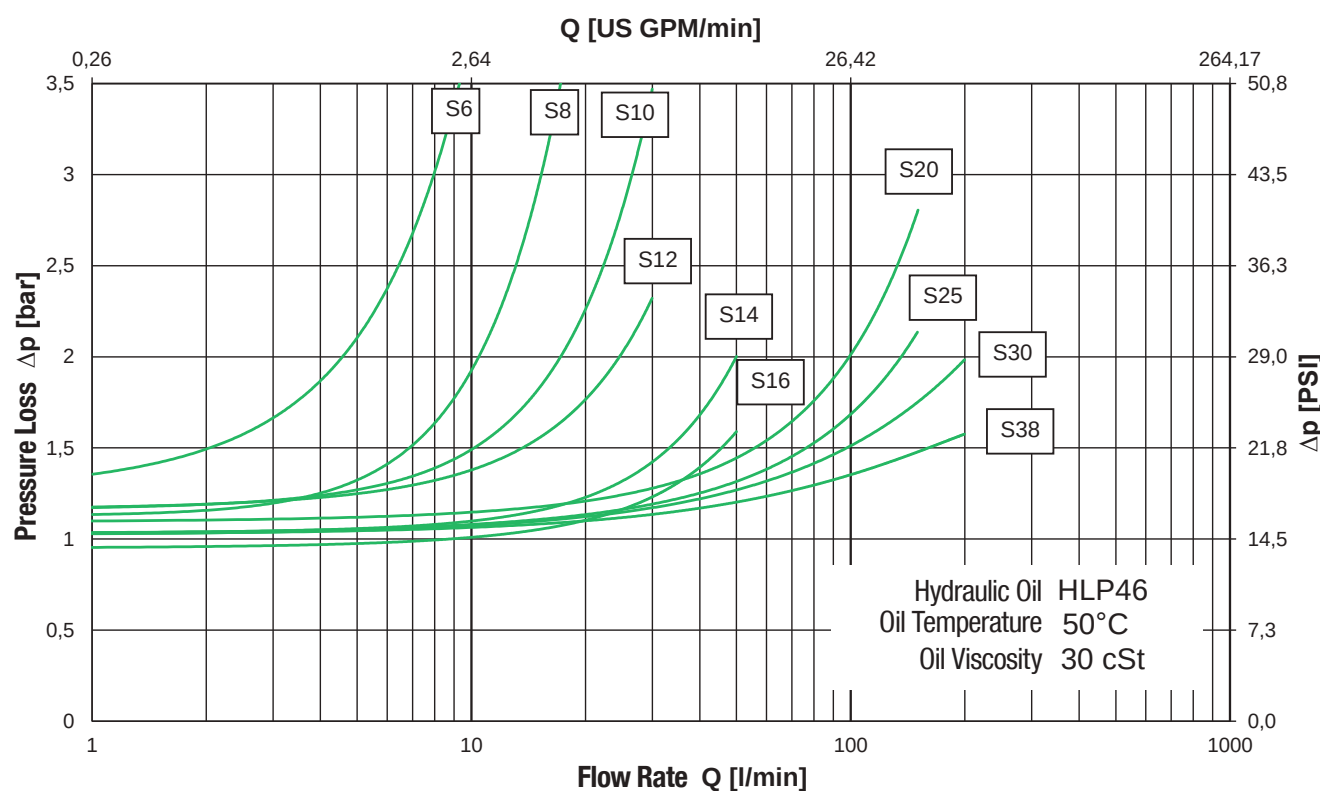
Pressure Loss Graphs for Check Valves  
High-Pressure Version  
Type FI-RV • Series L / S

Pressure Loss Graphs: Check Valves, Opening Pressure 1 bar Series L



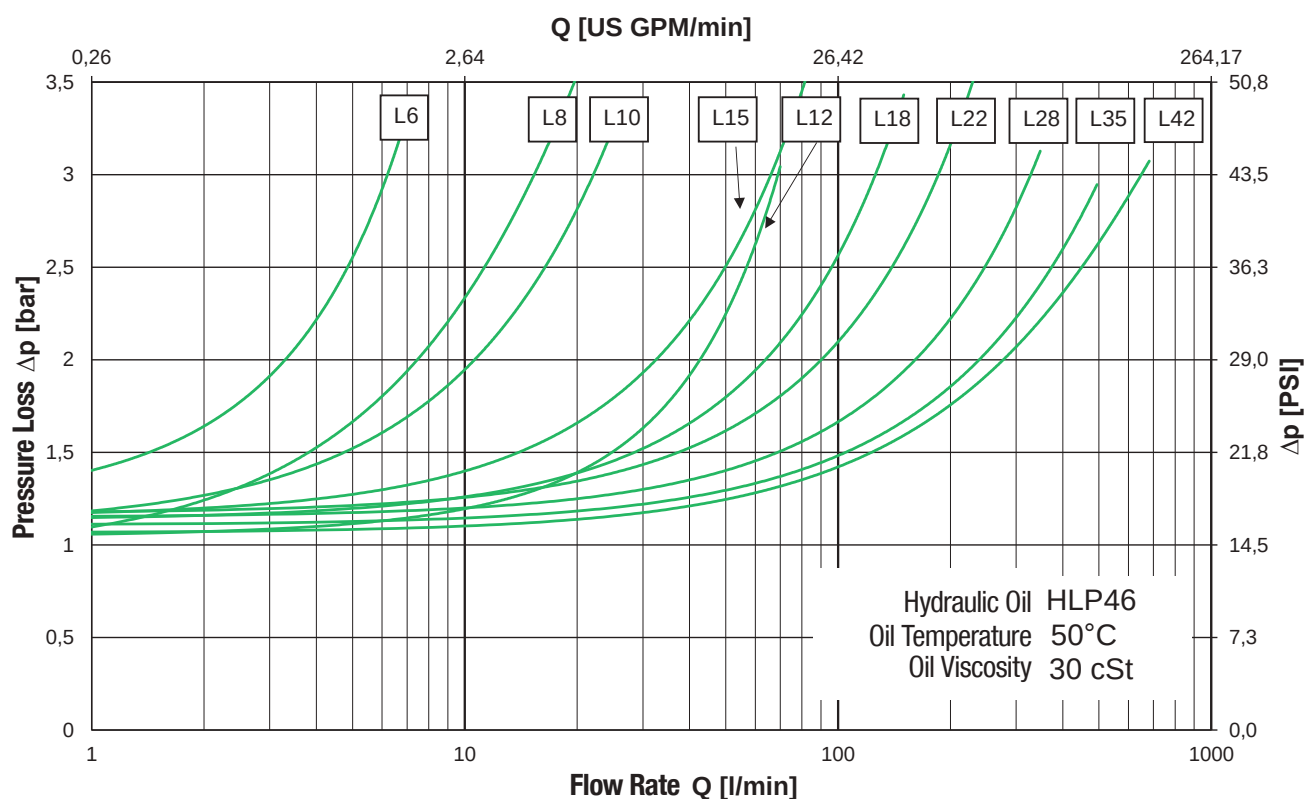
M

Pressure Loss Graphs: Check Valves, Opening Pressure 1 bar Series S

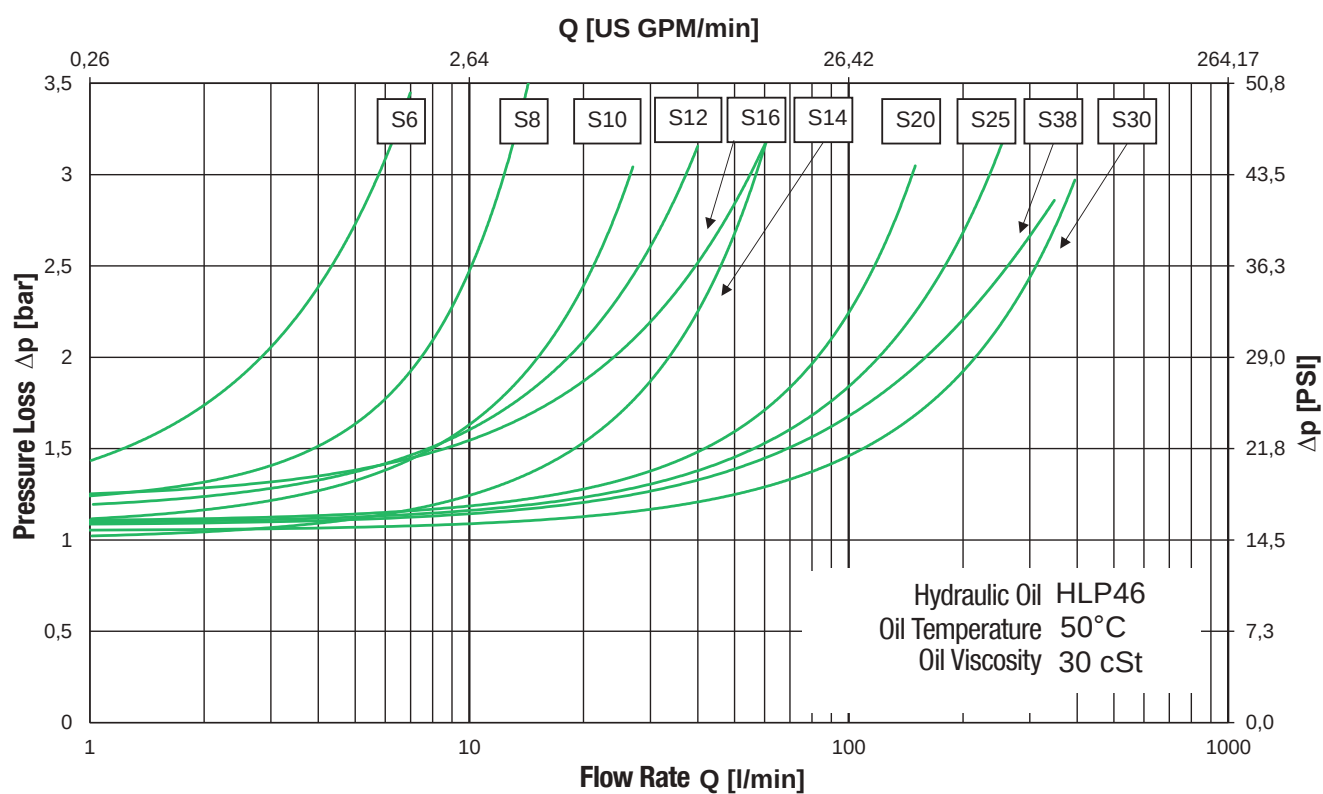


**Pressure Loss Graphs for Check Valves**  
**Standard Version**  
**Type FI-RVA • Series L / S**

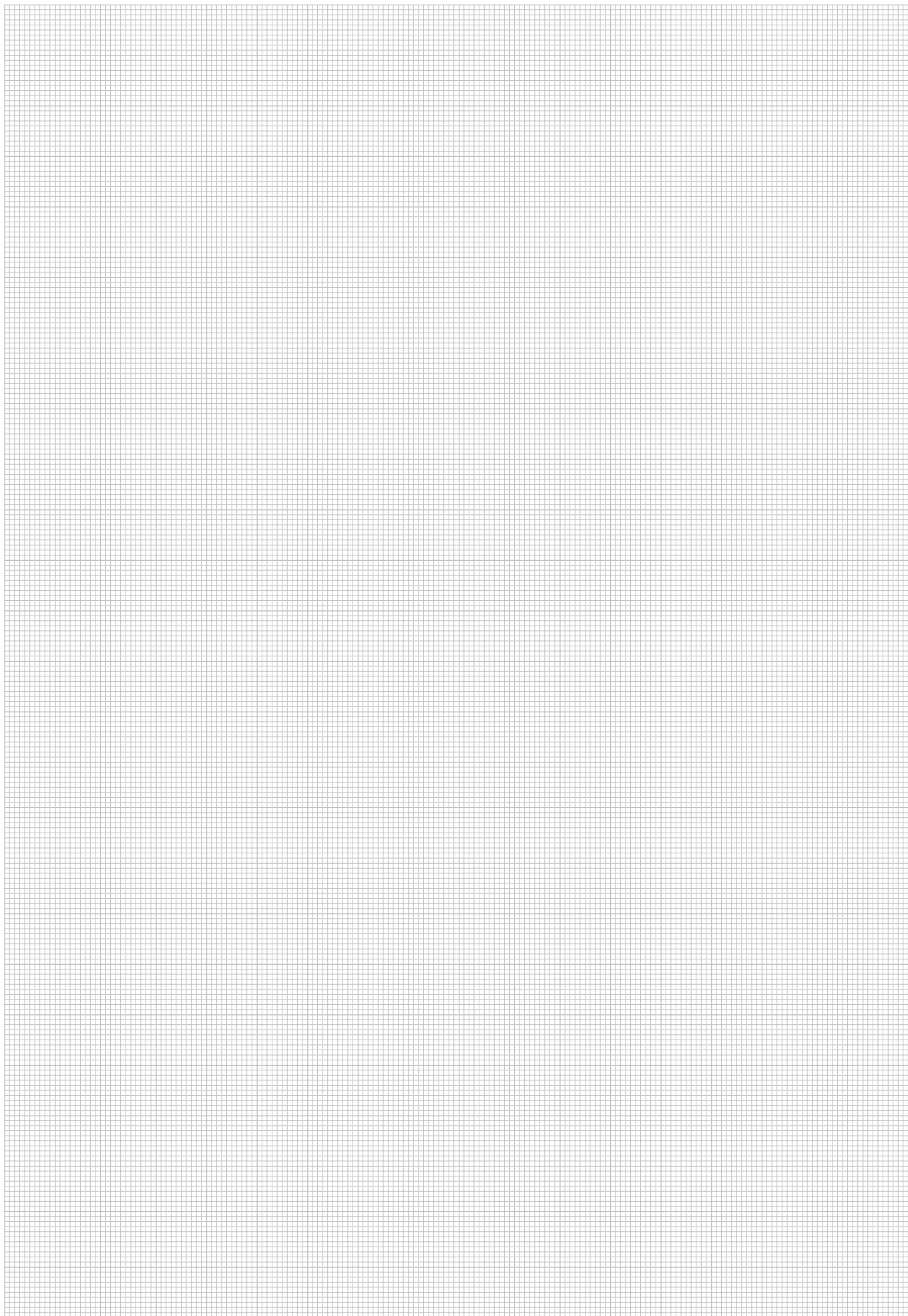
**Pressure Loss Graphs: Check Valves, Opening Pressure 1 bar Series L**



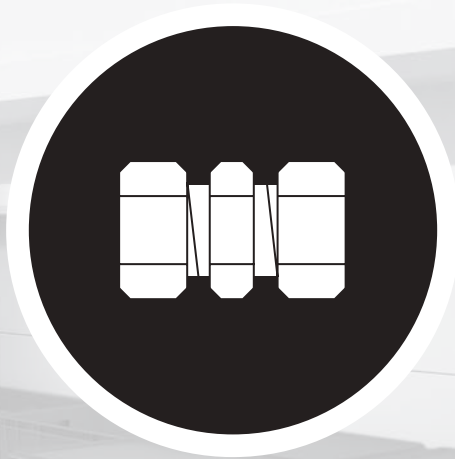
**Pressure Loss Graphs: Check Valves, Opening Pressure 1 bar Series S**







# Kommissionier-Shuttle WALTER II





#### Custom-Designed Solutions

220

In addition to a complete range of standard components, STAUFF is also able offer individually designed special solutions according to customer's specifications or based on own developments.

Options include tube connectors with non-standard connection types and combinations, in special lengths and jump sizes or with throttle bores as well as distributors and manifolds in single-piece, soldered, brazed and welded construction.

Please do not hesitate to contact STAUFF for further information.





N





N





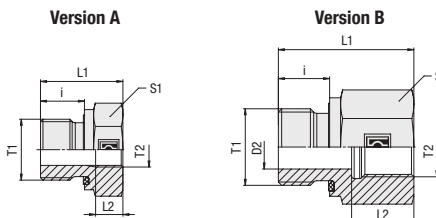




|                                                                                     |                                                                          |         |                                                                                   |                                         |     |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------|-----------------------------------------------------------------------------------|-----------------------------------------|-----|
|    | <b>Thread Reducer</b>                                                    | 224-226 |  | <b>Profile Sealing Ring</b>             | 238 |
|                                                                                     | FI-RED                                                                   |         |                                                                                   | WDG                                     |     |
|    | <b>Whitworth Parallel Pipe Thread (BSPP) /<br/>Profile Sealing Ring</b>  | 224     |  | <b>O-Ring</b>                           | 239 |
|                                                                                     | FI-RED-...-R-WD                                                          |         |                                                                                   | O-RING                                  |     |
|    | <b>Whitworth Parallel Pipe Thread (BSPP) /<br/>Metallic Sealing Edge</b> | 226     |  | <b>External Metallic Sealing Ring</b>   | 244 |
|                                                                                     | FI-RED-...-R                                                             |         |                                                                                   | FI-DKR                                  |     |
|    | <b>Blanking Screw for Ports (Heavy Duty)</b>                             | 228-229 |  | <b>Retaining Ring with Captive Seal</b> | 245 |
|                                                                                     | FI-VSV                                                                   |         |                                                                                   | FI-DIR                                  |     |
|    | <b>Whitworth Parallel Pipe Thread (BSPP) /<br/>Profile Sealing Ring</b>  | 228     |  | <b>Internal Metallic Sealing Ring</b>   | 246 |
|                                                                                     | FI-VSV-...-R-WD                                                          |         |                                                                                   | FI-DKI                                  |     |
|    | <b>Metric Parallel Thread /<br/>Profile Sealing Ring</b>                 | 229     |  | <b>Retaining Ring (Small)</b>           | 247 |
|                                                                                     | FI-VSV-...-M-WD                                                          |         |                                                                                   | FI-KR                                   |     |
|    | <b>Blanking Screw for Ports</b>                                          | 230-233 |                                                                                   |                                         |     |
|                                                                                     | FI-VS                                                                    |         |                                                                                   |                                         |     |
|  | <b>Whitworth Parallel Pipe Thread (BSPP) /<br/>Profile Sealing Ring</b>  | 230     |                                                                                   |                                         |     |
|                                                                                     | FI-VS-...-R-WD                                                           |         |                                                                                   |                                         |     |
|  | <b>Metric Parallel Thread /<br/>Profile Sealing Ring</b>                 | 231     |                                                                                   |                                         |     |
|                                                                                     | FI-VS-...-M-WD                                                           |         |                                                                                   |                                         |     |
|  | <b>Whitworth Parallel Pipe Thread (BSPP) /<br/>Metallic Sealing Edge</b> | 232     |                                                                                   |                                         |     |
|                                                                                     | FI-VS-...-R                                                              |         |                                                                                   |                                         |     |
|  | <b>Metric Parallel Thread /<br/>O-Ring</b>                               | 233     |                                                                                   |                                         |     |
|                                                                                     | FI-VS-...-M-OR                                                           |         |                                                                                   |                                         |     |
|  | <b>Blanking Plug with 24° Taper / O-Ring (DK0)</b>                       | 234     |                                                                                   |                                         |     |
|                                                                                     | FI-VD                                                                    |         |                                                                                   |                                         |     |
|  | <b>Blanking Plug with Sealing Edge</b>                                   | 235     |                                                                                   |                                         |     |
|                                                                                     | FI-BUZ                                                                   |         |                                                                                   |                                         |     |
|  | <b>Blanking Plug for Tube Ends</b>                                       | 236     |                                                                                   |                                         |     |
|                                                                                     | FI-VSK                                                                   |         |                                                                                   |                                         |     |
|  | <b>Hexagon Lock Nut</b>                                                  | 237     |                                                                                   |                                         |     |
|                                                                                     | FI-SKM                                                                   |         |                                                                                   |                                         |     |



## Thread Reducer Type FI-RED-...-R-WD



### Male / Female Whitworth Parallel Pipe Thread (BSPP)

### Profile Sealing Ring

#### Ordering Codes

**\*FI-RED\*-R\*1/2\*-WD\*-R\*3/8\*-B\*-W3**

\* Thread Reducer **FI-RED**

\* Thread Type T1 Whitworth Parallel Pipe Thread (BSPP) **R**

\* Thread Size T1 acc. to dimension table **1/2**

Please always indicate thread sizes, e.g. 1/2!

\* Seal Type Profile Sealing Ring **-WD**

\* Thread Type T2 Whitworth Parallel Pipe Thread (BSPP) **R**

\* Thread Size T2 acc. to dimension table **3/8**

Please always indicate thread sizes, e.g. 3/8!

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

| PN<br>( <sup>bar</sup> /PSI) | Dimensions<br>( <sup>mm</sup> / <sup>in</sup> ) |           |     |      |      |     |      | Version | Torque<br>( <sup>N·m</sup> / <sup>ft·lb</sup> ) | Weight<br>( <sup>kg</sup> / <sup>lbs</sup> ) ca.<br>per 100 | Ordering Codes             |
|------------------------------|-------------------------------------------------|-----------|-----|------|------|-----|------|---------|-------------------------------------------------|-------------------------------------------------------------|----------------------------|
|                              | Thread T1                                       | Thread T2 | D2  | L1   | L2   | i   | S1   |         | Thread T                                        |                                                             |                            |
| 630                          | G 1/8                                           | G 1/4     | 4   | 31   | 17   | 8   | 19   | B       | 25                                              | 4,30                                                        | FI-RED-R1/8-WD-R1/4-B-W3   |
| 9135                         | G 1/8                                           | G 1/4     | .16 | 1.22 | .67  | .31 | .75  | B       | 18.4                                            | 9.46                                                        |                            |
| 630                          | G 1/8                                           | G 3/8     | 4   | 32   | 17   | 8   | 24   | B       | 25                                              | 6,70                                                        | FI-RED-R1/8-WD-R3/8-B-W3   |
| 9135                         | G 1/8                                           | G 3/8     | .16 | 1.26 | .67  | .31 | .94  | B       | 18.4                                            | 14.74                                                       |                            |
| 630                          | G 1/4                                           | G 1/8     | 5   | 29   | 12   | 12  | 19   | B       | 55                                              | 4,40                                                        | FI-RED-R1/4-WD-R1/8-B-W3   |
| 9135                         | G 1/4                                           | G 1/8     | .20 | 1.14 | .47  | .47 | .75  | B       | 40.5                                            | 9.68                                                        |                            |
| 630                          | G 1/4                                           | G 1/4     | 8   | 35,5 | 17   | 12  | 22   | B       | 55                                              | 4,26                                                        | FI-RED-R1/4-WD-R1/4-B-W3   |
| 9135                         | G 1/4                                           | G 1/4     | .31 | 1.40 | .67  | .47 | .87  | B       | 40.5                                            | 9.39                                                        |                            |
| 630                          | G 1/4                                           | G 3/8     | 5   | 36   | 17   | 12  | 24   | B       | 55                                              | 7,30                                                        | FI-RED-R1/4-WD-R3/8-B-W3   |
| 9135                         | G 1/4                                           | G 3/8     | .20 | 1.42 | .67  | .47 | .94  | B       | 40.5                                            | 16.06                                                       |                            |
| 630                          | G 1/4                                           | G 1/2     | 5   | 40   | 20   | 12  | 30   | B       | 55                                              | 12,80                                                       | FI-RED-R1/4-WD-R1/2-B-W3   |
| 9135                         | G 1/4                                           | G 1/2     | .20 | 1.57 | .79  | .47 | 1.18 | B       | 40.5                                            | 28.16                                                       |                            |
| 630                          | G 1/4                                           | G 3/4     | 5   | 43   | 22   | 12  | 36   | B       | 55                                              | 18,80                                                       | FI-RED-R1/4-WD-R3/4-B-W3   |
| 9135                         | G 1/4                                           | G 3/4     | .20 | 1.69 | .87  | .47 | 1.42 | B       | 40.5                                            | 41.36                                                       |                            |
| 630                          | G 3/8                                           | G 1/8     |     | 22,5 | 8,5  | 12  | 22   | A       | 80                                              | 4,20                                                        | FI-RED-R3/8-WD-R1/8-B-W3   |
| 9135                         | G 3/8                                           | G 1/8     |     | .89  | .33  | .47 | .87  | A       | 59                                              | 9,24                                                        |                            |
| 630                          | G 3/8                                           | G 1/4     | 8   | 36   | 17   | 12  | 22   | B       | 80                                              | 7,40                                                        | FI-RED-R3/8-WD-R1/4-B-W3   |
| 9135                         | G 3/8                                           | G 1/4     | .31 | 1.42 | .67  | .47 | .87  | B       | 59                                              | 16.28                                                       |                            |
| 630                          | G 3/8                                           | G 1/2     | 8   | 41   | 20   | 12  | 30   | B       | 80                                              | 13,60                                                       | FI-RED-R3/8-WD-R1/2-B-W3   |
| 9135                         | G 3/8                                           | G 1/2     | .31 | 1.61 | .79  | .47 | 1.18 | B       | 59                                              | 29,92                                                       |                            |
| 400                          | G 3/8                                           | G 3/4     | 8   | 44   | 22   | 12  | 36   | B       | 80                                              | 19,70                                                       | FI-RED-R3/8-WD-R3/4-B-W3   |
| 5800                         | G 3/8                                           | G 3/4     | .31 | 1.73 | .87  | .47 | 1.42 | B       | 59                                              | 43,34                                                       |                            |
| 630                          | G 1/2                                           | G 1/8     |     | 24   | 8    | 14  | 27   | A       | 115                                             | 7,00                                                        | FI-RED-R1/2-WD-R1/8-B-W3   |
| 9135                         | G 1/2                                           | G 1/8     |     | .94  | .31  | .55 | 1.06 | A       | 84.8                                            | 15.40                                                       |                            |
| 630                          | G 1/2                                           | G 1/4     |     | 24   | 12   | 14  | 27   | A       | 115                                             | 6,20                                                        | FI-RED-R1/2-WD-R1/4-B-W3   |
| 9135                         | G 1/2                                           | G 1/4     |     | .94  | .47  | .55 | 1.06 | A       | 84.8                                            | 13.64                                                       |                            |
| 630                          | G 1/2                                           | G 3/8     | 12  | 37   | 17   | 14  | 27   | B       | 115                                             | 10,40                                                       | FI-RED-R1/2-WD-R3/8-B-W3   |
| 9135                         | G 1/2                                           | G 3/8     | .47 | 1.46 | .67  | .55 | 1.06 | B       | 84.8                                            | 22.88                                                       |                            |
| 630                          | G 1/2                                           | G 1/2     | 12  | 43   | 20   | 14  | 30   | B       | 115                                             | 13,11                                                       | FI-RED-R1/2-WD-R1/2-B-W3   |
| 9135                         | G 1/2                                           | G 1/2     | .47 | 1.69 | .79  | .55 | 1.18 | B       | 84.8                                            | 28.90                                                       |                            |
| 400                          | G 1/2                                           | G 3/4     | 12  | 46   | 22   | 14  | 36   | B       | 115                                             | 20,10                                                       | FI-RED-R1/2-WD-R3/4-B-W3   |
| 5800                         | G 1/2                                           | G 3/4     | .47 | 1.81 | .87  | .55 | 1.42 | B       | 84.8                                            | 44.22                                                       |                            |
| 400                          | G 1/2                                           | G 1       | 12  | 49   | 24,5 | 14  | 41   | B       | 115                                             | 25,10                                                       | FI-RED-R1/2-WD-R1-B-W3     |
| 5800                         | G 1/2                                           | G 1       | .47 | 1.93 | .96  | .55 | 1.61 | B       | 84.8                                            | 55.22                                                       |                            |
| 250                          | G 1/2                                           | G 1 1/4   | 10  | 53   | 26,5 | 14  | 55   | B       | 115                                             | 52,10                                                       | FI-RED-R1/2-WD-R1-1/4-B-W3 |
| 3625                         | G 1/2                                           | G 1 1/4   | .39 | 2.09 | 1.04 | .55 | 2.17 | B       | 84.8                                            | 114.62                                                      |                            |

Standard seal material is NBR (Buna-N®).

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

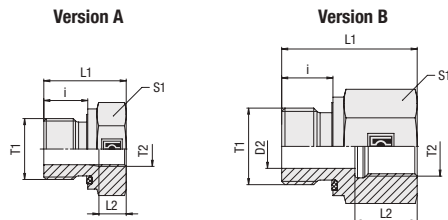
## Spare Parts / Accessories



Profile Sealing Ring  
Type **WDG**

Page 238





## Thread Reducer Type FI-RED-...-R-WD



### Profile Sealing Ring

### Male / Female Whitworth Parallel Pipe Thread (BSPP)

| PN<br>(bar/PSI) | Dimensions<br>(mm/in) |           |    |      |      |      |      | Version | Torque<br>(N·m/ft·lb) | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes               |
|-----------------|-----------------------|-----------|----|------|------|------|------|---------|-----------------------|-----------------------------------|------------------------------|
|                 | Thread T1             | Thread T2 | D2 | L1   | L2   | i    | S1   |         |                       |                                   |                              |
| 400             | G 3/4                 | G 1/4     |    | 26   | 12,5 | 16   | 32   | A       | 180                   | 10,90                             | FI-RED-R3/4-WD-R1/4-B-W3     |
| 5800            |                       |           |    | 1.02 | .49  | .63  | 1.26 |         | 123.7                 | 23.98                             |                              |
| 400             | G 3/4                 | G 3/8     |    | 26   | 12,5 | 16   | 32   | A       | 180                   | 9,40                              | FI-RED-R3/4-WD-R3/8-B-W3     |
| 5800            |                       |           |    | 1.02 | .49  | .63  | 1.26 |         | 123.7                 | 20.68                             |                              |
| 400             | G 3/4                 | G 1/2     | 16 | 43   | 20   | 16   | 32   | B       | 180                   | 16,90                             | FI-RED-R3/4-WD-R1/2-B-W3     |
| 5800            |                       |           |    | .63  | 1.69 | .79  | .63  |         | 1.26                  | 123.7                             |                              |
| 400             | G 3/4                 | G 3/4     | 16 | 48   | 22   | 16   | 41   | B       | 180                   | 18,96                             | FI-RED-R3/4-WD-R3/4-B-W3     |
| 5800            |                       |           |    | .63  | 1.89 | .87  | .63  |         | 1.61                  | 123.7                             |                              |
| 400             | G 3/4                 | G 1       | 16 | 51   | 24,5 | 16   | 41   | B       | 180                   | 26,60                             | FI-RED-R3/4-WD-R1-B-W3       |
| 5800            |                       |           |    | .63  | 2.01 | .96  | .63  |         | 1.61                  | 123.7                             |                              |
| 250             | G 3/4                 | G 1 1/4   | 16 | 55   | 26,5 | 16   | 55   | B       | 180                   | 52,70                             | FI-RED-R3/4-WD-R1-1/4-B-W3   |
| 3625            |                       |           |    | .63  | 2.17 | 1.04 | .63  |         | 2.17                  | 123.7                             |                              |
| 250             | G 3/4                 | G 1 1/2   | 16 | 57   | 28,5 | 16   | 60   | B       | 180                   | 61,10                             | FI-RED-R3/4-WD-R1-1/2-B-W3   |
| 3625            |                       |           |    | .63  | 2.24 | 1.12 | .63  |         | 2.36                  | 123.7                             |                              |
| 400             | G 1                   | G 1/4     |    | 29   | 12,5 | 18   | 41   | A       | 310                   | 20,70                             | FI-RED-R1-WD-R1/4-B-W3       |
| 5800            |                       |           |    | 1.14 | .49  | .71  | 1.61 |         | 228.6                 | 45.54                             |                              |
| 400             | G 1                   | G 3/8     |    | 29   | 12,5 | 18   | 41   | A       | 310                   | 19,10                             | FI-RED-R1-WD-R3/8-B-W3       |
| 5800            |                       |           |    | 1.14 | .49  | .71  | 1.61 |         | 228.6                 | 42.02                             |                              |
| 400             | G 1                   | G 1/2     |    | 29   | 14,5 | 18   | 41   | A       | 310                   | 16,80                             | FI-RED-R1-WD-R1/2-B-W3       |
| 5800            |                       |           |    | 1.14 | .57  | .71  | 1.61 |         | 228.6                 | 36.96                             |                              |
| 400             | G 1                   | G 3/4     | 20 | 49   | 22   | 18   | 41   | B       | 310                   | 31,30                             | FI-RED-R1-WD-R3/4-B-W3       |
| 5800            |                       |           |    | .79  | 1.93 | .87  | .71  |         | 1.61                  | 228.6                             |                              |
| 400             | G 1                   | G 1       | 20 | 52   | 24,5 | 18   | 41   | B       | 310                   | 26,21                             | FI-RED-R1-WD-R1-B-W3         |
| 5800            |                       |           |    | .79  | 2.05 | .96  | .71  |         | 1.61                  | 228.6                             |                              |
| 250             | G 1                   | G 1 1/4   | 20 | 57   | 26,5 | 18   | 55   | B       | 310                   | 58,80                             | FI-RED-R1-WD-R1-1/4-B-W3     |
| 3625            |                       |           |    | .79  | 2.24 | 1.04 | .71  |         | 2.17                  | 228.6                             |                              |
| 250             | G 1                   | G 1 1/2   | 20 | 59   | 28,5 | 18   | 60   | B       | 310                   | 63,90                             | FI-RED-R1-WD-R1-1/2-B-W3     |
| 3625            |                       |           |    | .79  | 2.32 | 1.12 | .71  |         | 2.36                  | 228.6                             |                              |
| 400             | G 1 1/4               | G 1/2     |    | 32   | 14,5 | 20   | 50   | A       | 450                   | 33,00                             | FI-RED-R1-1/4-WD-R1/2-B-W3   |
| 5800            |                       |           |    | 1.26 | .57  | .79  | 1.97 |         | 331,9                 | 72.60                             |                              |
| 400             | G 1 1/4               | G 3/4     |    | 32   | 16,5 | 20   | 50   | A       | 450                   | 28,30                             | FI-RED-R1-1/4-WD-R3/4-B-W3   |
| 5800            |                       |           |    | 1.26 | .65  | .79  | 1.97 |         | 331,9                 | 62.26                             |                              |
| 400             | G 1 1/4               | G 1       | 25 | 53   | 24,5 | 20   | 50   | B       | 450                   | 50,60                             | FI-RED-R1-1/4-WD-R1-B-W3     |
| 5800            |                       |           |    | .98  | 2.09 | .96  | .79  |         | 1.97                  | 331,9                             |                              |
| 250             | G 1 1/4               | G 1 1/2   | 25 | 60   | 28,5 | 20   | 60   | B       | 450                   | 67,30                             | FI-RED-R1-1/4-WD-R1-1/2-B-W3 |
| 3625            |                       |           |    | .98  | 2.36 | 1.12 | .79  |         | 2.36                  | 331,9                             |                              |
| 400             | G 1 1/2               | G 1/2     |    | 36   | 14,5 | 22   | 55   | A       | 540                   | 49,60                             | FI-RED-R1-1/2-WD-R1/2-B-W3   |
| 5800            |                       |           |    | 1.42 | .57  | .87  | 2.17 |         | 398.3                 | 109.12                            |                              |
| 400             | G 1 1/2               | G 3/4     |    | 36   | 16   | 22   | 55   | A       | 540                   | 44,40                             | FI-RED-R1-1/2-WD-R3/4-B-W3   |
| 5800            |                       |           |    | 1.42 | .63  | .87  | 2.17 |         | 398.3                 | 97.68                             |                              |
| 400             | G 1 1/2               | G 1       |    | 36   | 18,5 | 22   | 55   | A       | 540                   | 36,90                             | FI-RED-R1-1/2-WD-R1-B-W3     |
| 5800            |                       |           |    | 1.42 | .73  | .87  | 2.17 |         | 398.3                 | 81.18                             |                              |
| 250             | G 1 1/2               | G 1 1/4   |    | 58   | 26,5 | 22   | 55   | A       | 540                   | 57,80                             | FI-RED-R1-1/2-WD-R1-1/4-B-W3 |
| 3625            |                       |           |    | 2.28 | 1.04 | .87  | 2.17 |         | 398.3                 | 127.16                            |                              |
| 160             | G 2                   | G 1       |    | 46   | 19,5 | 24   | 75   | A       | 700                   | 99,8                              | FI-RED-R2-WD-R1-B-W3         |
| 2320            |                       |           |    | 1.81 | .77  | .94  | 2.95 |         | 516.3                 | 220.02                            |                              |
| 160             | G 2                   | G 1 1/4   |    | 48   | 20,5 | 24   | 75   | A       | 700                   | 93,70                             | FI-RED-R2-WD-R1-1/4-B-W3     |
| 2320            |                       |           |    | 1.89 | .81  | .94  | 2.95 |         | 516.3                 | 206.14                            |                              |
| 160             | G 2                   | G 1 1/2   | 40 | 65   | 29   | 24   | 75   | B       | 700                   | 132,20                            | FI-RED-R2-WD-R1-1/2-B-W3     |
| 2320            |                       |           |    | 1.57 | 2.56 | 1.14 | .94  |         | 2.95                  | 516.3                             |                              |

Standard seal material is NBR (Buna-N®).

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

**\*FI-RED\*-R\*1/2\*-WD\*-R\*3/8\*-B\*-W3**

|                                                |                                       |
|------------------------------------------------|---------------------------------------|
| * Thread Reducer                               | FI-RED                                |
| * Thread Type T1                               | Whitworth Parallel Pipe Thread (BSPP) |
| * Thread Size T1                               | acc. to dimension table               |
| Please always indicate thread sizes, e.g. 1/2! |                                       |
| * Seal Type                                    | Profile Sealing Ring                  |
| * Thread Type T2                               | Whitworth Parallel Pipe Thread (BSPP) |
| * Thread Size T2                               | acc. to dimension table               |
| Please always indicate thread sizes, e.g. 3/8! |                                       |
| * Seal Material                                | NBR (Buna-N®)                         |
|                                                | FKM (Viton®)                          |
|                                                | EPDM                                  |
| * Material Code                                | Steel, zinc/nickel-plated             |

Please contact STAUFF for alternative materials and surface finishings.

### Spare Parts / Accessories



Profile Sealing Ring  
Type **WDG**

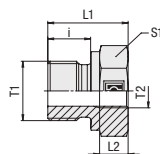
Page 238



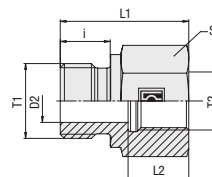
## Thread Reducer Type FI-RED-...-R



Version A



Version B



### Male / Female Whitworth Parallel Pipe Thread (BSPP)

### Metallic Sealing Edge

#### Ordering Codes

**\*FI-RED\*-R\*1/2\*-R\*3/8\*-B\*-W3**

\* Thread Reducer **FI-RED**

\* Thread Type T1 Whitworth Parallel Pipe Thread (BSPP) **R**

\* Thread Size T1 acc. to dimension table **1/2**

Please always indicate thread sizes, e.g. 1/2!

\* Thread Type T2 Whitworth Parallel Pipe Thread (BSPP) **R**

\* Thread Size T2 acc. to dimension table **3/8**

Please always indicate thread sizes, e.g. 3/8!

\* Seal Material NBR (Buna-N®) **-B**  
FKM (Viton®) **-V**  
EPDM **-E**

\* Material Code Steel, zinc/nickel-plated **-W3**

Please contact STAUFF for alternative materials and surface finishings.

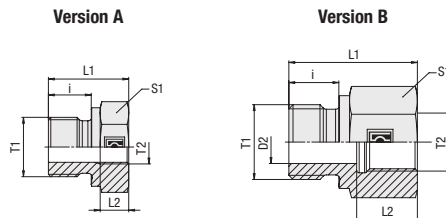
| PN<br>(bar/PSI) | Dimensions<br>(mm/in) |           |     |      |      |     |      | Version | Torque<br>(Nm/ft-lb) | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes        |
|-----------------|-----------------------|-----------|-----|------|------|-----|------|---------|----------------------|-----------------------------------|-----------------------|
|                 | Thread T1             | Thread T2 | D2  | L1   | L2   | i   | S1   |         | Thread T             |                                   |                       |
| 400             | G 1/8                 | G 1/4     | 4   | 31   | 17   | 8   | 19   | B       | 25                   | 4,25                              | FI-RED-R1/8-R1/4-W3   |
| 5800            |                       |           | .16 | 1.22 | .67  | .31 | .75  |         | 18.4                 | 9.35                              |                       |
| 400             | G 1/8                 | G 3/8     | 4   | 32   | 17   | 8   | 24   | B       | 25                   | 6,15                              | FI-RED-R1/8-R3/8-W3   |
| 5800            |                       |           | .16 | 1.26 | .67  | .31 | .94  |         | 18.4                 | 13.53                             |                       |
| 400             | G 1/4                 | G 1/8     | 5   | 28   | 12   | 12  | 19   | B       | 60                   | 3,91                              | FI-RED-R1/4-R1/8-W3   |
| 5800            |                       |           | .20 | 1.10 | .47  | .47 | .75  |         | 44.2                 | 8.60                              |                       |
| 400             | G 1/4                 | G 3/8     | 5   | 36   | 17   | 12  | 24   | B       | 60                   | 6,80                              | FI-RED-R1/4-R3/8-W3   |
| 5800            |                       |           | .20 | 1.42 | .67  | .47 | .94  |         | 44.2                 | 14.96                             |                       |
| 400             | G 1/4                 | G 1/2     | 5   | 40   | 20   | 12  | 30   | B       | 60                   | 11,80                             | FI-RED-R1/4-R1/2-W3   |
| 5800            |                       |           | .20 | 1.57 | .79  | .47 | 1.18 |         | 44.2                 | 25.96                             |                       |
| 315             | G 1/4                 | G 3/4     | 5   | 43   | 22   | 12  | 36   | B       | 60                   | 17,50                             | FI-RED-R1/4-R3/4-W3   |
| 4567,5          |                       |           | .20 | 1.69 | .87  | .47 | 1.42 |         | 44.2                 | 38.50                             |                       |
| 400             | G 3/8                 | G 1/8     | 8   | 22,5 | 8    | 12  | 22   | A       | 110                  | 4,20                              | FI-RED-R3/8-R1/8-W3   |
| 5800            |                       |           | .31 | .89  | .31  | .47 | .87  |         | 81.1                 | 9.24                              |                       |
| 400             | G 3/8                 | G 1/4     | 8   | 36   | 17   | 12  | 22   | B       | 110                  | 7,05                              | FI-RED-R3/8-R1/4-W3   |
| 5800            |                       |           | .31 | 1.42 | .67  | .47 | .87  |         | 81.1                 | 15.51                             |                       |
| 400             | G 3/8                 | G 1/2     | 8   | 41   | 20   | 12  | 30   | B       | 110                  | 17,80                             | FI-RED-R3/8-R1/2-W3   |
| 5800            |                       |           | .31 | 1.61 | .79  | .47 | 1.18 |         | 81.1                 | 39.18                             |                       |
| 315             | G 3/8                 | G 3/4     | 8   | 44   | 22   | 12  | 36   | B       | 110                  | 18,40                             | FI-RED-R3/8-R3/4-W3   |
| 4567,5          |                       |           | .31 | 1.73 | .87  | .47 | 1.42 |         | 81.1                 | 40.48                             |                       |
| 400             | G 1/2                 | G 1/8     | 12  | 24   | 8    | 14  | 27   | A       | 200                  | 6,58                              | FI-RED-R1/2-R1/8-W3   |
| 5800            |                       |           | .47 | .94  | .31  | .55 | 1.06 |         | 147.5                | 14.48                             |                       |
| 315             | G 1/2                 | G 1/4     | 12  | 24   | 12,5 | 14  | 27   | A       | 200                  | 5,53                              | FI-RED-R1/2-R1/4-W3   |
| 4567,5          |                       |           | .47 | .94  | .49  | .55 | 1.06 |         | 147.5                | 12.17                             |                       |
| 315             | G 1/2                 | G 3/8     | 12  | 36   | 17   | 14  | 27   | B       | 200                  | 9,30                              | FI-RED-R1/2-R3/8-W3   |
| 4567,5          |                       |           | .47 | 1.42 | .67  | .55 | 1.06 |         | 147.5                | 20.46                             |                       |
| 315             | G 1/2                 | G 3/4     | 12  | 46   | 22   | 14  | 36   | B       | 200                  | 18,50                             | FI-RED-R1/2-R3/4-W3   |
| 4567,5          |                       |           | .47 | 1.81 | .87  | .55 | 1.42 |         | 147.5                | 40.70                             |                       |
| 315             | G 1/2                 | G 1       | 12  | 49   | 24,5 | 14  | 41   | B       | 200                  | 22,70                             | FI-RED-R1/2-R1-W3     |
| 4567,5          |                       |           | .47 | 1.93 | .96  | .55 | 1.61 |         | 147.5                | 49.94                             |                       |
| 160             | G 1/2                 | G 1 1/4   | 12  | 53   | 26,5 | 14  | 55   | B       | 200                  | 48,10                             | FI-RED-R1/2-R1-1/4-W3 |
| 2320            |                       |           | .47 | 2.09 | 1.04 | .55 | 2.17 |         | 147.5                | 105.82                            |                       |

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.



## Thread Reducer Type FI-RED-...-R



### Metallic Sealing Edge

### Male / Female Whitworth Parallel Pipe Thread (BSPP)

| PN<br>(bar/psi) | Dimensions<br>(mm/in) |           |      |      |      |     |      | Version | Torque<br>(N·m/N·lb) | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes          |
|-----------------|-----------------------|-----------|------|------|------|-----|------|---------|----------------------|-----------------------------------|-------------------------|
|                 | Thread T1             | Thread T2 | D2   | L1   | L2   | i   | S1   |         |                      |                                   |                         |
| 400             | G 3/4                 | G 1/4     |      | 26   | 12,5 | 16  | 32   | A       | 320                  | 10,20                             | FI-RED-R3/4-R1/4-W3     |
| 5800            |                       |           |      | 1.02 | .49  | .63 | 1.26 |         | 236                  | 22.44                             |                         |
| 400             | G 3/4                 | G 3/8     |      | 26   | 12,5 | 16  | 32   | A       | 320                  | 8,70                              | FI-RED-R3/4-R3/8-W3     |
| 5800            |                       |           |      | 1.02 | .49  | .63 | 1.26 |         | 236                  | 19.14                             |                         |
| 400             | G 3/4                 | G 1/2     | 16   | 41   | 20   | 16  | 32   | B       | 320                  | 14,60                             | FI-RED-R3/4-R1/2-W3     |
| 5800            |                       |           | .63  | 1.61 | .79  | .63 | 1.26 |         | 236                  | 32.12                             |                         |
| 400             | G 3/4                 | G 1       | 16   | 51   | 24,5 | 16  | 41   | B       | 320                  | 24,60                             | FI-RED-R3/4-R1-W3       |
| 5800            |                       |           | .63  | 2.01 | .96  | .63 | 1.61 |         | 236                  | 54.12                             |                         |
| 400             | G 3/4                 | G 1 1/4   | 16   | 55   | 26,5 | 16  | 55   | B       | 320                  | 48,40                             | FI-RED-R3/4-R1-1/4-W3   |
| 5800            |                       |           | .63  | 2.17 | 1.04 | .63 | 2.17 |         | 236                  | 106.48                            |                         |
| 250             | G 3/4                 | G 1 1/2   | 16   | 57   | 28,5 | 16  | 60   | B       | 320                  | 57,00                             | FI-RED-R3/4-R1-1/2-W3   |
| 3625            |                       |           | .63  | 2.24 | 1.12 | .63 | 2.36 |         | 236                  | 125.40                            |                         |
| 315             | G 1                   | G 1/4     |      | 29   | 12,5 | 18  | 41   | A       | 500                  | 19,10                             | FI-RED-R1-R1/4-W3       |
| 4567,5          |                       |           |      | 1.14 | .49  | .71 | 1.61 |         | 368.8                | 42.02                             |                         |
| 315             | G 1                   | G 3/8     |      | 29   | 12,5 | 18  | 41   | A       | 500                  | 17,90                             | FI-RED-R1-R3/8-W3       |
| 4567,5          |                       |           |      | 1.14 | .49  | .71 | 1.61 |         | 368.8                | 39.38                             |                         |
| 315             | G 1                   | G 1/2     |      | 29   | 14,5 | 18  | 41   | A       | 500                  | 15,40                             | FI-RED-R1-R1/2-W3       |
| 4567,5          |                       |           |      | 1.14 | .57  | .71 | 1.61 |         | 368.8                | 33.88                             |                         |
| 315             | G 1                   | G 3/4     | 20   | 47   | 22   | 18  | 41   | B       | 500                  | 27,60                             | FI-RED-R1-R3/4-W3       |
| 4567,5          |                       |           | .79  | 1.85 | .87  | .71 | 1.61 |         | 368.8                | 60.72                             |                         |
| 160             | G 1                   | G 1 1/4   | 20   | 57   | 26,5 | 18  | 55   | B       | 500                  | 52,10                             | FI-RED-R1-R1-1/4-W3     |
| 2320            |                       |           | .79  | 2.24 | 1.04 | .71 | 2.17 |         | 368.8                | 114.62                            |                         |
| 160             | G 1                   | G 1 1/2   | 20   | 59   | 28,5 | 18  | 60   | B       | 500                  | 59                                | FI-RED-R1-R1-1/2-W3     |
| 2320            |                       |           | .79  | 2.32 | 1.12 | .71 | 2.36 |         | 368.8                | 130.07                            |                         |
| 160             | G 1 1/4               | G 1/2     |      | 32   | 14,5 | 20  | 50   | A       | 600                  | 31,30                             | FI-RED-R1-1/4-R1/2-W3   |
| 2320            |                       |           |      | 1.26 | .57  | .79 | 1.97 |         | 442.5                | 68.86                             |                         |
| 160             | G 1 1/4               | G 3/4     |      | 32   | 16,5 | 20  | 50   | A       | 600                  | 26,50                             | FI-RED-R1-1/4-R3/4-W3   |
| 2320            |                       |           |      | 1.26 | .65  | .79 | 1.97 |         | 442.5                | 58.30                             |                         |
| 160             | G 1 1/4               | G 1       | 25   | 53   | 24,5 | 20  | 50   | B       | 600                  | 4,7                               | FI-RED-R1-1/4-R1-W3     |
| 2320            |                       |           | .98  | 2.09 | .96  | .79 | 1.97 |         | 442.5                | 10.36                             |                         |
| 160             | G 1 1/4               | G 1 1/2   | 25   | 60   | 28,5 | 20  | 60   | B       | 600                  | 63,3                              | FI-RED-R1-1/4-R1-1/2-W3 |
| 2320            |                       |           | .98  | 2.36 | 1.12 | .79 | 2.36 |         | 442.5                | 139.55                            |                         |
| 160             | G 1 1/2               | G 1 1/4   | 32   | 58   | 26,5 | 22  | 55   | B       | 800                  | 53                                | FI-RED-R1-1/2-R1-1/4-W3 |
| 2320            |                       |           | 1.26 | 2.28 | 1.04 | .87 | 2.17 |         | 590                  | 116.85                            |                         |
| 160             | G 1 1/2               | G 1/2     |      | 36   | 14,5 | 22  | 55   | A       | 800                  | 47,30                             | FI-RED-R1-1/2-R1/2-W3   |
| 2320            |                       |           |      | 1.42 | .57  | .87 | 2.17 |         | 590                  | 104.06                            |                         |
| 160             | G 1 1/2               | G 3/4     |      | 36   | 14,5 | 22  | 55   | A       | 800                  | 41,90                             | FI-RED-R1-1/2-R3/4-W3   |
| 2320            |                       |           |      | 1.42 | .57  | .87 | 2.17 |         | 590                  | 92.18                             |                         |
| 160             | G 1 1/2               | G 1       |      | 36   | 18   | 22  | 55   | A       | 800                  | 34,10                             | FI-RED-R1-1/2-R1-W3     |
| 2320            |                       |           |      | 1.42 | .71  | .87 | 2.17 |         | 590                  | 75.02                             |                         |
| 160             | G 2                   | G 1 1/4   |      | 62   | 20,5 | 24  | 70   | A       | 1000                 | 99,50                             | FI-RED-R2-R1-1/4-W3     |
| 2320            |                       |           |      | 2.44 | .81  | .94 | 2.76 |         | 737.6                | 218.90                            |                         |
| 160             | G 2                   | G 1 1/2   | 40   | 62   | 28,5 | 24  | 70   | B       | 1000                 | 107,30                            | FI-RED-R2-R1-1/2-W3     |
| 2320            |                       |           | 1.57 | 2.44 | 1.12 | .94 | 2.76 |         | 737.6                | 236.06                            |                         |

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

### Ordering Codes

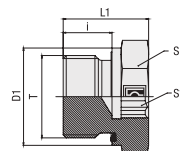
#### \*FI-RED\*-R\*1/2\*-R\*3/8\*-B\*-W3

|                                                |                                       |                |
|------------------------------------------------|---------------------------------------|----------------|
| * Thread Reducer                               |                                       | FI-RED         |
| * Thread Type T1                               | Whitworth Parallel Pipe Thread (BSPP) | R              |
| * Thread Size T1                               | acc. to dimension table               | 1/2            |
| Please always indicate thread sizes, e.g. 1/2! |                                       |                |
| * Thread Type T2                               | Whitworth Parallel Pipe Thread (BSPP) | R              |
| * Thread Size T2                               | acc. to dimension table               | 3/8            |
| Please always indicate thread sizes, e.g. 3/8! |                                       |                |
| * Seal Material                                | NBR (Buna-N®)<br>FKM (Viton®)<br>EPDM | -B<br>-V<br>-E |
| * Material Code                                | Steel, zinc/nickel-plated             | -W3            |

Please contact STAUFF for alternative materials and surface finishings.



## Blanking Screw for Ports (Heavy Duty) Type FI-VSV-...-R-WD



### Ordering Codes

#### \*FI-VSV\*-R\*1/2\*-WD\*-B\*-W3

|                                                |                                       |                                     |
|------------------------------------------------|---------------------------------------|-------------------------------------|
| * Blanking Screw for Ports                     |                                       | <b>FI-VSV</b>                       |
| * Thread Type                                  | Whitworth Parallel Pipe Thread (BSPP) | <b>R</b>                            |
| * Thread Size                                  | acc. to dimension table               | <b>1/2</b>                          |
| Please always indicate thread sizes, e.g. 1/2! |                                       |                                     |
| * Seal Type                                    | Profile Sealing Ring                  | <b>-WD</b>                          |
| * Seal Material                                | NBR (Buna-N®)<br>FKM (Viton®)<br>EPDM | <b>-B</b><br><b>-V</b><br><b>-E</b> |
| * Material Code                                | Steel, zinc/nickel-plated             | <b>-W3</b>                          |

Please contact STAUFF for alternative materials and surface finishings.

### Spare Parts / Accessories



Profile Sealing Ring  
Type **WDG**

Page 238

### Whitworth Parallel Pipe Thread (BSPP)

| PN<br>( <sup>bar</sup> /PSI) | Dimensions<br>( <sup>mm</sup> / <sup>in</sup> ) |      |      |     |     |      | Torque<br>( <sup>N·m</sup> /ft·lb) | Weight<br>( <sup>kg</sup> /lbs) ca.<br>per 100 | Ordering Codes        |
|------------------------------|-------------------------------------------------|------|------|-----|-----|------|------------------------------------|------------------------------------------------|-----------------------|
|                              | Thread T                                        | D1   | L1   | i   | S1  | S2   |                                    |                                                |                       |
| 400                          | G 1/8                                           | 14   | 18   | 8   | 5   | 14   | 18                                 | 1,56                                           | FI-VSV-R1/8-WD-B-W3   |
| 5800                         |                                                 | .55  | .71  | .31 | .20 | .55  | 13.3                               | 3.43                                           |                       |
| 400                          | G 1/4                                           | 19   | 20   | 12  | 6   | 19   | 33                                 | 2,73                                           | FI-VSV-R1/4-WD-B-W3   |
| 5800                         |                                                 | .75  | .79  | .47 | .24 | .75  | 24.4                               | 6.00                                           |                       |
| 400                          | G 3/8                                           | 22   | 22   | 12  | 8   | 22   | 70                                 | 4,48                                           | FI-VSV-R3/8-WD-B-W3   |
| 5800                         |                                                 | .87  | .87  | .47 | .31 | .87  | 51.8                               | 9.85                                           |                       |
| 400                          | G 1/2                                           | 27   | 24   | 14  | 10  | 27   | 90                                 | 7,27                                           | FI-VSV-R1/2-WD-B-W3   |
| 5800                         |                                                 | 1.06 | .94  | .55 | .39 | 1.06 | 66.6                               | 15.98                                          |                       |
| 400                          | G 3/4                                           | 32   | 28   | 16  | 12  | 32   | 181                                | 13,02                                          | FI-VSV-R3/4-WD-B-W3   |
| 5800                         |                                                 | 1.26 | 1.10 | .63 | .47 | 1.26 | 133.2                              | 28.64                                          |                       |
| 400                          | G 1                                             | 46   | 33   | 18  | 17  | 46   | 250                                | 23,80                                          | FI-VSV-R1-WD-B-W3     |
| 5800                         |                                                 | 1.81 | 1.30 | .71 | .67 | 1.81 | 185.0                              | 52.36                                          |                       |
| 400                          | G 1 1/4                                         | 57   | 38   | 20  | 22  | 60   | 400                                | 42,00                                          | FI-VSV-R1-1/4-WD-B-W3 |
| 5800                         |                                                 | 2.24 | 1.50 | .79 | .87 | 2.36 | 296.0                              | 92.40                                          |                       |
| 400                          | G 1 1/2                                         | 64   | 40   | 22  | 24  | 65   | 500                                | 55,60                                          | FI-VSV-R1-1/2-WD-B-W3 |
| 5800                         |                                                 | 2.52 | 1.57 | .87 | .94 | 2.56 | 370.0                              | 122.32                                         |                       |

Standard seal material is NBR (Buna-N®).

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

Male stud acc. to ISO 1179-2 (Type E)

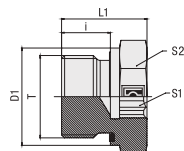
Port acc. to ISO 1179-1

Torque recommendations with a tolerance of +10% and refer to original components from the STAUFF Connect product range made of steel with zinc/nickel coating and apply for Steel mating material.





## Blanking Screw for Ports (Heavy Duty) Type FI-VSV-...-M-WD



### Profile Sealing Ring

### Metric Parallel Thread

| PN<br>(bar/PSI) | Dimensions<br>(mm/in) |      |      |     |     |      | Torque<br>(N·m/N·lb) | Weight<br>(kg/lbs) Ca. | Ordering Codes         |
|-----------------|-----------------------|------|------|-----|-----|------|----------------------|------------------------|------------------------|
|                 | Thread T              | D1   | L1   | i   | S1  | S2   |                      |                        |                        |
| 400             | M 10 x 1              | 14   | 18   | 8   | 5   | 14   | 12                   | 1,58                   | FI-VSV-M10x1-WD-B-W3   |
| 5800            |                       | .55  | .71  | .31 | .20 | .55  | 8.9                  | 3.47                   |                        |
| 400             | M 12 x 1,5            | 17   | 20   | 12  | 6   | 17   | 25                   | 2,13                   | FI-VSV-M12x1.5-WD-B-W3 |
| 5800            |                       | .67  | .79  | .47 | .24 | .67  | 18.5                 | 4.69                   |                        |
| 400             | M 14 x 1,5            | 19   | 22   | 12  | 6   | 19   | 45                   | 3,35                   | FI-VSV-M14x1.5-WD-B-W3 |
| 5800            |                       | .75  | .87  | .47 | .24 | .75  | 33.3                 | 7.38                   |                        |
| 400             | M 16 x 1,5            | 22   | 22   | 12  | 8   | 22   | 55                   | 4,30                   | FI-VSV-M16x1.5-WD-B-W3 |
| 5800            |                       | .87  | .87  | .47 | .31 | .87  | 40.7                 | 9.46                   |                        |
| 400             | M 18 x 1,5            | 24   | 22   | 12  | 8   | 24   | 70                   | 5,38                   | FI-VSV-M18x1.5-WD-B-W3 |
| 5800            |                       | .94  | .87  | .47 | .31 | .94  | 51.8                 | 11.83                  |                        |
| 400             | M 20 x 1,5            | 27   | 22   | 14  | 10  | 27   | 80                   | 6,09                   | FI-VSV-M20x1.5-WD-B-W3 |
| 5800            |                       | 1.06 | .87  | .55 | .39 | 1.06 | 59.2                 | 13.39                  |                        |
| 400             | M 22 x 1,5            | 27   | 22   | 14  | 10  | 27   | 125                  | 6,77                   | FI-VSV-M22x1.5-WD-B-W3 |
| 5800            |                       | 1.06 | .87  | .55 | .39 | 1.06 | 92.5                 | 14.89                  |                        |
| 400             | M 26 x 1,5            | 32   | 30   | 16  | 12  | 32   | 180                  | 14,33                  | FI-VSV-M26x1.5-WD-B-W3 |
| 5800            |                       | 1.26 | 1.18 | .63 | .47 | 1.26 | 133.2                | 31.53                  |                        |
| 400             | M 27 x 2              | 32   | 28   | 16  | 12  | 32   | 180                  | 13,23                  | FI-VSV-M27x2-WD-B-W3   |
| 5800            |                       | 1.26 | 1.10 | .63 | .47 | 1.26 | 133.2                | 29.11                  |                        |
| 400             | M 33 x 2              | 40   | 33   | 18  | 17  | 41   | 250                  | 29,32                  | FI-VSV-M33x2-WD-B-W3   |
| 5800            |                       | 1.57 | 1.30 | .71 | .67 | 1.61 | 185.0                | 64.50                  |                        |
| 400             | M 42 x 2              | 50   | 38   | 20  | 22  | 50   | 400                  | 57,35                  | FI-VSV-M42x2-WD-B-W3   |
| 5800            |                       | 1.97 | 1.50 | .79 | .87 | 1.97 | 296.0                | 126.17                 |                        |
| 400             | M 48 x 2              | 55   | 40   | 22  | 24  | 55   | 500                  | 73,79                  | FI-VSV-M48x2-WD-B-W3   |
| 5800            |                       | 2.17 | 1.57 | .87 | .94 | 2.17 | 370.0                | 162.33                 |                        |

Standard seal material is NBR (Buna-N®).

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

Male stud acc. to ISO 9974-2 (Type E)  
Port acc. to ISO 9974-1

Torque recommendations with a tolerance of +10% and refer to original components from the STAUFF Connect product range made of steel with zinc/nickel coating and apply for Steel mating material.

### Ordering Codes

#### \*FI-VSV\*-M\*12x1.5\*-WD\*-B\*-W3

|                                                   |                           |        |
|---------------------------------------------------|---------------------------|--------|
| * Blanking Screw for Ports                        |                           | FI-VSV |
| * Thread Type                                     | Metric Parallel Thread    | M      |
| * Thread Size                                     | acc. to dimension table   | 12x1.5 |
| Please always indicate thread sizes, e.g. 12x1.5! |                           |        |
| * Seal Type                                       | Profile Sealing Ring      | -WD    |
| * Seal Material                                   | NBR (Buna-N®)             | -B     |
|                                                   | FKM (Viton®)              | -V     |
|                                                   | EPDM                      | -E     |
| * Material Code                                   | Steel, zinc/nickel-plated | -W3    |

Please contact STAUFF for alternative materials and surface finishings.

### Spare Parts / Accessories

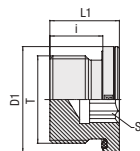


Profile Sealing Ring  
Type WDG

Page 238



## Blanking Screw for Ports Type FI-VS-...-R-WD



### Ordering Codes

**\*FI-VS\*-R\*1/2\*-WD\*-B\*-W3**

|                                                |                                       |                                     |
|------------------------------------------------|---------------------------------------|-------------------------------------|
| * Blanking Screw for Ports                     |                                       | <b>FI-VS</b>                        |
| * Thread Type                                  | Whitworth Parallel Pipe Thread (BSPP) | <b>R</b>                            |
| * Thread Size                                  | acc. to dimension table               | <b>1/2</b>                          |
| Please always indicate thread sizes, e.g. 1/2! |                                       |                                     |
| * Seal Type                                    | Profile Sealing Ring                  | <b>-WD</b>                          |
| * Seal Material                                | NBR (Buna-N®)<br>FKM (Viton®)<br>EPDM | <b>-B</b><br><b>-V</b><br><b>-E</b> |
| * Material Code                                | Steel, zinc/nickel-plated             | <b>-W3</b>                          |

Please contact STAUFF for alternative materials and surface finishings.

### Whitworth Parallel Pipe Thread (BSPP)

| PN<br>( <sup>bar</sup> /PSI) | Dimensions<br>( <sup>mm</sup> / <sup>in</sup> ) |      |      |     |     | Torque<br>( <sup>N·m</sup> /ft·lb) | Weight<br>( <sup>kg</sup> /lbs) ca.<br>per 100 | Ordering Codes       |
|------------------------------|-------------------------------------------------|------|------|-----|-----|------------------------------------|------------------------------------------------|----------------------|
|                              | Thread T                                        | D1   | L1   | i   | S1  |                                    |                                                |                      |
| 400                          | G 1/8                                           | 14   | 12,3 | 8   | 5   | 15                                 | 0,70                                           | FI-VS-R1/8-WD-B-W3   |
| 5800                         |                                                 | .55  | .48  | .31 | .20 | 11.1                               | 1.54                                           |                      |
| 400                          | G 1/4                                           | 19   | 17,3 | 12  | 6   | 25                                 | 1,90                                           | FI-VS-R1/4-WD-B-W3   |
| 5800                         |                                                 | .75  | .68  | .47 | .24 | 18.5                               | 4.18                                           |                      |
| 400                          | G 3/8                                           | 22   | 17,3 | 12  | 8   | 50                                 | 2,70                                           | FI-VS-R3/8-WD-B-W3   |
| 5800                         |                                                 | .87  | .68  | .47 | .31 | 37.0                               | 5.94                                           |                      |
| 400                          | G 1/2                                           | 27   | 19,3 | 14  | 10  | 70                                 | 4,60                                           | FI-VS-R1/2-WD-B-W3   |
| 5800                         |                                                 | 1.06 | .76  | .55 | .39 | 51.8                               | 10.12                                          |                      |
| 400                          | G 3/4                                           | 32   | 21,3 | 16  | 12  | 120                                | 8,00                                           | FI-VS-R3/4-WD-B-W3   |
| 5800                         |                                                 | 1.26 | .84  | .63 | .47 | 88.8                               | 17.60                                          |                      |
| 400                          | G 1                                             | 40   | 22,8 | 16  | 17  | 200                                | 12,80                                          | FI-VS-R1-WD-B-W3     |
| 5800                         |                                                 | 1.57 | .90  | .63 | .67 | 148.0                              | 28.16                                          |                      |
| 315                          | G 1 1/4                                         | 50   | 22,8 | 16  | 22  | 320                                | 19,90                                          | FI-VS-R1-1/4-WD-B-W3 |
| 4568                         |                                                 | 1.97 | .90  | .63 | .87 | 236.8                              | 43.78                                          |                      |
| 315                          | G 1 1/2                                         | 55   | 22,8 | 16  | 24  | 400                                | 26,20                                          | FI-VS-R1-1/2-WD-B-W3 |
| 4568                         |                                                 | 2.17 | .90  | .63 | .94 | 296.0                              | 57.64                                          |                      |

Standard seal material is NBR (Buna-N®).

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

Male stud acc. to ISO 1179-2 (Type E)

Port acc. to ISO 1179-1

Torque recommendations with a tolerance of +10% and refer to original components from the STAUFF Connect product range made of steel with zinc/nickel coating and apply for Steel mating material.

### Spare Parts / Accessories

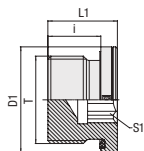


Profile Sealing Ring  
Type **WDG**

Page 238



## Blanking Screw for Ports Type FI-VS-...-M-WD



### Profile Sealing Ring

### Metric Parallel Thread

| PN<br>(bar/PSI) | Dimensions<br>(mm/in) |      |      |     |     | Torque<br>(N·m/N·lb) | Weight<br>(kg/lbs) Ca. | Ordering Codes        |
|-----------------|-----------------------|------|------|-----|-----|----------------------|------------------------|-----------------------|
|                 | Thread T              | D1   | L1   | i   | S1  |                      |                        |                       |
| 400             | M 8 x 1               | 12   | 12   | 8   | 4   | 10                   | 0,50                   | FI-VS-M8x1-WD-B-W3    |
| 5800            |                       | .47  | .47  | .31 | .16 | 7.4                  | 1.10                   |                       |
| 400             | M 10 x 1              | 14   | 12,3 | 8   | 5   | 12                   | 0,70                   | FI-VS-M10x1-WD-B-W3   |
| 5800            |                       | .55  | .48  | .31 | .20 | 8.9                  | 1.54                   |                       |
| 400             | M 12 x 1,5            | 17   | 17,3 | 12  | 6   | 23                   | 1,50                   | FI-VS-M12x1.5-WD-B-W3 |
| 5800            |                       | .67  | .68  | .47 | .24 | 17.0                 | 3.30                   |                       |
| 400             | M 14 x 1,5            | 19   | 17,3 | 12  | 6   | 30                   | 2,00                   | FI-VS-M14x1.5-WD-B-W3 |
| 5800            |                       | .75  | .68  | .47 | .24 | 22.2                 | 4.40                   |                       |
| 400             | M 16 x 1,5            | 22   | 17,3 | 12  | 8   | 50                   | 2,60                   | FI-VS-M16x1.5-WD-B-W3 |
| 5800            |                       | .87  | .68  | .47 | .31 | 37.0                 | 5.72                   |                       |
| 400             | M 18 x 1,5            | 24   | 17,3 | 12  | 8   | 65                   | 3,30                   | FI-VS-M18x1.5-WD-B-W3 |
| 5800            |                       | .94  | .68  | .47 | .31 | 48.1                 | 7.26                   |                       |
| 400             | M 20 x 1,5            | 26   | 19,3 | 14  | 10  | 80                   | 4,30                   | FI-VS-M20x1.5-WD-B-W3 |
| 5800            |                       | 1.02 | .76  | .55 | .39 | 59.2                 | 9.46                   |                       |
| 400             | M 22 x 1,5            | 27   | 19,3 | 14  | 10  | 90                   | 5,10                   | FI-VS-M22x1.5-WD-B-W3 |
| 5800            |                       | 1.06 | .76  | .55 | .39 | 66.6                 | 11.22                  |                       |
| 400             | M 26 x 1,5            | 32   | 21,3 | 16  | 12  | 100                  | 8,00                   | FI-VS-M26x1.5-WD-B-W3 |
| 5800            |                       | 1.26 | .84  | .63 | .47 | 74.0                 | 17.60                  |                       |
| 400             | M 27 x 2              | 32   | 21,3 | 16  | 12  | 130                  | 8,20                   | FI-VS-M27x2-WD-B-W3   |
| 5800            |                       | 1.26 | .84  | .63 | .47 | 96.2                 | 18.04                  |                       |
| 400             | M 33 x 2              | 40   | 22,8 | 16  | 17  | 250                  | 13,10                  | FI-VS-M33x2-WD-B-W3   |
| 5800            |                       | 1.57 | .90  | .63 | .67 | 185.0                | 28.82                  |                       |
| 250             | M 42 x 2              | 50   | 22,8 | 16  | 22  | 310                  | 20,40                  | FI-VS-M42x2-WD-B-W3   |
| 3625            |                       | 1.97 | .90  | .63 | .87 | 229.4                | 44.88                  |                       |
| 250             | M 48 x 2              | 55   | 22,8 | 16  | 24  | 380                  | 26,90                  | FI-VS-M48x2-WD-B-W3   |
| 3625            |                       | 2.17 | .90  | .63 | .94 | 281.2                | 59.18                  |                       |

Standard seal material is NBR (Buna-N®).

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

Male stud acc. to ISO 9974-2 (Type E)  
Port acc. to ISO 9974-1

Torque recommendations with a tolerance of +10% and refer to original components from the STAUFF Connect product range made of steel with zinc/nickel coating and apply for Steel mating material.

### Ordering Codes

**\*FI-VS\*-M\*12x1.5\*-WD\*-B\*-W3**

|                                                   |                           |        |
|---------------------------------------------------|---------------------------|--------|
| * Blanking Screw for Ports                        |                           | FI-VS  |
| * Thread Type                                     | Metric Parallel Thread    | M      |
| * Thread Size                                     | acc. to dimension table   | 12x1.5 |
| Please always indicate thread sizes, e.g. 12x1.5! |                           |        |
| * Seal Type                                       | Profile Sealing Ring      | -WD    |
| * Seal Material                                   | NBR (Buna-N®)             | -B     |
|                                                   | FKM (Viton®)              | -V     |
|                                                   | EPDM                      | -E     |
| * Material Code                                   | Steel, zinc/nickel-plated | -W3    |

Please contact STAUFF for alternative materials and surface finishings.

### Spare Parts / Accessories

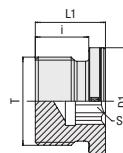


Profile Sealing Ring  
Type **WDG**

Page 238



## Blanking Screw for Ports Type FI-VS-...-R



### Ordering Codes

#### \*FI-VS\*-R\*1/2\*-W3

\* Blanking Screw for Ports

\* Thread Type Whitworth Parallel  
Pipe Thread (BSPP)

\* Thread Size acc. to dimension table

Please always indicate thread sizes, e.g. 1/2!

\* Material Code Steel, zinc/nickel-plated

Please contact STAUFF for alternative  
materials and surface finishings.

FI-VS

R

1/2

-W3

### Whitworth Parallel Pipe Thread (BSPP)

### Metallic Sealing Edge

| PN<br>( <sup>bar</sup> /PSI) | Dimensions<br>( <sup>mm</sup> / <sup>in</sup> ) |      |      |     |     | Torque<br>( <sup>N·m</sup> /ft·lb) | Weight<br>( <sup>kg</sup> /lbs) ca.<br>per 100 | Ordering Codes  |
|------------------------------|-------------------------------------------------|------|------|-----|-----|------------------------------------|------------------------------------------------|-----------------|
|                              | Thread T                                        | D1   | L1   | i   | S1  |                                    |                                                |                 |
| 400                          | G 1/8                                           | 14   | 12,3 | 8   | 5   | 25                                 | 0,70                                           | FI-VS-R1/8-W3   |
| 5800                         |                                                 | .55  | .48  | .31 | .20 | 18.5                               | 1.54                                           |                 |
| 400                          | G 1/4                                           | 18   | 17,3 | 12  | 6   | 40                                 | 1,80                                           | FI-VS-R1/4-W3   |
| 5800                         |                                                 | .71  | .68  | .47 | .24 | 29.6                               | 3.96                                           |                 |
| 400                          | G 3/8                                           | 22   | 17,3 | 12  | 8   | 95                                 | 2,70                                           | FI-VS-R3/8-W3   |
| 5800                         |                                                 | .87  | .68  | .47 | .31 | 70.3                               | 5.94                                           |                 |
| 400                          | G 1/2                                           | 26   | 19,3 | 14  | 10  | 130                                | 4,60                                           | FI-VS-R1/2-W3   |
| 5800                         |                                                 | 1.02 | .76  | .55 | .39 | 96.2                               | 10.12                                          |                 |
| 400                          | G 3/4                                           | 32   | 21,3 | 16  | 12  | 250                                | 7,90                                           | FI-VS-R3/4-W3   |
| 5800                         |                                                 | 1.26 | .84  | .63 | .47 | 185.0                              | 17.38                                          |                 |
| 400                          | G 1                                             | 39   | 22,8 | 16  | 17  | 400                                | 12,80                                          | FI-VS-R1-W3     |
| 5800                         |                                                 | 1.54 | .90  | .63 | .67 | 296.0                              | 28.16                                          |                 |
| 315                          | G 1 1/4                                         | 49   | 22,8 | 16  | 22  | 600                                | 19,30                                          | FI-VS-R1-1/4-W3 |
| 4567,5                       |                                                 | 1.93 | .90  | .63 | .87 | 444.0                              | 42.46                                          |                 |
| 315                          | G 1 1/2                                         | 55   | 22,8 | 16  | 24  | 800                                | 26,10                                          | FI-VS-R1-1/2-W3 |
| 4567,5                       |                                                 | 2.17 | .90  | .63 | .94 | 592.0                              | 57.42                                          |                 |

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

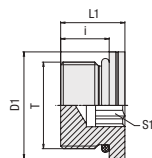
Please contact STAUFF prior to the assembly for further information.

Male stud acc. to DIN 3852-2 (Form B) / ISO 1179-4 (Type B)  
Port acc. to DIN 3852-2 (Form X) / ISO 1179-1

Torque recommendations with a tolerance of +10% and refer to original components from the STAUFF Connect product range made of steel with zinc/nickel coating and apply for Steel mating material.



## Blanking Screw for Ports Type FI-VS-...-M-OR



### O-Ring

### Metric Parallel Thread

| PN<br>(bar/PSI) | Dimensions<br>(mm/in) |      |      |      |     | Torque<br>(N·m/N·lb) | Weight<br>(kg/lbs) Ca. | Ordering Codes        |
|-----------------|-----------------------|------|------|------|-----|----------------------|------------------------|-----------------------|
|                 | Thread T              | D1   | L1   | i    | S1  |                      |                        |                       |
| 630             | M 10 x 1              | 13,8 | 13,5 | 9,5  | 5   | 15                   | 0,8                    | FI-VS-M10x1-OR-B-W3   |
| 9135            |                       | .54  | .53  | .37  | .20 | 11.1                 | 1.76                   |                       |
| 630             | M 12 x 1,5            | 16,8 | 15,5 | 11   | 6   | 22                   | 1,4                    | FI-VS-M12x1.5-OR-B-W3 |
| 9135            |                       | .66  | .61  | .43  | .24 | 16.3                 | 3.08                   |                       |
| 630             | M 14 x 1,5            | 18,8 | 16   | 11   | 6   | 45                   | 2,0                    | FI-VS-M14x1.5-OR-B-W3 |
| 9135            |                       | .74  | .63  | .43  | .24 | 33.3                 | 4.40                   |                       |
| 630             | M 16 x 1,5            | 21,8 | 17,5 | 12,5 | 8   | 55                   | 2,7                    | FI-VS-M16x1.5-OR-B-W3 |
| 9135            |                       | .86  | .69  | .49  | .31 | 40.7                 | 5.94                   |                       |
| 630             | M 18 x 1,5            | 23,8 | 19   | 14   | 8   | 70                   | 3,8                    | FI-VS-M18x1.5-OR-B-W3 |
| 9135            |                       | .94  | .75  | .55  | .31 | 51.8                 | 8.36                   |                       |
| 630             | M 22 x 1,5            | 26,8 | 20   | 15   | 10  | 100                  | 5,5                    | FI-VS-M22x1.5-OR-B-W3 |
| 9135            |                       | 1.06 | .79  | .59  | .39 | 74.0                 | 12.10                  |                       |
| 400             | M 26 x 1,5            | 31,8 | 21   | 16   | 12  | 170                  | 7,7                    | FI-VS-M26x1.5-OR-B-W3 |
| 5800            |                       | 1.25 | .83  | .63  | .47 | 125.8                | 16.94                  |                       |
| 400             | M 27 x 2              | 31,8 | 23,5 | 18,5 | 12  | 180                  | 9,4                    | FI-VS-M27x2-OR-B-W3   |
| 5800            |                       | 1.25 | .93  | .73  | .47 | 133.2                | 20.68                  |                       |
| 400             | M 33 x 2              | 40,8 | 24,5 | 18,5 | 14  | 215                  | 15,6                   | FI-VS-M33x2-OR-B-W3   |
| 5800            |                       | 1.61 | .96  | .73  | .55 | 159.1                | 34.32                  |                       |
| 400             | M 42 x 2              | 49,8 | 25   | 19   | 22  | 330                  | 24,5                   | FI-VS-M42x2-OR-B-W3   |
| 5800            |                       | 1.96 | .98  | .75  | .87 | 244.2                | 53.90                  |                       |
| 400             | M 48 x 2              | 54,8 | 27,5 | 21,5 | 24  | 420                  | 37,1                   | FI-VS-M48x2-OR-B-W3   |
| 5800            |                       | 2.16 | 1.08 | .85  | .94 | 310.8                | 81.62                  |                       |

Standard seal material is NBR (Buna-N®).

Male stud acc. to ISO 6149-2/-3  
Port acc. to ISO 6149-1

Male threaded studs were designed for female threaded ports in components made of steel. For applications with components made of softer mating materials (e.g. Aluminium), the use of connectors with additionally rolled male threads is recommended.

Please contact STAUFF prior to the assembly for further information.

Torque recommendations with a tolerance of +10% and refer to original components from the STAUFF Connect product range made of steel with zinc/nickel coating and apply for Steel mating material.

### Ordering Codes

**\*FI-VS\*-M\*12x1.5\*-OR\*-B\*-W3**

|                                                   |                           |        |
|---------------------------------------------------|---------------------------|--------|
| * Blanking Screw for Ports                        |                           | FI-VS  |
| * Thread Type                                     | Metric Parallel Thread    | M      |
| * Thread Size                                     | acc. to dimension table   | 12x1.5 |
| Please always indicate thread sizes, e.g. 12x1.5! |                           |        |
| * Seal Type                                       | O-Ring                    | -OR    |
| * Seal Material                                   | NBR (Buna-N®)             | -B     |
|                                                   | FKM (Viton®)              | -V     |
|                                                   | EPDM                      | -E     |
| * Material Code                                   | Steel, zinc/nickel-plated | -W3    |

Please contact STAUFF for alternative materials and surface finishings.

### Spare Parts / Accessories

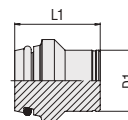
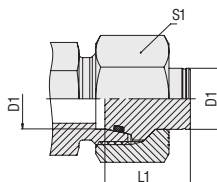


O-Ring  
Type **O-RING**

Page 239



## Blanking Plug with 24° Taper / O-Ring (DKO) Type FI-VD ▪ Series L / S



### Ordering Codes

#### \*FI-VD\*-15\*L\*-V\*-W3\*-M

|                                                                         |                                                                                |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| * Blanking Plug with 24° Taper / O-Ring (DKO)                           | <b>FI-VD</b>                                                                   |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-15</b>                                                                     |
| * Series                                                                | Light Series <b>L</b><br>Heavy Series <b>S</b>                                 |
| * Seal Material                                                         | FKM (Viton®) <b>-V</b><br>EPDM <b>-E</b>                                       |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                           |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                |
| * Assembling / Kitting                                                  | Blanking plug only <b>—</b><br>Blanking plug supplied with union nut <b>-M</b> |

### Connecting Parts



Union Nut  
Type **FI-M**

Page 33

### Spare Parts / Accessories



O-Ring  
Type **O-RING**

Page 239

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in)<br>L1 <sup>1</sup> | S1   | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|------------------------------------------|------|-----------------------------------|-----------------------------|
| L      | 6                        | 800             | 17                                       | 14   | 0,55                              | FI-VD-06L/S-V-W3            |
|        | .24                      | 11600           | .67                                      | .55  | 1.21                              |                             |
|        | 8                        | 800             | 17                                       | 17   | 0,91                              | FI-VD-08L/S-V-W3            |
|        | .31                      | 11600           | .67                                      | .67  | 2.02                              |                             |
|        | 10                       | 800             | 20                                       | 19   | 1,55                              | FI-VD-10L/S-V-W3            |
|        | .39                      | 11600           | .79                                      | .75  | 3.41                              |                             |
|        | 12                       | 630             | 21                                       | 22   | 2,23                              | FI-VD-12L/S-V-W3            |
|        | .47                      | 9135            | .83                                      | .87  | 4.91                              |                             |
|        | 15                       | 400             | 20                                       | 27   | 3,60                              | FI-VD-15L-V-W3              |
|        | .59                      | 5800            | .79                                      | 1.06 | 7.92                              |                             |
|        | 18                       | 400             | 21                                       | 32   | 4,88                              | FI-VD-18L-V-W3              |
|        | .71                      | 5800            | .83                                      | 1.26 | 10.74                             |                             |
|        | 22                       | 250             | 23                                       | 36   | 7,70                              | FI-VD-22L-V-W3              |
|        | .87                      | 3625            | .91                                      | 1.42 | 16.94                             |                             |
|        | 28                       | 250             | 23                                       | 41   | 12,00                             | FI-VD-28L-V-W3              |
|        | 1.10                     | 3625            | .91                                      | 1.61 | 26.40                             |                             |
|        | 35                       | 250             | 29                                       | 50   | 24,00                             | FI-VD-35L-V-W3              |
|        | 1.38                     | 3625            | 1.14                                     | 1.97 | 52.80                             |                             |
|        | 42                       | 250             | 30                                       | 60   | 35,00                             | FI-VD-42L-V-W3              |
|        | 1.65                     | 3625            | 1.18                                     | 2.36 | 77.00                             |                             |
| S      | 6                        | 800             | 17                                       | 17   | 0,55                              | FI-VD-06L/S-V-W3            |
|        | .24                      | 11600           | .67                                      | .67  | 1.21                              |                             |
|        | 8                        | 800             | 17                                       | 19   | 0,91                              | FI-VD-08L/S-V-W3            |
|        | .31                      | 11600           | .67                                      | .75  | 20.01                             |                             |
|        | 10                       | 800             | 20                                       | 22   | 1,55                              | FI-VD-10L/S-V-W3            |
|        | .39                      | 11600           | .79                                      | .87  | 3.41                              |                             |
|        | 12                       | 630             | 21                                       | 24   | 2,23                              | FI-VD-12L/S-V-W3            |
|        | .47                      | 9135            | .83                                      | .94  | 4.91                              |                             |
|        | 14                       | 630             | 23                                       | 27   | 3,30                              | FI-VD-14S-V-W3              |
|        | .55                      | 9135            | .91                                      | 1.06 | 7.26                              |                             |
|        | 16                       | 630             | 24                                       | 30   | 4,30                              | FI-VD-16S-V-W3              |
|        | .63                      | 9135            | .94                                      | 1.18 | 9.46                              |                             |
|        | 20                       | 420             | 28                                       | 36   | 8,10                              | FI-VD-20S-V-W3              |
|        | .79                      | 6091            | 1.10                                     | 1.42 | 17.82                             |                             |
|        | 25                       | 420             | 31                                       | 46   | 13,50                             | FI-VD-25S-V-W3              |
|        | .98                      | 6091            | 1.22                                     | 1.81 | 29.70                             |                             |
|        | 30                       | 420             | 34                                       | 50   | 21,20                             | FI-VD-30S-V-W3              |
|        | 1.18                     | 6091            | 1.34                                     | 1.97 | 46.64                             |                             |
|        | 38                       | 420             | 38                                       | 60   | 36,90                             | FI-VD-38S-V-W3              |
|        | 1.50                     | 6091            | 1.50                                     | 2.36 | 81.18                             |                             |

<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding union nut.

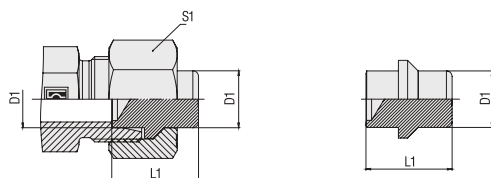
<sup>3</sup> Standard scope of delivery: Blanking plug only.

Standard seal material is FKM (Viton®).





## Blanking Plug with Sealing Edge Type FI-BUZ • Series L / S



| Series | Tube OD<br>(mm/in) | PN<br>(bar/PSI) | Dimensions<br>(mm/in) | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------|-----------------|-----------------------|-----------------------------------|-----------------------------|
|        | D1                 |                 | L1 <sup>1</sup>       | S1                                |                             |
| L      | 6                  | 500             | 19,5                  | 14                                | 0,55                        |
|        | .24                | 7250            | .77                   | .55                               | 1.21                        |
|        | 8                  | 500             | 19,5                  | 17                                | 0,90                        |
|        | .31                | 7250            | .77                   | .67                               | 1.98                        |
|        | 10                 | 500             | 21,5                  | 19                                | 1,48                        |
|        | .39                | 7250            | .85                   | .75                               | 3.57                        |
|        | 12                 | 400             | 22                    | 22                                | 2,13                        |
|        | .47                | 5800            | .87                   | .87                               | 4.69                        |
|        | 15                 | 400             | 22                    | 27                                | 3,20                        |
|        | .59                | 5800            | .87                   | 1.06                              | 7.04                        |
|        | 18                 | 400             | 24                    | 32                                | 5,00                        |
|        | .71                | 5800            | .94                   | 1.26                              | 11.00                       |
|        | 22                 | 250             | 26                    | 36                                | 7,90                        |
|        | .87                | 3625            | 1.02                  | 1.42                              | 17.38                       |
|        | 28                 | 250             | 25,5                  | 41                                | 11,90                       |
|        | 1.10               | 3625            | 1.00                  | 1.61                              | 26.18                       |
|        | 35                 | 250             | 32                    | 50                                | 23,50                       |
|        | 1.38               | 3625            | 1.26                  | 1.97                              | 51.70                       |
|        | 42                 | 250             | 32,5                  | 60                                | 38,50                       |
|        | 1.65               | 3625            | 1.28                  | 2.36                              | 84.70                       |
| S      | 6                  | 800             | 19,5                  | 17                                | 0,55                        |
|        | .24                | 11600           | .77                   | .67                               | 1.21                        |
|        | 8                  | 800             | 19,5                  | 19                                | 0,90                        |
|        | .31                | 11600           | .77                   | .75                               | 1.98                        |
|        | 10                 | 800             | 21,5                  | 22                                | 1,48                        |
|        | .39                | 11600           | .85                   | .87                               | 3.57                        |
|        | 12                 | 630             | 22                    | 24                                | 2,13                        |
|        | .47                | 9135            | .87                   | .94                               | 4.69                        |
|        | 14                 | 630             | 23,5                  | 27                                | 3,12                        |
|        | .55                | 9135            | .93                   | 1.06                              | 6.86                        |
|        | 16                 | 630             | 25,5                  | 30                                | 4,27                        |
|        | .63                | 9135            | 1.00                  | 1.18                              | 9.93                        |
|        | 20                 | 400             | 30,5                  | 36                                | 8,00                        |
|        | .79                | 5800            | 1.20                  | 1.42                              | 17.60                       |
|        | 25                 | 400             | 32,5                  | 46                                | 17,90                       |
|        | .98                | 5800            | 1.28                  | 1.81                              | 39.38                       |
|        | 30                 | 400             | 35,5                  | 50                                | 20,00                       |
|        | 1.18               | 5800            | 1.40                  | 1.97                              | 44.00                       |
|        | 38                 | 400             | 42                    | 60                                | 36,60                       |
|        | 1.50               | 5800            | 1.65                  | 2.36                              | 80.52                       |

### Ordering Codes

**\*FI-BUZ\*-15\*L\*-W3\*-M**

|                                                                         |                                       |
|-------------------------------------------------------------------------|---------------------------------------|
| * Blanking Plug with Sealing Edge                                       | FI-BUZ                                |
| * Outside Tube Diameter D1 (in mm)                                      | -15                                   |
| * Series                                                                | Light Series<br>Heavy Series          |
|                                                                         | L<br>S                                |
| * Material Code                                                         | Steel, zinc/nickel-plated             |
|                                                                         | -W3                                   |
| Please contact STAUFF for alternative materials and surface finishings. |                                       |
| * Assembling / Kitting                                                  | Blanking plug only                    |
|                                                                         | Blanking plug supplied with union nut |
|                                                                         | -M                                    |

### Connecting Parts



Union Nut  
Type FI-M

Page 33

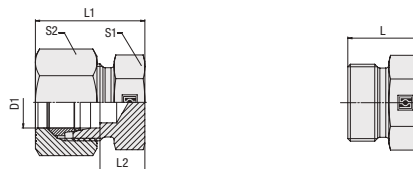
<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding union nut.

<sup>3</sup> Standard scope of delivery: Blanking plug only.



## Blanking Plug for Tube Ends Type FI-VSK • Series L / S



### Ordering Codes

#### \*FI-VSK\*-10\*L\*-W3\*-MS

|                                                                         |                                                                                 |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| * Blanking Plug for Tube Ends                                           | <b>FI-VSK</b>                                                                   |
| * Outside Tube Diameter D1 (in mm)                                      | <b>-10</b>                                                                      |
| * Series                                                                | Light Series <b>L</b><br>Heavy Series <b>S</b>                                  |
| * Material Code                                                         | Steel, zinc/nickel-plated <b>-W3</b>                                            |
| Please contact STAUFF for alternative materials and surface finishings. |                                                                                 |
| * Assembling / Kitting                                                  | Blanking plug only <b>—</b>                                                     |
|                                                                         | Blanking plug supplied with cutting ring and union nut <b>-MS</b>               |
|                                                                         | Blanking plug supplied with soft-sealing cutting ring and union nut <b>-MSV</b> |

### Connecting Parts

|  |                                                   |         |
|--|---------------------------------------------------|---------|
|  | Cutting Ring<br>Type <b>FI-DS</b>                 | Page 28 |
|  | Soft-Sealing Cutting Ring<br>Type <b>FI-WDDS</b>  | Page 29 |
|  | Support Sleeve<br>Type <b>FI-VH</b>               | Page 31 |
|  | STAUFF Form EVO Sealing Ring<br>Type <b>FI-FD</b> | Page 32 |
|  | Union Nut<br>Type <b>FI-M</b>                     | Page 33 |
|  | 37° Flared Tube Fitting Set<br>Type <b>FI-AB</b>  | Page 37 |

| Series | Tube OD<br>(mm/in)<br>D1 | PN<br>(bar/psi) | Dimensions<br>(mm/in) |                 |      |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes <sup>3</sup> |
|--------|--------------------------|-----------------|-----------------------|-----------------|------|------|------|-----------------------------------|-----------------------------|
|        |                          |                 | L                     | L1 <sup>1</sup> | L2   | S1   | S2   |                                   |                             |
| L      | 6                        | 315             | 17                    | 22              | 7    | 14   | 14   | 1,40                              | FI-VSK-06L-W3               |
|        | .24                      | 4568            | .55                   | .87             | .28  | .47  | .55  | 3,08                              |                             |
|        | 8                        | 315             | 17                    | 23              | 8    | 17   | 17   | 1,93                              | FI-VSK-08L-W3               |
|        | .31                      | 4568            | .59                   | .91             | .31  | .55  | .67  | 4,24                              |                             |
|        | 10                       | 315             | 20                    | 24              | 9    | 17   | 19   | 2,55                              | FI-VSK-10L-W3               |
|        | .39                      | 4568            | .63                   | .94             | .35  | .67  | .75  | 5,61                              |                             |
|        | 12                       | 315             | 21                    | 25              | 10   | 19   | 22   | 3,44                              | FI-VSK-12L-W3               |
|        | .47                      | 4568            | .67                   | .98             | .39  | .75  | .87  | 8,74                              |                             |
|        | 15                       | 315             | 20                    | 26              | 11   | 24   | 27   | 4,90                              | FI-VSK-15L-W3               |
|        | .59                      | 4568            | .71                   | 1.02            | .43  | .94  | 1.06 | 10,78                             |                             |
|        | 18                       | 315             | 21                    | 28              | 11,5 | 27   | 32   | 6,80                              | FI-VSK-18L-W3               |
|        | .71                      | 4568            | .75                   | 1.10            | .45  | 1.06 | 1.26 | 14,96                             |                             |
|        | 22                       | 160             | 23                    | 30              | 13,5 | 32   | 36   | 10,70                             | FI-VSK-22L-W3               |
|        | .87                      | 2320            | .83                   | 1.18            | .53  | 1.26 | 1.42 | 23,54                             |                             |
|        | 28                       | 160             | 23                    | 31              | 14,5 | 41   | 41   | 15,20                             | FI-VSK-28L-W3               |
|        | 1.10                     | 2320            | .87                   | 1.22            | .57  | 1.61 | 1.61 | 33,44                             |                             |
|        | 35                       | 160             | 29                    | 36              | 14,5 | 46   | 50   | 25,90                             | FI-VSK-35L-W3               |
|        | 1.38                     | 2320            | .98                   | 1.42            | .57  | 1.81 | 1.97 | 56,98                             |                             |
|        | 42                       | 160             | 30                    | 39              | 16   | 55   | 60   | 35,30                             | FI-VSK-42L-W3               |
|        | 1.65                     | 2320            | 1.06                  | 1.54            | .63  | 2.17 | 2.36 | 77,66                             |                             |
| S      | 6                        | 630             | 17                    | 26              | 11   | 17   | 17   | 1,80                              | FI-VSK-06S-W3               |
|        | .24                      | 9135            | .71                   | 1.02            | .43  | .55  | .67  | 3,96                              |                             |
|        | 8                        | 630             | 17                    | 28              | 13   | 17   | 19   | 2,16                              | FI-VSK-08S-W3               |
|        | .31                      | 9135            | .79                   | 1.10            | .51  | .67  | .75  | 4,75                              |                             |
|        | 10                       | 630             | 20                    | 29              | 12,5 | 19   | 22   | 3,34                              | FI-VSK-10S-W3               |
|        | .39                      | 9135            | .79                   | 1.14            | .49  | .75  | .87  | 7,35                              |                             |
|        | 12                       | 630             | 21                    | 31              | 14,5 | 22   | 24   | 4,60                              | FI-VSK-12S-W3               |
|        | .47                      | 9135            | .87                   | 1.22            | .57  | .87  | .94  | 10,12                             |                             |
|        | 14                       | 630             | 23                    | 34              | 16   | 24   | 27   | 5,88                              | FI-VSK-14S-W3               |
|        | .55                      | 9135            | .94                   | 1.34            | .63  | .94  | 1.06 | 12,94                             |                             |
|        | 16                       | 400             | 24                    | 34              | 15,5 | 27   | 30   | 7,54                              | FI-VSK-16S-W3               |
|        | .63                      | 5800            | .94                   | 1.34            | .61  | 1.06 | 1.18 | 16,59                             |                             |
|        | 20                       | 420             | 28                    | 39              | 17,5 | 32   | 36   | 12,50                             | FI-VSK-20S-W3               |
|        | .79                      | 6091            | 1.10                  | 1.54            | .69  | 1.26 | 1.42 | 27,50                             |                             |
|        | 25                       | 420             | 31                    | 44              | 20   | 41   | 46   | 21,40                             | FI-VSK-25S-W3               |
|        | .98                      | 6091            | 1.26                  | 1.73            | .79  | 1.61 | 1.81 | 47,08                             |                             |
|        | 30                       | 420             | 34                    | 47              | 20,5 | 46   | 50   | 30,40                             | FI-VSK-30S-W3               |
|        | 1.18                     | 6091            | 1.34                  | 1.85            | .81  | 1.81 | 1.97 | 76,20                             |                             |
|        | 38                       | 420             | 38                    | 54              | 23   | 55   | 60   | 40,80                             | FI-VSK-38S-W3               |
|        | 1.50                     | 6091            | 1.54                  | 2.13            | .91  | 2.17 | 2.36 | 89,76                             |                             |

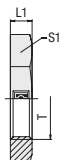
<sup>1</sup> Approximate dimension in assembled condition.

<sup>2</sup> Weight excluding cutting ring and union nut.

<sup>3</sup> Standard scope of delivery: Blanking plug only.



## Hexagon Lock Nut Type FI-SKM • Series L / S



for Straight Bulkhead Fittings / Bulkhead Elbows

| Series | Dimensions |           | Weight<br>( <sup>kg</sup> / <sub>lbs</sub> ) ca.<br>per 100 | Ordering Codes |
|--------|------------|-----------|-------------------------------------------------------------|----------------|
|        | Thread T   | L1 S1     |                                                             |                |
| L      | M 12 x 1,5 | 6<br>.24  | 17<br>.67                                                   | 0,66<br>1.45   |
|        | M 14 x 1,5 | 6<br>.24  | 19<br>.75                                                   | 0,76<br>1.67   |
|        | M 16 x 1,5 | 6<br>.24  | 22<br>.87                                                   | 1,04<br>2.29   |
|        | M 18 x 1,5 | 6<br>.24  | 24<br>.94                                                   | 1,17<br>2.62   |
|        | M 22 x 1,5 | 7<br>.28  | 30<br>1.18                                                  | 2,25<br>4.95   |
|        | M 26 x 1,5 | 8<br>.31  | 36<br>1.42                                                  | 3,75<br>8.25   |
|        | M 30 x 2   | 8<br>.31  | 41<br>1.61                                                  | 4,79<br>10.53  |
|        | M 36 x 2   | 9<br>.35  | 46<br>1.81                                                  | 5,90<br>12.98  |
|        | M 45 x 2   | 9<br>.35  | 55<br>2.17                                                  | 7,60<br>16.72  |
|        | M 52 x 2   | 10<br>.39 | 65<br>2.56                                                  | 12,20<br>26.84 |
| S      | M 14 x 1,5 | 6<br>.24  | 19<br>.75                                                   | 0,76<br>1.67   |
|        | M 16 x 1,5 | 6<br>.24  | 22<br>.87                                                   | 1,04<br>2.29   |
|        | M 18 x 1,5 | 6<br>.24  | 24<br>.94                                                   | 1,17<br>2.57   |
|        | M 20 x 1,5 | 6<br>.24  | 27<br>1.06                                                  | 1,54<br>3.39   |
|        | M 22 x 1,5 | 7<br>.28  | 30<br>1.18                                                  | 2,25<br>4.95   |
|        | M 24 x 1,5 | 7<br>.28  | 32<br>1.26                                                  | 2,40<br>5.28   |
|        | M 30 x 2   | 8<br>.31  | 41<br>1.61                                                  | 4,79<br>10.54  |
|        | M 36 x 2   | 9<br>.35  | 46<br>1.81                                                  | 5,90<br>12.98  |
|        | M 42 x 2   | 9<br>.35  | 50<br>1.97                                                  | 5,70<br>12.54  |
|        | M 52 x 2   | 10<br>.39 | 65<br>2.56                                                  | 12,20<br>26.84 |

### Ordering Codes

**\*FI-SKM\*-06\*L\*-W3**

|                                          |                                  |
|------------------------------------------|----------------------------------|
| * Hexagon Lock Nut for Bulkhead Fittings | FI-SKM                           |
| * Outside Tube Diameter D1 (in mm)       | -06                              |
| * Series                                 | Light Series L<br>Heavy Series S |
| * Material Code                          | Steel, zinc/nickel-plated -W3    |

Please contact STAUFF for alternative materials and surface finishings.



## Profile Sealing Ring for Male Studs Type WDG



### Whitworth Parallel Pipe Thread (BSPP)

Male stud acc. to ISO 1179-2 (Type E) / Port according to ISO 1179-1

| Dimensions<br>( <sup>mm</sup> / <sub>in</sub> )<br>for Thread |              |              |            | Ordering Codes        |                       |
|---------------------------------------------------------------|--------------|--------------|------------|-----------------------|-----------------------|
|                                                               | D1           | D2           | L1         | NBR (Buna-N®)         | FKM (Viton®)          |
| G 1/8                                                         | 8,4<br>.33   | 11,9<br>.47  | 1<br>.04   | WDG-8.4x11.9x1-B90    | WDG-8.4x11.9x1-V90    |
| G 1/4                                                         | 11,6<br>.46  | 16,5<br>.65  | 1,5<br>.06 | WDG-11.6x16.5x1.5-B90 | WDG-11.6x16.5x1.5-V90 |
| G 3/8                                                         | 14,7<br>.58  | 18,9<br>.74  | 1,5<br>.06 | WDG-14.7x18.9x1.5-B90 | WDG-14.7x18.9x1.5-V90 |
| G 1/2                                                         | 18,5<br>.73  | 23,9<br>.94  | 1,5<br>.06 | WDG-18.5x23.9x1.5-B90 | WDG-18.5x23.9x1.5-V80 |
| G 3/4                                                         | 23,9<br>.94  | 29,2<br>1.15 | 1,5<br>.06 | WDG-23.9x29.2x1.5-B90 | WDG-23.9x29.2x1.5-V80 |
| G 1                                                           | 29,7<br>1.17 | 35,7<br>1.41 | 2<br>.08   | WDG-29.7x35.7x2-B90   | WDG-29.7x35.7x2-V80   |
| G 1 1/4                                                       | 38,8<br>1.53 | 45,8<br>1.80 | 2<br>.08   | WDG-38.8x45.8x2-B90   | WDG-38.8x45.8x2-V80   |
| G 1 1/2                                                       | 44,7<br>1.76 | 50,7<br>2.00 | 2<br>.08   | WDG-44.7x50.7x2-B90   | WDG-44.7x50.7x2-V80   |

### Metric Parallel Thread

Male stud according to ISO 9974-2 (Type E) / Port according to ISO 9974-1

| Dimensions<br>( <sup>mm</sup> / <sub>in</sub> )<br>for Thread |              |              |            | Ordering Codes        |                       |
|---------------------------------------------------------------|--------------|--------------|------------|-----------------------|-----------------------|
|                                                               | D1           | D2           | L1         | NBR (Buna-N®)         | FKM (Viton®)          |
| M 8 x 1                                                       | 6,5<br>.26   | 9,9<br>.39   | 1<br>.04   | WDG-6.5x9.9x1-B90     | WDG-6.5x9.9x1-V90     |
| M 10 x 1                                                      | 8,4<br>.33   | 11,9<br>.47  | 1<br>.04   | WDG-8.4x11.9x1-B90    | WDG-8.4x11.9x1-V90    |
| M 12 x 1,5                                                    | 9,8<br>.39   | 14,5<br>.57  | 1,5<br>.06 | WDG-9.8x14.5x1.5-B90  | WDG-9.8x14.5x1.5-V90  |
| M 14 x 1,5                                                    | 11,6<br>.46  | 16,5<br>.65  | 1,5<br>.06 | WDG-11.6x16.5x1.5-B90 | WDG-11.6x16.5x1.5-V90 |
| M 16 x 1,5                                                    | 13,8<br>.54  | 18,9<br>.74  | 1,5<br>.06 | WDG-13.8x18.9x1.5-B80 | WDG-13.8x18.9x1.5-V80 |
| M 18 x 1,5                                                    | 15,7<br>.62  | 20,9<br>.82  | 1,5<br>.06 | WDG-15.7x20.9x1.5-B90 | WDG-15.7x20.9x1.5-V80 |
| M 20 x 1,5                                                    | 17,8<br>.70  | 22,9<br>.90  | 1,5<br>.06 | WDG-17.8x22.9x1.5-B90 | WDG-17.8x22.9x1.5-V90 |
| M 22 x 1,5                                                    | 19,6<br>.77  | 24,3<br>.96  | 1,5<br>.06 | WDG-19.6x24.3x1.5-B90 | WDG-19.6x24.3x1.5-V90 |
| M 26 x 1,5                                                    | 23,9<br>.94  | 29,2<br>1.15 | 1,5<br>.06 | WDG-23.9x29.2x1.5-B90 | WDG-23.9x29.2x1.5-V80 |
| M 27 x 2                                                      | 23,9<br>.94  | 29,2<br>1.15 | 1,5<br>.06 | WDG-23.9x29.2x1.5-B90 | WDG-23.9x29.2x1.5-V80 |
| M 33 x 2                                                      | 29,7<br>1.17 | 35,7<br>1.41 | 2<br>.08   | WDG-29.7x35.7x2-B90   | WDG-29.7x35.7x2-V80   |
| M 42 x 2                                                      | 38,8<br>1.53 | 45,8<br>1.80 | 2<br>.08   | WDG-38.8x45.8x2-B90   | WDG-38.8x45.8x2-V80   |
| M 48 x 2                                                      | 44,7<br>1.76 | 50,7<br>2.00 | 2<br>.08   | WDG-44.7x50.7x2-B90   | WDG-44.7x50.7x2-V80   |



## O-Ring for Male Studs Type O-RING



Male stud according to ISO 6149-2/-3 / Port according to ISO 6149-1

Metric Parallel Thread

| Dimensions<br>( <sup>mm</sup> / <sub>in</sub> )<br>for Thread | Ordering Codes         |                        |
|---------------------------------------------------------------|------------------------|------------------------|
|                                                               | NBR (Buna-N®)          | FKM (Viton®)           |
| M 8 x 1                                                       | O-RING-6.07x1.63-B90   | O-RING-6.07x1.63-V90   |
| M 10 x 1                                                      | O-RING-8.1x1.6-B90     | O-RING-8.1x1.6-V90     |
| M 12 x 1,5                                                    | O-RING-9.3x2.2-B90     | O-RING-9.3x2.2-V90     |
| M14 x 1,5                                                     | O-RING-11.3x2.2-B90    | O-RING-11.3x2.2-V90    |
| M16 x 1,5                                                     | O-RING-13.3x2.2-B90    | O-RING-13.3x2.2-V90    |
| M18 x 1,5                                                     | O-RING-15.3x2.2-B90    | O-RING-15.3x2.2-V90    |
| M22 x 1,5                                                     | O-RING-19.3x2.2-B90    | O-RING-19.3x2.2-V90    |
| M26 x 1,5                                                     | O-RING-23.3x2.4-B90    | O-RING-23.3x2.4-V90    |
| M27 x 2                                                       | O-RING-23.6x2.9-B90    | O-RING-23.6x2.9-V90    |
| M30 x 2                                                       | O-RING-26.62 x2.95-B90 | O-RING-26.62 x2.95-V90 |
| M33 x 2                                                       | O-RING-29.6x2.9-B90    | O-RING-29.6x2.9-V90    |
| M42 x 2                                                       | O-RING-38.6x2.9-B90    | O-RING-38.6x2.9-V90    |
| M48 x 2                                                       | O-RING-44.6x2.9-B90    | O-RING-44.6x2.9-V90    |

Male stud according to ISO 11926-2/-3 / Port according to ISO 11926-1

UN / UNF Thread

| Dimensions<br>( <sup>mm</sup> / <sub>in</sub> )<br>for Thread | Ordering Codes         |                         |
|---------------------------------------------------------------|------------------------|-------------------------|
|                                                               | NBR (Buna-N®)          | FKM (Viton®)            |
| 7/16-20 UNF                                                   | O-RING-8.92x1.83-B90   | O-RING-8.92x1.83-V90    |
| 1/2-20 UNF                                                    | O-RING-10.52x1.83-B90  | O-RING-10.52x1.83-V90   |
| 9/16-18 UNF                                                   | O-RING-11.89x1.98-B90  | O-RING-11.89x1.98-V90   |
| 3/4-16 UNF                                                    | O-RING-16.36x2.2-B90   | O-RING-16.36x2.2-V90    |
| 7/8-14 UNF                                                    | O-RING-19.18x2.46-B90  | O-RING-19.18x2.46-V 90  |
| 1 1/16-12 UN                                                  | O-RING-23.47x2.95-B90  | O-RING-23.47x2.95-V80   |
| 1 3/16-12 UN                                                  | O-RING-26.62 x2.95-B90 | O-RING-26.62 x 2.95-V90 |
| 1 5/16-12 UN                                                  | O-RING-29.74x2.95-B90  | O-RING-29.74x2.95-V90   |
| 1 5/8-12 UN                                                   | O-RING-37.47x3-B90     | O-RING-37.47x3-V90      |
| 1 7/8-12 UN                                                   | O-RING-43.69x3-B90     | O-RING-43.69x3-V90      |

Whitworth Parallel Pipe Thread (BSPP)

| Dimensions<br>( <sup>mm</sup> / <sub>in</sub> )<br>for Thread | Ordering Codes        |                       |
|---------------------------------------------------------------|-----------------------|-----------------------|
|                                                               | NBR (Buna-N®)         | FKM (Viton®)          |
| G 1/8                                                         | O-RING-7.97x1.88-B90  | O-RING-7.97x1.88-V90  |
| G 1/4                                                         | O-RING-10.77x2.62-B90 | O-RING-10.77x2.62-V90 |
| G 3/8                                                         | O-RING-13.94x2.62-B90 | O-RING-13.94x2.62-V90 |
| G 1/2                                                         | O-RING-17.86x2.62-B90 | O-RING-17.86x2.62-V90 |
| G 3/4                                                         | O-RING-23.47x2.62-B90 | O-RING-23.47x2.62-V90 |
| G 1                                                           | O-RING-29.74x3.53-B90 | O-RING-29.74x3.53-V90 |
| G 1 1/4                                                       | O-RING-37.69x3.53-B90 | O-RING-37.69x3.53-V90 |
| G 1 1/2                                                       | O-RING-44.04x3.53-B90 | O-RING-44.04x3.53-V90 |



## O-Ring for 24°/37° Flared Cone Adaptors

### Type O-RING



#### 24° Taper of the Flared Cone Adaptor

| Series | Tube OD<br>(mm/in) | Ordering Codes      |                     |
|--------|--------------------|---------------------|---------------------|
|        |                    | NBR (Buna-N®)       | FKM (Viton®)        |
| L      | 6                  | O-RING-4.5x1.5-B90  | O-RING-4.5x1.5-V90  |
|        | .24                |                     |                     |
|        | 8                  | O-RING-6.5x1.5-B90  | O-RING-6.5x1.5-V90  |
|        | .31                |                     |                     |
|        | 10                 | O-RING-8.5x1.5-B90  | O-RING-8.5x1.5-V90  |
|        | .39                |                     |                     |
|        | 12                 | O-RING-10x1.5-B90   | O-RING-10x1.5-V90   |
|        | .47                |                     |                     |
|        | 15                 | O-RING-12.5x2-B90   | O-RING-12.5x2-V90   |
|        | .59                |                     |                     |
|        | 18                 | O-RING-16x2-B90     | O-RING-16x2-V90     |
|        | .71                |                     |                     |
|        | 22                 | O-RING-20x2-B90     | O-RING-20x2-V90     |
|        | .87                |                     |                     |
|        | 28                 | O-RING-26x2-B90     | O-RING-26x2-V90     |
|        | 1.10               |                     |                     |
| S      | 35                 | O-RING-32x2.5-B90   | O-RING-32x2.5-V90   |
|        | 1.38               |                     |                     |
|        | 42                 | O-RING-38x2.5-B90   | O-RING-38x2.5-V90   |
|        | 1.65               |                     |                     |
|        | 6                  | O-RING-4.5x1.5-B90  | O-RING-4.5x1.5-V90  |
|        | .24                |                     |                     |
|        | 8                  | O-RING-6.5x1.5-B90  | O-RING-6.5x1.5-V90  |
|        | .31                |                     |                     |
|        | 10                 | O-RING-8.5x1.5-B90  | O-RING-8.5x1.5-V90  |
|        | .39                |                     |                     |
|        | 12                 | O-RING-10x1.5-B90   | O-RING-10x1.5-V90   |
|        | .47                |                     |                     |
|        | 14                 | O-RING-12x2-B90     | O-RING-12x2-V90     |
|        | .55                |                     |                     |
|        | 16                 | O-RING-14x2-B90     | O-RING-14x2-V90     |
|        | .63                |                     |                     |
|        | 20                 | O-RING-17.3x2.4-B90 | O-RING-17.3x2.4-V90 |
|        | .79                |                     |                     |
|        | 25                 | O-RING-22.3x2.4-B90 | O-RING-22.3x2.4-V90 |
|        | .98                |                     |                     |
|        | 30                 | O-RING-27.3x2.4-B90 | O-RING-27.3x2.4-V90 |
|        | 1.18               |                     |                     |
|        | 38                 | O-RING-35x2.5-B90   | O-RING-35x2.5-V90   |
|        | 1.50               |                     |                     |





## O-Ring for 24°/37° Flared Cone Adaptors Type O-RING



37° Taper of the Flared Cone Adaptor

| Series | Tube OD<br>(mm/in) | Ordering Codes      |                     |
|--------|--------------------|---------------------|---------------------|
|        |                    | NBR (Buna-N®)       | FKM (Viton®)        |
| L      | 6                  | O-RING-4.4x0.8-B90  | O-RING-4.4x0.8-V90  |
|        | .24                |                     |                     |
|        | 8                  | O-RING-6x0.8-B90    | O-RING-6x0.8-V90    |
|        | .31                |                     |                     |
|        | 10                 | O-RING-7.5x0.8-B90  | O-RING-7.5x0.8-V90  |
|        | .39                |                     |                     |
|        | 12                 | O-RING-9.5x0.8-B90  | O-RING-9.5x0.8-V90  |
|        | .47                |                     |                     |
|        | 15                 | O-RING-12.5x0.8-B90 | O-RING-12.5x0.8-V90 |
|        | .59                |                     |                     |
|        | 18                 | O-RING-15x1-B90     | O-RING-15x1-V90     |
|        | .71                |                     |                     |
|        | 22                 | O-RING-18x1-B90     | O-RING-18x1-V90     |
|        | .87                |                     |                     |
|        | 28                 | O-RING-23x1-B90     | O-RING-23x1-V90     |
|        | 1.10               |                     |                     |
| S      | 35                 | O-RING-30x1-B90     | O-RING-30x1-V90     |
|        | 1.38               |                     |                     |
|        | 42                 | O-RING-37x1-B90     | O-RING-37x1-V90     |
|        | 1.65               |                     |                     |
|        | 6                  | O-RING-4.4x0.8-B90  | O-RING-4.4x0.8-V90  |
|        | .24                |                     |                     |
|        | 8                  | O-RING-6x0.8-B90    | O-RING-6x0.8-V90    |
|        | .31                |                     |                     |
|        | 10                 | O-RING-7.5x0.8-B90  | O-RING-7.5x0.8-V90  |
|        | .39                |                     |                     |
|        | 12                 | O-RING-9.5x0.8-B90  | O-RING-9.5x0.8-V90  |
|        | .47                |                     |                     |
|        | 14                 | O-RING-11x1-B90     | O-RING-11x1-V90     |
|        | .55                |                     |                     |
|        | 16                 | O-RING-12.5x1-B90   | O-RING-12.5x1-V90   |
|        | .63                |                     |                     |
|        | 20                 | O-RING-16x1-B90     | O-RING-16x1-V90     |
|        | .79                |                     |                     |
|        | 25                 | O-RING-20x1-B90     | O-RING-20x1-V90     |
|        | .98                |                     |                     |
|        | 30                 | O-RING-25x1-B90     | O-RING-25x1-V90     |
|        | 1.18               |                     |                     |
|        | 38                 | O-RING-32x1.8-B90   | O-RING-32x1.8-V90   |
|        | 1.50               |                     |                     |



## O-Ring for for DKO Taper Fittings / 24° Weld Cones

### Type O-RING



| Series | Tube OD<br>(mm/in) | Ordering Codes      |                     |
|--------|--------------------|---------------------|---------------------|
|        |                    | NBR (Buna-N®)       | FKM (Viton®)        |
| L      | 6                  | 0-RING-4.5x1.5-B90  | 0-RING-4.5x1.5-V90  |
|        | .24                |                     |                     |
|        | 8                  | 0-RING-6.5x1.5-B90  | 0-RING-6.5x1.5-V90  |
|        | .31                |                     |                     |
|        | 10                 | 0-RING-8.5x1.5-B90  | 0-RING-8.5x1.5-V90  |
|        | .39                |                     |                     |
|        | 12                 | 0-RING-10x1.5-B90   | 0-RING-10x1.5-V90   |
|        | .47                |                     |                     |
|        | 15                 | 0-RING-12.5x2-B90   | 0-RING-12.5x2-V90   |
|        | .59                |                     |                     |
|        | 18                 | 0-RING-16x2-B90     | 0-RING-16x2-V90     |
|        | .71                |                     |                     |
|        | 22                 | 0-RING-20x2-B90     | 0-RING-20x2-V90     |
|        | .87                |                     |                     |
|        | 28                 | 0-RING-26x2-B90     | 0-RING-26x2-V90     |
|        | 1.10               |                     |                     |
|        | 35                 | 0-RING-32x2.5-B90   | 0-RING-32x2.5-V90   |
| S      | 1.38               |                     |                     |
|        | 42                 | 0-RING-38x2.5-B90   | 0-RING-38x2.5-V90   |
|        | 1.65               |                     |                     |
|        | 6                  | 0-RING-4.5x1.5-B90  | 0-RING-4.5x1.5-V90  |
|        | .24                |                     |                     |
|        | 8                  | 0-RING-6.5x1.5-B90  | 0-RING-6.5x1.5-V90  |
|        | .31                |                     |                     |
|        | 10                 | 0-RING-8.5x1.5-B90  | 0-RING-8.5x1.5-V90  |
|        | .39                |                     |                     |
|        | 12                 | 0-RING-10x1.5-B90   | 0-RING-10x1.5-V90   |
|        | .47                |                     |                     |
|        | 14                 | 0-RING-12x2-B90     | 0-RING-12x2-V90     |
|        | .55                |                     |                     |
|        | 16                 | 0-RING-14x2-B90     | 0-RING-14x2-V90     |
|        | .63                |                     |                     |
|        | 20                 | 0-RING-17.3x2.4-B90 | 0-RING-17.3x2.4-V90 |
|        | .79                |                     |                     |
|        | 25                 | 0-RING-22.3x2.4-B90 | 0-RING-22.3x2.4-V90 |
|        | .98                |                     |                     |
|        | 30                 | 0-RING-27.3x2.4-B90 | 0-RING-27.3x2.4-V90 |
|        | 1.18               |                     |                     |
|        | 38                 | 0-RING-35x2.5-B90   | 0-RING-35x2.5-V90   |
|        | 1.50               |                     |                     |



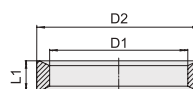
## O-Ring for Banjo Bolts of Banjo Fittings Type O-RING



| Dimensions<br>( <sup>mm</sup> / <sub>in</sub> ) |                          | Ordering Codes     |                    |
|-------------------------------------------------|--------------------------|--------------------|--------------------|
| for Thread                                      | for Tube Size / Series   | NBR (Buna-N®)      | FKM (Viton®)       |
| G 1/8                                           | 4LL / 6LL / 8LL / 6L     | O-RING-8.5x1.5-B90 | O-RING-8.5x1.5-V90 |
| G 1/4                                           | 8L / 10L / 12L / 6S / 8S | O-RING-11x2-B90    | O-RING-11x2-V90    |
| G 3/8                                           | 12L / 10S / 12S          | O-RING-14.5x2-B90  | O-RING-14.5x2-V90  |
| G 1/2                                           | 15L / 18L / 14S / 16S    | O-RING-19.5x2-B90  | O-RING-19.5x2-V90  |
| G 3/4                                           | 22L / 20S                | O-RING-26x1.5-B90  | O-RING-26x1.5-V90  |
| G 1                                             | 28L / 25S                | O-RING-31x2-B90    | O-RING-31x2-V90    |
| G 1 1/4                                         | 35L / 30S                | O-RING-40x2-B90    | O-RING-40x2-V90    |
| G 1 1/2                                         | 42L / 38S                | O-RING-46x2-B90    | O-RING-46x2-V90    |
| M 8 x 1                                         | 4LL                      | O-RING-6.5x1.5-B90 | O-RING-6.5x1.5-V90 |
| M 10 x 1                                        | 6LL / 8LL / 6L           | O-RING-8.5x1.5-B90 | O-RING-8.5x1.5-V90 |
| M 12 x 1,5                                      | 8L / 6S                  | O-RING-11x2-B90    | O-RING-11x2-V90    |
| M 14 x 1,5                                      | 10L / 8S / 12L           | O-RING-11x2-B90    | O-RING-11x2-V90    |
| M 16 x 1,5                                      | 12L / 10S                | O-RING-14.5x2-B90  | O-RING-14.5x2-V90  |
| M 18 x 1,5                                      | 12L / 10S                | O-RING-14.5x2-B90  | O-RING-14.5x2-V90  |
| M 18 x 1,5                                      | 15L / 12S                | O-RING-16.5x2-B90  | O-RING-16.5x2-V90  |
| M 20 x 1,5                                      | 14S                      | O-RING-19.5x2-B90  | O-RING-19.5x2-V90  |
| M 22 x 1,5                                      | 18L / 16S                | O-RING-19.5x2-B90  | O-RING-19.5x2-V90  |
| M 26 x 1,5                                      | 22L                      | O-RING-26x1.5-B90  | O-RING-26x1.5-V90  |
| M 27 x 2                                        | 20S                      | O-RING-26x1.5-B90  | O-RING-26x1.5-V90  |
| M 33 x 2                                        | 28L / 25S                | O-RING-31x2-B90    | O-RING-31x2-V90    |
| M 42 x 2                                        | 35L / 30S                | O-RING-40x2-B90    | O-RING-40x2-V90    |
| M 48 x 2                                        | 42L / 38S                | O-RING-46x2-B90    | O-RING-46x2-V90    |



## External Metallic Sealing Ring for Male Studs of Banjo Fittings Type FI-DKR



| Dimensions<br>(mm/in) |         |              |              |            | Ordering Codes                     |
|-----------------------|---------|--------------|--------------|------------|------------------------------------|
| for Thread            |         | D1           | D2           | L1         |                                    |
| M 8 x 1               |         | 8,05<br>.32  | 10,8<br>.43  | 4<br>.16   | FI-DKR-M8x1-W3-WOB                 |
| M 10 x 1              | G 1/8   | 10,1<br>.40  | 13<br>.51    | 4<br>.16   | FI-DKR-M10x1-R1/8-W3-WOB           |
| M 12 x 1,5            |         | 12,2<br>.48  | 17,8<br>.70  | 4<br>.16   | FI-DKR-M12x1.5-W3-WOB              |
|                       | G 1/4   | 13,2<br>.52  | 17,7<br>.70  | 4<br>.16   | FI-DKR-R1/4-W3-WOB                 |
| M 14 x 1,5            |         | 14,1<br>.56  | 17,7<br>.70  | 4,4<br>.17 | FI-DKR-M14x1.5-W3-WOB              |
| M 16 x 1,5            |         | 16,1<br>.63  | 21,5<br>.85  | 5<br>.20   | FI-DKR-M16x1.5-W3-WOB              |
|                       | G 3/8   | 16,7<br>.66  | 22<br>.87    | 5<br>.20   | FI-DKR-R3/8-W3-WOB                 |
| M 18 x 1,5            |         | 18,1<br>.71  | 23<br>.91    | 5<br>.20   | FI-DKR-M18x1.5-W3-WOB              |
|                       | G 1/2   | 21<br>.83    | 26<br>1.02   | 7<br>.28   | FI-DKR-18L/16S-R1/2-W3-WOB         |
| M 20 x 1,5            | G 1/2   | 21<br>.83    | 26<br>1.02   | 5<br>.20   | FI-DKR-15L/14S-M20x1.5-R1/2-W3-WOB |
| M 22 x 1,5            |         | 22,1<br>.87  | 27<br>1.06   | 7<br>.28   | FI-DKR-M22x1.5-W3-WOB              |
| M 26 x 1,5            |         | 26,1<br>1.03 | 31,5<br>1.24 | 5,5<br>.22 | FI-DKR-M26x1.5-W3-WOB              |
| M 27 x 2              | G 3/4   | 27,1<br>1.07 | 32<br>1.26   | 5,5<br>.22 | FI-DKR-M27x2-R3/4-W3-WOB           |
| M 33 x 2              |         | 33,3<br>1.31 | 39<br>1.54   | 5,5<br>.22 | FI-DKR-M33x2-R1-W3-WOB             |
| M 42 x 2              | G 1 1/4 | 42,1<br>1.66 | 49<br>1.93   | 5,5<br>.22 | FI-DKR-M42x2-R1-1/4-W3-WOB         |
| M 48 x 2              | G 1 1/2 | 48,1<br>1.89 | 55<br>2.17   | 5,5<br>.22 | FI-DKR-M48x2-R1-1/2-W3-WOB         |

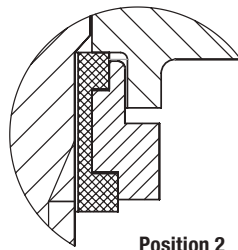
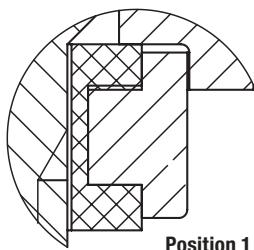


## Retaining Ring with Captive Seal for Male Studs of Banjo Fittings Type FI-DIR

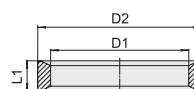


| Dimensions<br>(mm/in) |                       |             |              |              |            | Ordering Codes             |
|-----------------------|-----------------------|-------------|--------------|--------------|------------|----------------------------|
| for Thread            |                       | Positioning | D1           | D2           | L1         |                            |
| M 10 x 1              | G 1/8                 | 2           | 10,2<br>.40  | 14,9<br>.59  | 4,0<br>.16 | FI-DIR-M10x1-R1/8-B-W3     |
| M 12 x 1,5            |                       | 1           | 12,2<br>.48  | 17,8<br>.70  | 4,0<br>.16 | FI-DIR-M12x1.5-B-W3        |
|                       | G 1/4                 | 2           | 13,3<br>.52  | 18,8<br>.74  | 4,0<br>.16 | FI-DIR-R1/4-B-W3           |
| M 14 x 1,5            |                       | 2           | 14,1<br>.56  | 19,9<br>.78  | 4,0<br>.16 | FI-DIR-M14x1.5-B-W3        |
| M 16 x 1,5            | G 3/8                 | 1           | 16,8<br>.66  | 22,8<br>.90  | 4,4<br>.17 | FI-DIR-M16x1.5-R3/8-B-W3/2 |
| M 18 x 1,5            |                       | 1           | 18,1<br>.71  | 24,9<br>.98  | 5,0<br>.20 | FI-DIR-M18x1.5-B-W3/2      |
| M 18 x 1,5 (nur 12L)  |                       | 1           | 18,1<br>.71  | 24,5<br>.96  | 4,6<br>.18 | FI-DIR-12LM18x1.5-B-W3     |
|                       | G 1/2 (nur 15L / 14S) | 1           | 21<br>.83    | 27,9<br>1.1  | 5,0<br>.20 | FI-DIR-15L/14S-R1/2-B-W3/2 |
|                       | G 1/2 (nur 18L / 16S) | 1           | 21<br>.83    | 27,9<br>1.1  | 7,0<br>.28 | FI-DIR-18L/16S-R1/2-B-W3/2 |
| M 20 x 1,5            |                       | 1           | 20,2<br>.79  | 27,5<br>1.08 | 5,0<br>.20 | FI-DIR-M20x1.5-B-W3        |
| M 22 x 1,5            |                       | 1           | 22,1<br>.87  | 27,9<br>1.1  | 7,0<br>.28 | FI-DIR-M22x1.5-B-W3        |
| M 26 x 1,5            |                       | 1           | 26,1<br>1.03 | 32,5<br>1.28 | 5,5<br>.22 | FI-DIR-M26x1.5-B-W3        |
| M 27 x 2              | G 3/4                 | 1           | 27<br>1.06   | 32,9<br>1.3  | 5,5<br>.22 | FI-DIR-M27x2-R3/4-B-W3/2   |
| M 33 x 2              | G 1                   | 1           | 33,4<br>1.31 | 40,9<br>1.61 | 5,5<br>.22 | FI-DIR-M33x2-R1-B-W3/2     |
| M 42 x 2              | G 1 1/4               | 1           | 42,1<br>1.66 | 50,9<br>2.0  | 5,5<br>.22 | FI-DIR-M42x2-R1-1/4-B-W3   |
| M 48 x 2              | G 1 1/2               | 1           | 47,8<br>1.88 | 55,9<br>2.2  | 5,5<br>.22 | FI-DIR-M48x2-R1-1/2-B-W3   |

### Positioning and Orientation (also see page 320)



## Internal Metallic Sealing Ring for Female Studs of Gauge Fittings Type FI-DKI

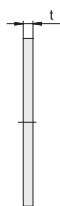
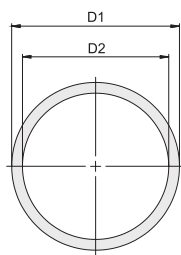


| Dimensions<br>(mm/in) |     |      |     | Ordering Codes     |
|-----------------------|-----|------|-----|--------------------|
| for Thread            | D1  | D2   | L1  |                    |
| G 1/4                 | 6   | 11,3 | 4,5 | FI-DKI-R1/4-W3-W0B |
|                       | .24 | .44  | .18 |                    |
| G 1/2                 | 12  | 18,5 | 5   | FI-DKI-R1/2-W3-W0B |
|                       | .47 | .73  | .20 |                    |





## Retaining Ring (Small) for Male Studs of Fittings with Lock Nut Type FI-KR



| Dimensions<br>(mm/in)<br>for Thread | D1           | D2           | t          | Ordering Codes       |
|-------------------------------------|--------------|--------------|------------|----------------------|
| G 1/8                               | 14,8<br>.58  | 11,8<br>.46  | 1,4<br>.06 | FI-KR-R1/8-W3-WOB    |
| G 1/4                               | 19,8<br>.78  | 16,15<br>.64 | 1,9<br>.07 | FI-KR-R1/4-W3-WOB    |
| G 3/8                               | 22,8<br>.90  | 19,4<br>.76  | 1,9<br>.07 | FI-KR-R3/8-W3-WOB    |
| G 1/2                               | 27,8<br>1.09 | 23,2<br>.91  | 1,9<br>.07 | FI-KR-R1/2-W3-WOB    |
| G 3/4                               | 32,8<br>1.29 | 28,6<br>1.13 | 1,9<br>.07 | FI-KR-R3/4-W3-WOB    |
| G 1                                 | 40,8<br>1.61 | 36,6<br>1.44 | 2,6<br>.10 | FI-KR-R1-W3-WOB      |
| G 1 1/4                             | 50,8<br>2.00 | 44,9<br>1.77 | 2,6<br>.10 | FI-KR-R1-1/4-W3-WOB  |
| G 1 1/2                             | 55,8<br>2.20 | 50,9<br>2.00 | 2,6<br>.10 | FI-KR-R1-1/2-W3-WOB  |
| M 10 x 1                            | 14,8<br>.58  | 11,4<br>.45  | 1,1<br>.04 | FI-KR-M10x1-W3-WOB   |
| M 12 x 1,5                          | 17,8<br>.70  | 13,9<br>.55  | 1,7<br>.07 | FI-KR-M12x1.5-W3-WOB |
| M 14 x 1,5                          | 19,8<br>.78  | 15,9<br>.63  | 1,7<br>.07 | FI-KR-M14x1.5-W3-WOB |
| M 16 x 1,5                          | 22,8<br>.90  | 17,9<br>.70  | 1,7<br>.07 | FI-KR-M16x1.5-W3-WOB |
| M 18 x 1,5                          | 24,8<br>.98  | 19,9<br>.78  | 1,7<br>.07 | FI-KR-M18x1.5-W3-WOB |
| M 22 x 1,5                          | 27,8<br>1.09 | 23,9<br>.94  | 1,7<br>.07 | FI-KR-M22x1.5-W3-WOB |
| M 27 x 2                            | 32,8<br>1.29 | 29,6<br>1.17 | 2,2<br>.09 | FI-KR-M27x2-W3-WOB   |
| M 33 x 2                            | 40,8<br>1.61 | 35,6<br>1.40 | 2,2<br>.09 | FI-KR-M33x2-W3-WOB   |
| M 42 x 2                            | 50,8<br>2.00 | 44,6<br>1.76 | 2,2<br>.09 | FI-KR-M42x2-W3-WOB   |
| M 48 x 2                            | 55,8<br>2.20 | 50,6<br>1.99 | 2,2<br>.09 | FI-KR-M48x2-W3-WOB   |
| 7/16-20 UNF                         | 17<br>.67    | 13<br>.51    | 1,3<br>.05 | FI-KR-7/16U-W3-WOB   |
| 9/16-18 UNF                         | 21<br>.83    | 16,1<br>.63  | 1,4<br>.06 | FI-KR-9/16U-W3-WOB   |
| 3/4-16 UNF                          | 26,5<br>1.04 | 21<br>.83    | 1,6<br>.06 | FI-KR-3/4U-W3-WOB    |
| 7/8-14 UNF                          | 30<br>1.18   | 24,3<br>.96  | 1,8<br>.07 | FI-KR-7/8U-W3-WOB    |
| 1 1/16-12 UN                        | 37,5<br>1.48 | 29,6<br>1.17 | 2,2<br>.09 | FI-KR-1-1/16U-W3-WOB |
| 1 5/16-12 UN                        | 45<br>1.77   | 35,8<br>1.41 | 2,2<br>.09 | FI-KR-1-5/16U-W3-WOB |
| 1 5/8-12 UN                         | 56,5<br>2.22 | 43,7<br>1.72 | 2,2<br>.09 | FI-KR-1-5/8U-W3-WOB  |
| 1 7/8-12 UN                         | 64<br>2.52   | 49,9<br>1.96 | 2,2<br>.09 | FI-KR-1-7/8U-W3-WOB  |

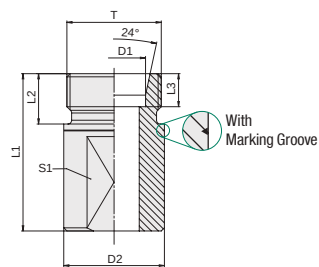




|                                                                                     |                                                                                                                 |     |                                                                                   |                                                      |     |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----|-----------------------------------------------------------------------------------|------------------------------------------------------|-----|
|    | <b>Final Assembly Stud for the Manual Cutting Ring Assembly</b><br>FI-FK                                        | 250 |  | <b>STAUFF Form EVO Tube Forming Machine</b><br>SF0-F | 268 |
|    | <b>Pre-Assembly Stud for the Manual Cutting Ring Assembly</b><br>FI-VK                                          | 251 |  | <b>Optional Cloud connection</b><br>SF0-F-IOT        | 272 |
|    | <b>Cutting Ring Final Assembly Machine</b><br>SPR-PRC-POC-A-A                                                   | 252 |  | <b>Tube Shapers</b><br>FI-FST                        | 270 |
|    | <b>Cutting Ring Assembly Stud for Machine-Assisted Assembly</b><br>FI-MFK                                       | 254 |  | <b>Internal Tube Supports</b><br>FI-ID               | 270 |
|    | <b>Support Plate for Machine-Assisted Assembly</b><br>FI-GP                                                     | 255 |  | <b>Clamping Jaws</b><br>FI-FB                        | 271 |
|    | <b>Optional tool holder for tubes with small bending radii</b><br>SPR-PRC-POC-RTH                               | 256 |                                                                                   | <b>Accessories</b>                                   | 272 |
|    | <b>Optional Cloud connection</b><br>SPR-PRC-POC-A-A-IOT                                                         | 256 |                                                                                   |                                                      |     |
|                                                                                     | <b>Accessories</b>                                                                                              | 256 |                                                                                   |                                                      |     |
|  | <b>Cutting Ring Assembly and 37° Flaring Machine with Automatic / Manual Pressure Setting</b><br>SPR-PRC-MA-D-A | 258 |                                                                                   |                                                      |     |
|                                                                                     | <b>Accessories</b>                                                                                              | 260 |                                                                                   |                                                      |     |
|  | <b>Cutting Ring Assembly Stud for Machine-Assisted Assembly</b><br>FI-MFK                                       | 261 |                                                                                   |                                                      |     |
|  | <b>Support Plate for Machine-Assisted Assembly</b><br>FI-GP-PRC                                                 | 262 |                                                                                   |                                                      |     |
|  | <b>Clamping Jaws for 37° Flaring</b><br>FI-KB-PRC                                                               | 263 |                                                                                   |                                                      |     |
|  | <b>Portable Cutting Ring Assembly Machine with Manual Pressure Setting (Set)</b><br>SPR-PRC-H-SET               | 264 |                                                                                   |                                                      |     |
|  | <b>Cutting Ring Assembly Stud for Machine-Assisted Assembly</b><br>FI-MVK-PRC-H-M                               | 266 |                                                                                   |                                                      |     |



## Final Assembly Stud for the Manual Cutting Ring Assembly Type FI-FK • Series LL / L / S



| Series | Tube OD<br>(mm/in) | Dimensions<br>(mm/in) |      |      |     |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes |
|--------|--------------------|-----------------------|------|------|-----|------|------|-----------------------------------|----------------|
|        | D1                 | Thread T              | D2   | L1   | L2  | L3   | S1   |                                   |                |
| LL     | 4                  | M 8 x 1               | 14   | 40   | 8   | 4    | 11   | 3,74                              | FI-FK-04LL-HR  |
|        | .16                |                       | .55  | 1.57 | .31 | .16  | .43  | 8.23                              |                |
|        | 6                  | M 10 x 1              | 14   | 40   | 8   | 5,5  | 11   | 3,81                              | FI-FK-06LL-HR  |
|        | .24                |                       | .55  | 1.57 | .31 | .22  | .43  | 8.39                              |                |
|        | 8                  | M 12 x 1              | 14   | 41   | 9   | 5,5  | 11   | 4,00                              | FI-FK-08LL-HR  |
|        | .31                |                       | .55  | 1.61 | .35 | .22  | .43  | 8.81                              |                |
| L      | 6                  | M 12 x 1,5            | 14   | 43   | 10  | 7    | 11   | 4,21                              | FI-FK-06L-HR   |
|        | .24                |                       | .55  | 1.69 | .39 | .28  | .43  | 9.26                              |                |
|        | 8                  | M 14 x 1,5            | 15   | 43   | 10  | 7    | 12   | 4,96                              | FI-FK-08L-HR   |
|        | .31                |                       | .59  | 1.69 | .39 | .28  | .47  | 10.90                             |                |
|        | 10                 | M 16 x 1,5            | 17   | 44   | 11  | 7    | 14   | 6,57                              | FI-FK-10L-HR   |
|        | .39                |                       | .67  | 1.73 | .43 | .28  | .55  | 14.46                             |                |
|        | 12                 | M 18 x 1,5            | 20   | 44   | 11  | 7    | 17   | 9,06                              | FI-FK-12L-HR   |
|        | .47                |                       | .79  | 1.73 | .43 | .28  | .67  | 19.92                             |                |
|        | 15                 | M 22 x 1,5            | 23   | 45   | 12  | 7    | 19   | 12,34                             | FI-FK-15L-HR   |
|        | .59                |                       | .91  | 1.77 | .47 | .28  | .75  | 27.14                             |                |
|        | 18                 | M 26 x 1,5            | 29   | 46   | 12  | 7,5  | 24   | 19,62                             | FI-FK-18L-HR   |
|        | .71                |                       | 1.14 | 1.81 | .47 | .30  | .94  | 43.16                             |                |
|        | 22                 | M 30 x 2              | 32   | 48   | 14  | 7,5  | 27   | 25,11                             | FI-FK-22L-HR   |
|        | .87                |                       | 1.26 | 1.89 | .55 | .30  | 1.06 | 55.23                             |                |
|        | 28                 | M 36 x 2              | 38   | 48   | 14  | 7,5  | 32   | 35,07                             | FI-FK-28L-HR   |
|        | 1.10               |                       | 1.50 | 1.89 | .55 | .30  | 1.26 | 77.15                             |                |
| S      | 35                 | M 45 x 2              | 48   | 60   | 16  | 10,5 | 41   | 69,87                             | FI-FK-35L-HR   |
|        | 1.38               |                       | 1.89 | 2.36 | .63 | .41  | 1.61 | 153.71                            |                |
|        | 42                 | M 52 x 2              | 54   | 60   | 16  | 11   | 46   | 87,41                             | FI-FK-42L-HR   |
|        | 1.65               |                       | 2.13 | 2.36 | .63 | .43  | 1.81 | 192.31                            |                |
|        | 6                  | M 14 x 1,5            | 15   | 45   | 12  | 7    | 12   | 5,34                              | FI-FK-06S-HR   |
|        | .24                |                       | .59  | 1.77 | .47 | .28  | .47  | 11.75                             |                |
|        | 8                  | M 16 x 1,5            | 17   | 45   | 12  | 7    | 14   | 6,92                              | FI-FK-08S-HR   |
|        | .31                |                       | .67  | 1.77 | .47 | .28  | .55  | 15.23                             |                |
|        | 10                 | M 18 x 1,5            | 20   | 45   | 12  | 7,5  | 17   | 9,44                              | FI-FK-10S-HR   |
|        | .39                |                       | .79  | 1.77 | .47 | .30  | .67  | 20.78                             |                |
|        | 12                 | M 20 x 1,5            | 22   | 45   | 12  | 7,5  | 17   | 10,87                             | FI-FK-12S-HR   |
|        | .47                |                       | .87  | 1.77 | .47 | .30  | .67  | 23.92                             |                |
|        | 14                 | M 22 x 1,5            | 24   | 47   | 14  | 8    | 19   | 13,59                             | FI-FK-14S-HR   |
|        | .55                |                       | .94  | 1.85 | .55 | .31  | .75  | 29.90                             |                |
|        | 16                 | M 24 x 1,5            | 27   | 48   | 14  | 8,5  | 22   | 17,49                             | FI-FK-16S-HR   |
|        | .63                |                       | 1.06 | 1.89 | .55 | .33  | .87  | 38.48                             |                |
|        | 20                 | M 30 x 2              | 32   | 50   | 16  | 10,5 | 27   | 25,83                             | FI-FK-20S-HR   |
|        | .79                |                       | 1.26 | 1.97 | .63 | .41  | 1.06 | 56.82                             |                |
|        | 25                 | M 36 x 2              | 38   | 62   | 18  | 12   | 32   | 46,15                             | FI-FK-25S-HR   |
|        | .98                |                       | 1.50 | 2.44 | .71 | .47  | 1.26 | 101.54                            |                |
|        | 30                 | M 42 x 2              | 44   | 64   | 20  | 13,5 | 36   | 62,34                             | FI-FK-30S-HR   |
|        | 1.18               |                       | 1.73 | 2.52 | .79 | .53  | 1.42 | 137.15                            |                |
|        | 38                 | M 52 x 2              | 54   | 66   | 22  | 16   | 46   | 95,92                             | FI-FK-38S-HR   |
|        | 1.50               |                       | 2.13 | 2.60 | .87 | .63  | 1.81 | 211.03                            |                |

Materials / surface finishings: **HR** Steel, uncoated, hardened

### Accessories

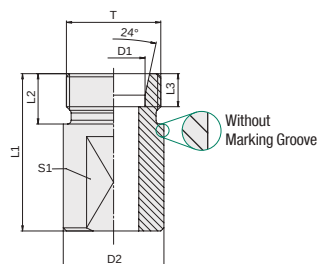


Cone Gauges

Page 277



## Pre-Assembly Stud for the Manual Cutting Ring Assembly Type FI-VK • Series LL / L / S



| Series | Tube OD<br>(mm/in) | Dimensions<br>(mm/in) |      |      |     |      |      | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes |
|--------|--------------------|-----------------------|------|------|-----|------|------|-----------------------------------|----------------|
|        | D1                 | Thread T              | D2   | L1   | L2  | L3   | S1   |                                   |                |
| LL     | 4                  | M 8 x 1               | 14   | 25   | 8   | 4,3  | 11   | 2,11                              | FI-VK-04LL-HR  |
|        | .16                |                       | .55  | .98  | .31 | .17  | .43  | 4,64                              |                |
|        | 6                  | M 10 x 1              | 14   | 25   | 8   | 5,8  | 11   | 2,18                              | FI-VK-06LL-HR  |
|        | .24                |                       | .55  | .98  | .31 | .23  | .43  | 4,79                              |                |
|        | 8                  | M 12 x 1              | 14   | 26   | 9   | 5,8  | 11   | 2,36                              | FI-VK-08LL-HR  |
|        | .31                |                       | .55  | 1.02 | .35 | .23  | .43  | 5,20                              |                |
| L      | 6                  | M 12 x 1,5            | 14   | 28   | 10  | 7,3  | 11   | 2,57                              | FI-VK-06L-HR   |
|        | .24                |                       | .55  | 1.10 | .39 | .29  | .43  | 5,66                              |                |
|        | 8                  | M 14 x 1,5            | 15   | 28   | 10  | 7,3  | 12   | 3,05                              | FI-VK-08L-HR   |
|        | .31                |                       | .59  | 1.10 | .39 | .29  | .47  | 6,71                              |                |
|        | 10                 | M 16 x 1,5            | 17   | 29   | 11  | 7,3  | 14   | 4,07                              | FI-VK-10L-HR   |
|        | .39                |                       | .67  | 1.14 | .43 | .29  | .55  | 8,96                              |                |
|        | 12                 | M 18 x 1,5            | 20   | 29   | 11  | 7,3  | 17   | 5,53                              | FI-VK-12L-HR   |
|        | .47                |                       | .79  | 1.14 | .43 | .29  | .67  | 12,16                             |                |
|        | 15                 | M 22 x 1,5            | 23   | 30   | 12  | 7,3  | 19   | 7,75                              | FI-VK-15L-HR   |
|        | .59                |                       | .91  | 1.18 | .47 | .29  | .75  | 17,04                             |                |
|        | 18                 | M 26 x 1,5            | 29   | 31   | 12  | 7,8  | 24   | 12,31                             | FI-VK-18L-HR   |
|        | .71                |                       | 1.14 | 1.22 | .47 | .31  | .94  | 27,08                             |                |
|        | 22                 | M 30 x 2              | 32   | 33   | 14  | 7,8  | 27   | 16,08                             | FI-VK-22L-HR   |
|        | .87                |                       | 1.26 | 1.30 | .55 | .31  | 1.06 | 35,38                             |                |
|        | 28                 | M 36 x 2              | 38   | 33   | 14  | 7,8  | 32   | 22,34                             | FI-VK-28L-HR   |
|        | 1.10               |                       | 1.50 | 1.30 | .55 | .31  | 1.26 | 49,15                             |                |
| S      | 35                 | M 45 x 2              | 48   | 45   | 16  | 10,8 | 41   | 49,40                             | FI-VK-35L-HR   |
|        | 1.38               |                       | 1.89 | 1.77 | .63 | .43  | 1.61 | 108,67                            |                |
|        | 42                 | M 52 x 2              | 54   | 45   | 16  | 11,3 | 46   | 61,50                             | FI-VK-42L-HR   |
|        | 1.65               |                       | 2.13 | 1.77 | .63 | .44  | 1.81 | 135,31                            |                |
|        | 6                  | M 14 x 1,5            | 15   | 30   | 12  | 7,3  | 12   | 3,43                              | FI-VK-06S-HR   |
|        | .24                |                       | .59  | 1.18 | .47 | .29  | .47  | 7,55                              |                |
|        | 8                  | M 16 x 1,5            | 17   | 30   | 12  | 7,3  | 14   | 4,43                              | FI-VK-08S-HR   |
|        | .31                |                       | .67  | 1.18 | .47 | .29  | .55  | 9,75                              |                |
|        | 10                 | M 18 x 1,5            | 20   | 30   | 12  | 7,8  | 17   | 5,92                              | FI-VK-10S-HR   |
|        | .39                |                       | .79  | 1.18 | .47 | .31  | .67  | 13,03                             |                |
|        | 12                 | M 20 x 1,5            | 22   | 30   | 12  | 7,8  | 17   | 6,87                              | FI-VK-12S-HR   |
|        | .47                |                       | .87  | 1.18 | .47 | .31  | .67  | 15,11                             |                |
|        | 14                 | M 22 x 1,5            | 24   | 32   | 14  | 8,3  | 19   | 8,74                              | FI-VK-14S-HR   |
|        | .55                |                       | .94  | 1.26 | .55 | .33  | .75  | 19,23                             |                |
|        | 16                 | M 24 x 1,5            | 27   | 33   | 14  | 8,8  | 22   | 11,23                             | FI-VK-16S-HR   |
|        | .63                |                       | 1.06 | 1.30 | .55 | .35  | .87  | 24,70                             |                |
|        | 20                 | M 30 x 2              | 32   | 35   | 16  | 10,8 | 27   | 16,83                             | FI-VK-20S-HR   |
|        | .79                |                       | 1.26 | 1.38 | .63 | .43  | 1.06 | 37,02                             |                |
|        | 25                 | M 36 x 2              | 38   | 47   | 18  | 12,3 | 32   | 33,47                             | FI-VK-25S-HR   |
|        | .98                |                       | 1.50 | 1.85 | .71 | .48  | 1.26 | 73,63                             |                |
|        | 30                 | M 42 x 2              | 44   | 49   | 20  | 13,8 | 36   | 45,62                             | FI-VK-30S-HR   |
|        | 1.18               |                       | 1.73 | 1.93 | .79 | .54  | 1.42 | 100,37                            |                |
|        | 38                 | M 52 x 2              | 54   | 51   | 22  | 16,3 | 46   | 70,08                             | FI-VK-38S-HR   |
|        | 1.50               |                       | 2.13 | 2.01 | .87 | .64  | 1.81 | 154,17                            |                |

Materials / surface finishings: **HR** Steel, uncoated, hardened



## STAUFF Press Cutting Ring Final Assembly Machine Type SPR-PRC-POC-A-A



### Product Description

The STAUFF Press Assembly Machine SPR-PRC-POC-A-A allows the pressure/position-controlled final assembly of cutting rings from the Extra-Light Series (LL), the Light Series (L) and the Heavy Series (S) according to ISO 8434-1 / DIN 2353 on tube ends with outer diameters between 4 mm and 42 mm.

The machine is designed as a robust table-top device for continuous operation in the workshop. It is used in connection with hardened and wear-resistant assembly studs FI-FMK and support plates FI-GP which are specially designed for the machine-assisted assembly.

The combined pressure/position-control of the device allows wear on the assembly tools to be detected in time before it can have a negative influence on the assembly result. Maximum service life of the tools is achieved through careful handling of the components and practical operation of the assembly machine. Other factors are proper storage (protected against contamination and corrosion), regular cleaning and lubrication (with suitable lubricants) and thorough preparation of the tube ends before assembly (cutting, deburring and cleaning).

Short times for tool changes, setup and assembly make it possible to carry out series assembly of cutting rings as well as assembly of small and medium quantities with a high level of economic efficiency, reproducibility and process reliability. Among other things, this is achieved with the RFID transponders – which are integrated into the support plates for automatic tool size identification as a standard – and with the tool contact switch: this allows assembly processes to be automatically started and completed by simply pushing the tube end into the assembly stud without having to press any buttons. The assembly area is secured against interference by a light grid to comply with current accident prevention regulations.

With machine-assisted **final assembly**, the cutting ring has already cut 100% into the tube and the fitter only has to tighten the union nut by 30° (corresponds to 1/12 turns) from the fix point. Please pay attention to the corresponding assembly instruction.

Final assembly (100%) minimises the risk for errors (insufficient or excessive manual tightening) and the resulting leak potentials which can often lead to time consuming and expensive machine downtimes and environmental impact. Due to the time benefits during final tightening, final assembly by machine also generates clear saving potentials compared to manual direct assembly as well as to machine-assisted pre-assembly.

In case of incorrect or incomplete assembly where pressure and position parameters significantly deviate from the values stored in the machine, it automatically stops the assembly process and displays a corresponding warning message on the operating panel.



Operating elements of the assembly machine



Noise-reducing tool tray with durable rubber mat



Electrical connection plug and Ethernet port (RJ45)



Lateral handle bars and rubber machine feet with suitable clearance height

**Machine-Assisted Final Assembly (100%)**  
and finish the assembly by manually tightening the union nut by 30° (equivalent to 1/12 a turn)

**Machine-Assisted Pre-Assembly (50%)**  
and finish the assembly by manually tightening the union nut by 180° (equivalent to 1/2 a turn)



Comparison of the total times required for the assembly and installation of cutting ring connections (medium size)





## STAUFF Press Cutting Ring Final Assembly Machine Type SPR-PRC-POC-A-A

### Characteristics

#### Performance

- final assembly (100 %)
- Short times for tool changes, setup and assembly
- Tool size detection via RFID transponders in the support plates
- Automatic assembly start through integrated tool contact switch
- Tool wear detection through combined pressure/position-control
- Internal memory for up to 9 assembly programs which can be selected on the operating panel: predefined are tube materials steel E235 and E355 as well as stainless steel 316; parameters for other materials (copper, CuNiFe, Tungum, polyamide etc.) can be added by the manufacturer if required
- Counters for lot/batch sizes and total quantities (separated by tool size)
- Documented process control through programmable logic control (PLC)
- Predefined menu languages: English, German, French and Italian
- Manual pressure adjustment possible

#### Design

- ① Robust and ergonomically designed machine housing
- ② Optimised assembly area, which allows processing of tubes with low bending radii (to at least 31 mm / 1.22 in distance from the tube axis to the interfering edge of the machine housing) or complex geometries
- ③ Noise-reducing tool tray with durable rubber mat
- ④ Lateral handle bars as attachment points for transport (e.g. with lifting belts)
- ⑤ Secure positioning thanks to flexible rubber machine feet
- ⑥ Type plate, with technical data, serial number, year of manufacture, etc.

### Technical Data

#### Area of Application

- Function: final assembly (100%) of cutting rings on metric tube ends
- Operating principle: Assembly with combined pressure/position-control
- Series and diameters: Extra-Light Series (LL): 4, 6, 8, 10, 12 mm  
Light Series (L): 6, 8, 10, 12, 15, 18, 22, 28, 35, 42 mm  
Heavy Series (S): 6, 8, 10, 12, 14, 16, 20, 25, 30, 38 mm

#### Dimensions / Weight

- Dimensions (W x D x H): 780 mm x 650 mm x 305 mm  
30.70 in x 25.29 in x 12.00 in  
with lateral handle bars (detachable)
- Distance from the tube axis to the interfering edge of the machine housing: 80 mm / 3.15 in
- Clearance height: 65 mm / 2.56 in (height of the machine feet)  
enables simple and safe transport  
using a forklift or pallet jack
- Weight: 95 kg / 210 lbs (incl. operating fluid, excl. assembly tools)

#### Materials

- Machine frame: Aluminium
- Machine housing: Steel, painted
- Tool tray: NBR (Perbunan®)
- Machine feet: Natural rubber
- Assembly studs: Steel, PVD coated
- Support plates: Steel, browned

#### Operating Elements

- ⑦ Operating panel for display and selection of all relevant settings and assembly parameters
- ⑧ Button for definite confirmation of entries made on the operating panel
- ⑨ Status light to indicate readiness for operation and running assembly processes

#### Safety Devices

- ⑩ Main power switch  
(can be secured against unauthorised actuation when required)
- ⑪ Separate emergency stop button to immediately stop all machine movements
- ⑫ Light grid to protect users when reaching into the assembly area

#### Connections (at the back of the machine)

- ⑬ Electrical connection according to IEC 60309 CEE 16A  
(cable length: 4 m / 13.12 ft) and Ethernet connection (RJ45)  
for maintenance and data input by the manufacturer

#### Assembly Tools

- ⑭ Wear-resistant assembly stud FI-MFK
- ⑮ Support plate FI-GP with RFID transponder

#### Motor Configuration

- Power supply: 400 V AC @ 50 Hz - 3 phases  
460 V AC @ 60 Hz - 3 phases
- Current consumption: 2,7 A
- Connected load: 0,9 kW
- Electrical connection: Phase reversing plug according to IEC 60309 CEE 16A
- Cable length: 4 m / 13.12 ft

Alternative motor configurations and plug types are available on request.  
Please contact STAUFF for details.

#### Hydraulic System

- Operating fluid: Hydraulic oil Shell Tellus S2 MA 46 or equivalent  
(filled and ready for operation when delivered)
- Fluid volume: 4 litres / 1.06 US Gallon
- Max working pressure: 450 bar / 6527 PSI

#### Operating Conditions

- Storage temperature: -10°C ... +70°C / +14°F ... +158°F
- Ambient temperature: +15°C ... +35°C / +59°F ... +95°F
- Ambient conditions: Dry, no condensing humidity,  
operation in horizontal position only
- Noise emission: less than 66 dB(A) as per EN ISO 11202  
at full-load operation with maximum tube dimensions



#### STAUFF Maintenance Contracts

Please contact STAUFF for a maintenance contract, that provides optimum service for your STAUFF assembly machine.



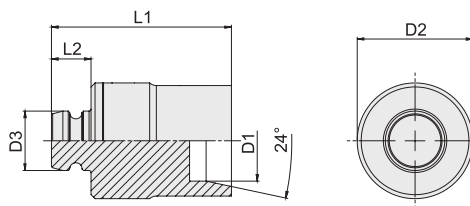
#### STAUFF Machine Rental

Please contact STAUFF for a rental machine and further details of what this service can offer.



## Cutting Ring Assembly Stud for Machine-Assisted Assembly

### Type FI-MFK ▪ Series LL / L / S



| Series | Tube OD |      | Dimensions |      |     | Weight<br>( <sup>kg</sup> /lbs) ca.<br>per 100 | Ordering Codes   |
|--------|---------|------|------------|------|-----|------------------------------------------------|------------------|
|        | D1      | D2   | D3         | L1   | L2  |                                                |                  |
| LL     | 4       | 30   | 14,8       | 50   | 10  | 12,98                                          | FI-MFK-04LL-W100 |
|        | .16     | 1.18 | .58        | 1.97 | .39 | 28.55                                          | FI-MFK-06LL-W100 |
|        | 6       | 30   | 14,8       | 50   | 10  | 13,28                                          | FI-MFK-08LL-W100 |
|        | .24     | 1.18 | .58        | 1.97 | .39 | 29.22                                          | FI-MFK-10LL-W100 |
|        | .31     | 1.18 | .58        | 1.97 | .39 | 30.10                                          | FI-MFK-12LL-W100 |
| L      | 6       | 30   | 14,8       | 50   | 10  | 13,57                                          | FI-MFK-06L-W100  |
|        | .24     | 1.18 | .58        | 1.97 | .39 | 29.85                                          | FI-MFK-08L-W100  |
|        | 8       | 30   | 14,8       | 50   | 10  | 14,01                                          | FI-MFK-10L-W100  |
|        | .31     | 1.18 | .58        | 1.97 | .39 | 30.82                                          | FI-MFK-12L-W100  |
|        | 10      | 30   | 14,8       | 50   | 10  | 14,63                                          | FI-MFK-14L-W100  |
|        | .39     | 1.18 | .58        | 1.97 | .39 | 32.18                                          | FI-MFK-16L-W100  |
|        | 12      | 30   | 14,8       | 50   | 10  | 16,09                                          | FI-MFK-18L-W100  |
|        | .47     | 1.18 | .58        | 1.97 | .39 | 35.39                                          | FI-MFK-20L-W100  |
|        | 15      | 30   | 14,8       | 50   | 10  | 16,63                                          | FI-MFK-22L-W100  |
|        | .59     | 1.18 | .58        | 1.97 | .39 | 36.58                                          | FI-MFK-24L-W100  |
|        | 18      | 30   | 14,8       | 50   | 10  | 18,23                                          | FI-MFK-26L-W100  |
|        | .71     | 1.18 | .58        | 1.97 | .39 | 40.10                                          | FI-MFK-28L-W100  |
|        | 22      | 30   | 14,8       | 49   | 10  | 19,13                                          | FI-MFK-30L-W100  |
|        | .87     | 1.18 | .58        | 1.93 | .39 | 42.08                                          | FI-MFK-32L-W100  |
|        | 28      | 33,8 | 14,8       | 48   | 10  | 24,43                                          | FI-MFK-34L-W100  |
|        | 1.10    | 1.33 | .58        | 1.89 | .39 | 53.74                                          | FI-MFK-36L-W100  |
|        | 35      | 42,8 | 14,8       | 45   | 10  | 32,72                                          | FI-MFK-38L-W100  |
|        | 1.38    | 1.69 | .58        | 1.77 | .39 | 71.99                                          | FI-MFK-40L-W100  |
| S      | 42      | 49,8 | 14,8       | 44   | 10  | 41,17                                          | FI-MFK-42L-W100  |
|        | 1.65    | 1.96 | .58        | 1.73 | .39 | 90.58                                          | FI-MFK-44L-W100  |
|        | 6       | 30   | 14,8       | 50   | 10  | 14,14                                          | FI-MFK-06S-W100  |
|        | .24     | 1.18 | .58        | 1.97 | .39 | 31.11                                          | FI-MFK-08S-W100  |
|        | 8       | 30   | 14,8       | 50   | 10  | 14,68                                          | FI-MFK-10S-W100  |
|        | .31     | 1.18 | .58        | 1.97 | .39 | 32.29                                          | FI-MFK-12S-W100  |
|        | 10      | 30   | 14,8       | 50   | 10  | 15,23                                          | FI-MFK-14S-W100  |
|        | .39     | 1.18 | .58        | 1.97 | .39 | 33.51                                          | FI-MFK-16S-W100  |
|        | 12      | 30   | 14,8       | 50   | 10  | 15,89                                          | FI-MFK-18S-W100  |
|        | .47     | 1.18 | .58        | 1.97 | .39 | 34.95                                          | FI-MFK-20S-W100  |
|        | 14      | 30   | 14,8       | 49   | 10  | 15,98                                          | FI-MFK-22S-W100  |
|        | .55     | 1.18 | .58        | 1.93 | .39 | 35.15                                          | FI-MFK-24S-W100  |
|        | 16      | 30   | 14,8       | 49   | 10  | 16,65                                          | FI-MFK-26S-W100  |
|        | .63     | 1.18 | .58        | 1.93 | .39 | 36.64                                          | FI-MFK-28S-W100  |
|        | 20      | 30   | 14,8       | 45   | 10  | 16,43                                          | FI-MFK-30S-W100  |
|        | .79     | 1.18 | .58        | 1.77 | .39 | 36.15                                          | FI-MFK-32S-W100  |
|        | 25      | 33,8 | 14,8       | 42   | 10  | 19,02                                          | FI-MFK-34S-W100  |
|        | .98     | 1.33 | .58        | 1.65 | .39 | 41.84                                          | FI-MFK-36S-W100  |
|        | 30      | 39,8 | 14,8       | 40   | 10  | 22,88                                          | FI-MFK-38S-W100  |
|        | 1.18    | 1.57 | .58        | 1.57 | .39 | 50.34                                          | FI-MFK-40S-W100  |
|        | 38      | 49,8 | 14,8       | 36   | 10  | 26,41                                          | FI-MFK-42S-W100  |
|        | 1.50    | 1.96 | .58        | 1.42 | .39 | 58.10                                          | FI-MFK-44S-W100  |

Materials / surface finishings: W100 Steel, PVD coated

### Accessories

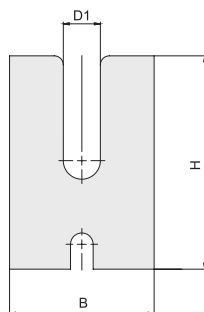
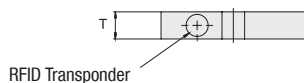


Cone Gauges

Page 277



## Support Plate for Machine-Assisted Assembly Type FI-GP ▪ Series LL / L / S



| Series | Tube OD       | Dimensions   |      |     | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes  |
|--------|---------------|--------------|------|-----|-----------------------------------|-----------------|
|        | (mm/in)<br>D1 | (mm/in)<br>B | H    | T   |                                   |                 |
| LL     | 4             | 80           | 118  | 15  | 104,43                            | FI-GP-04LL-W101 |
|        | .16           | 3.15         | 4.65 | .59 | 229.75                            |                 |
|        | 6             | 80           | 118  | 15  | 102,97                            | FI-GP-06LL-W101 |
|        | .24           | 3.15         | 4.65 | .59 | 226.53                            |                 |
|        | 8             | 80           | 118  | 15  | 101,46                            | FI-GP-08LL-W101 |
|        | .31           | 3.15         | 4.65 | .59 | 223.22                            |                 |
| L      | 6             | 80           | 118  | 15  | 102,97                            | FI-GP-06L-W101  |
|        | .24           | 3.15         | 4.65 | .59 | 226.53                            |                 |
|        | 8             | 80           | 118  | 15  | 101,46                            | FI-GP-08L-W101  |
|        | .31           | 3.15         | 4.65 | .59 | 223.22                            |                 |
|        | 10            | 80           | 118  | 15  | 99,93                             | FI-GP-10L-W101  |
|        | .39           | 3.15         | 4.65 | .59 | 219.84                            |                 |
|        | 12            | 80           | 118  | 15  | 98,35                             | FI-GP-12L-W101  |
|        | .47           | 3.15         | 4.65 | .59 | 216.37                            |                 |
|        | 15            | 80           | 118  | 15  | 95,91                             | FI-GP-15L-W101  |
|        | .59           | 3.15         | 4.65 | .59 | 211.01                            |                 |
|        | 18            | 80           | 118  | 15  | 93,40                             | FI-GP-18L-W101  |
|        | .71           | 3.15         | 4.65 | .59 | 205.47                            |                 |
|        | 22            | 80           | 118  | 15  | 89,91                             | FI-GP-22L-W101  |
|        | .87           | 3.15         | 4.65 | .59 | 197.80                            |                 |
|        | 28            | 80           | 118  | 15  | 84,41                             | FI-GP-28L-W101  |
|        | 1.10          | 3.15         | 4.65 | .59 | 185.69                            |                 |
|        | 35            | 80           | 118  | 15  | 77,56                             | FI-GP-35L-W101  |
|        | 1.38          | 3.15         | 4.65 | .59 | 170.64                            |                 |
|        | 42            | 80           | 118  | 15  | 70,27                             | FI-GP-42L-W101  |
|        | 1.65          | 3.15         | 4.65 | .59 | 154.59                            |                 |
| S      | 6             | 80           | 118  | 15  | 102,97                            | FI-GP-06S-W101  |
|        | .24           | 3.15         | 4.65 | .59 | 226.53                            |                 |
|        | 8             | 80           | 118  | 15  | 101,46                            | FI-GP-08S-W101  |
|        | .31           | 3.15         | 4.65 | .59 | 223.22                            |                 |
|        | 10            | 80           | 118  | 15  | 99,93                             | FI-GP-10S-W101  |
|        | .39           | 3.15         | 4.65 | .59 | 219.84                            |                 |
|        | 12            | 80           | 118  | 15  | 98,35                             | FI-GP-12S-W101  |
|        | .47           | 3.15         | 4.65 | .59 | 216.37                            |                 |
|        | 14            | 80           | 118  | 15  | 96,73                             | FI-GP-14S-W101  |
|        | .55           | 3.15         | 4.65 | .59 | 212.81                            |                 |
|        | 16            | 80           | 118  | 15  | 95,08                             | FI-GP-16S-W101  |
|        | .63           | 3.15         | 4.65 | .59 | 209.18                            |                 |
|        | 20            | 80           | 118  | 15  | 91,67                             | FI-GP-20S-W101  |
|        | .79           | 3.15         | 4.65 | .59 | 201.68                            |                 |
|        | 25            | 80           | 118  | 15  | 87,20                             | FI-GP-25S-W101  |
|        | .98           | 3.15         | 4.65 | .59 | 191.84                            |                 |
|        | 30            | 80           | 118  | 15  | 82,50                             | FI-GP-30S-W101  |
|        | 1.18          | 3.15         | 4.65 | .59 | 181.49                            |                 |
|        | 38            | 80           | 118  | 15  | 74,49                             | FI-GP-38S-W101  |
|        | 1.50          | 3.15         | 4.65 | .59 | 163.88                            |                 |

Materials / surface finishings: **W101** Steel, browned



## STAUFF Press

### Optional tool holder for tubes with small bending radii

#### Type SPR-PRC-POC-RTH



The assembly head differs from the standard model by the holder for the cutting ring assembly socket being moved upwards, shortening the distance from the tube axis in the assembly socket to the upper edge of the machine from the standard 77 mm to 31 mm.

This means that cutting rings can be fitted with ease to tubes with small axis distances.

If tubes with complex geometries are to be handled (e.g. with short tube end and 90°tail), the safety light barrier, which secures the assembly area, can be disabled if required.

The optional assembly head enables tubes with a diameter of 6 to 18 mm in the Light Series and 6 mm to 16 mm in the Heavy Series to be handled.

Existing assembly tools can also continue to be used. The user simply needs to import new parameter sets into the machine.

## STAUFF Press

### Optional Cloud connection allows preventive maintenance via remote access and facilitates the documentation of assembly processes

#### Type SPR-PRC-POC-A-A-IOT



Cutting ring assembly machines type SPR-PRC-POC can be equipped at the factory with a built-in module for direct connection to a cloud operated by STAUFF. This solution is realised with an integrated SIM card which can be used in all industrial regions of the world.

This enables software updates, for example, without having to connect the machine to a local network on site. Parameter sets, which have been determined by STAUFF for non-standard tube materials can also be transferred quickly and directly to the machine in this way.

Customers are given access to the cloud via a protected online portal, where they can get detailed information on the assembly processes performed, among other things.

The required data security is guaranteed by encryption in both directions.

## P

## Assembly Tool Magazine

### Type SPR-TM



- Provides safe and convenient storage for up to 10 assembly studs (type FI-MFK) as well as up to 10 support plates (types FI-GP and FI-GP-PRC) for the machine-assisted cutting ring assembly
- Assembly studs and support plates are not included in the scope of delivery for this item and have to be ordered separately

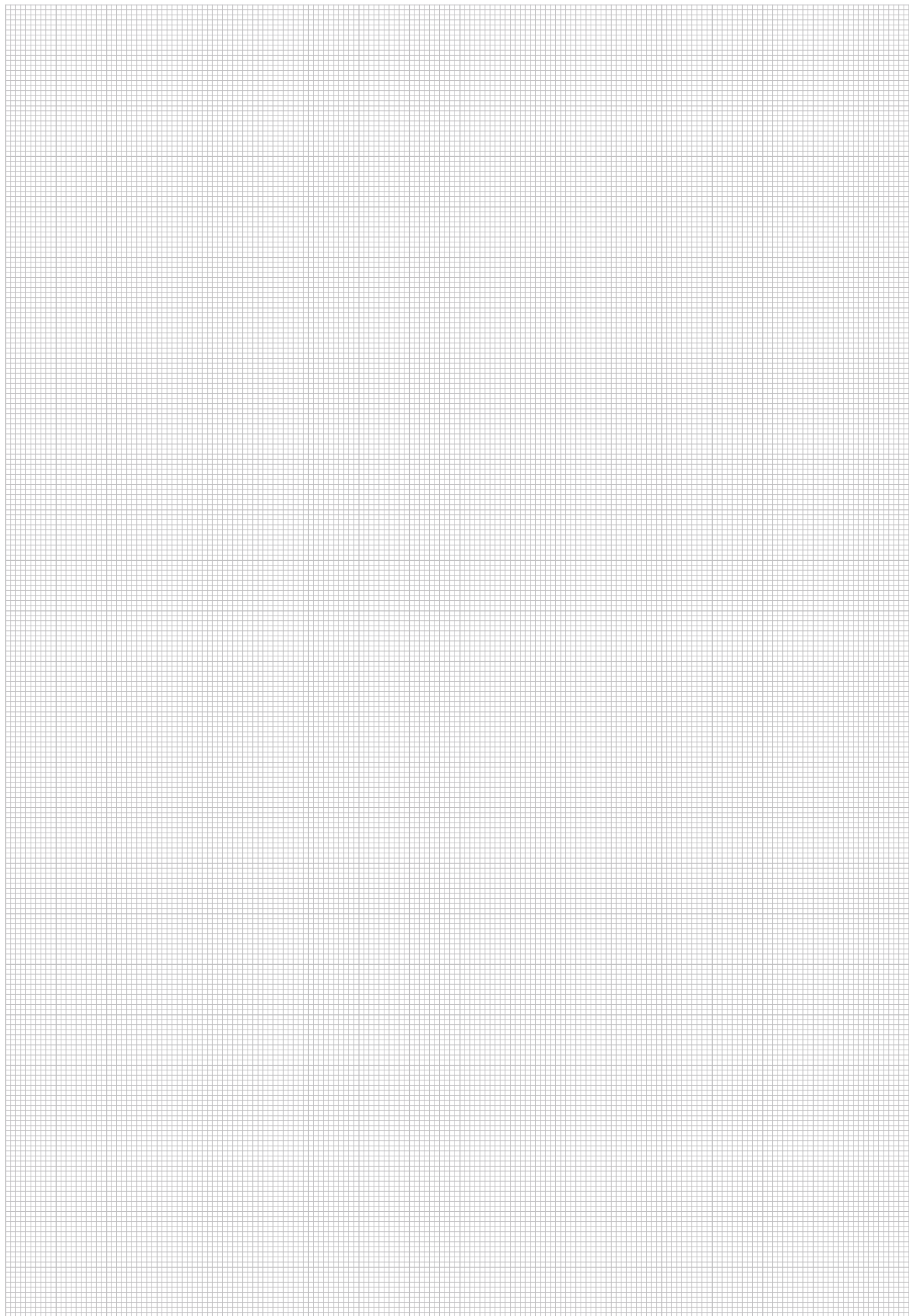
## External Foot Control Switch

### Type SF0/PRC-POC-FS



- Enables the operator to trigger assembly processes from a larger distance to the machine (cable length: 5 m / 16.40 ft)







## STAUFF Press

### Combined Cutting Ring Assembly and 37° Tube Flaring Machine

#### with Automatic or Manual Pressure Setting and Control ▪ Type SPR-PRC-MA-D-A

##### Product Description

The electro-hydraulically operated STAUFF Press Assembly Machine SPR-PRC-MA-D-A allows the assembly of cutting rings in the Light Series (L) as well as in the Heavy Series (S) according to ISO 8434-1 / DIN 2353 on metric tube ends with outer diameters from 4 mm to 42 mm.

Exchangeable heads allows the device to be adapted for 37° flaring of metric and imperial tube ends with outer diameters from 4 mm to 42 mm and from 1/4 in to 1 1/2 in respectively according to DIN 3949 or SAE J514 / ISO 8434-2.

Short times for tool changes, setup and assembly (even when changing the assembly type from cutting ring assembly to 37° tube flaring) make it possible to carry out series production as well as the assembly of small and medium quantities with a high level of economic efficiency, reproducibility and process reliability with considerable reduction of times and cost of assembly of fittings.

The adjustable return stroke of the cylinder helps the operator to further optimise the total cycle times.

The machine is designed as a robust table-top device for continuous operation in the workshop. It is used in connection with hardened and wear-resistant assembly tools which are specially designed for the machine-assisted assembly.



Tooling head for cutting ring assembly based on pre-defined settings / automatic tool size detection



Tooling head for cutting ring assembly based on settings manually defined by the operator



Tooling head for 37° tube flaring based on settings manually defined by the operator



Smart programmable control panel with push/turn button and back-lit parameter display



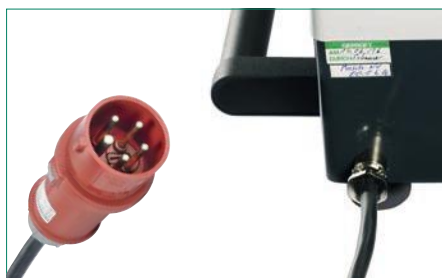
Noise-reducing tool tray with durable rubber mat



Robust rubber feet providing secure positioning and dampening during operation



USB connection for maintenance and data input by the manufacturer



Electrical connection with a phase reversing plug according to IEC 60309 CEE 16A



Connections for the tool head as well as for the external foot control switch





## STAUFF Press

### Combined Cutting Ring Assembly and 37° Tube Flaring Machine with Automatic or Manual Pressure Setting and Control ▪ Type SPR-PRC-MA-D-A

#### Characteristics

##### Performance

- Pressure-controlled assembly of cutting rings on metric tube ends as well as 37° tube flaring of metric/imperial tube ends due to exchangeable tool heads
- Cutting ring assembly with Tooling Head SPR-PRC-TH-C-MA based on pre-defined pressure settings (with automatic tool size detection) or with Tooling Head SPR-PRC-TH-C-M based on pressure settings as manually defined by the operator
- Short times for tool and head changes, setup and assembly (even when changing the assembly type from cutting ring assembly to 37° tube flaring)
- Adjustable return stroke of the cylinder in order to further optimise the total cycle times
- Internal memory for up to 8 assembly programs which can be selected on the operating panel: predefined are tube materials steel E235 and E355 as well as stainless steel 316; parameters for other materials (copper, CuNiFe, Tungum, polyamide etc.) can be added by the manufacturer if required
- Counters for lot/batch sizes and total quantities
- Operator-friendly and easy to maintain and service

##### Design

- ① Robust and compact table-top device allowing for maximum mobility and flexibility
- ② Optimised assembly area with approx. 65 mm / 2.56 in distance from the tube axis to the interfering edge of the machine housing, which allows processing of tubes with low bending radii or complex geometries
- ③ Noise-reducing tool tray with durable rubber mat
- ④ Lateral handle bars as attachment points for transport (e.g. with lifting belts)
- ⑤ Robust rubber feet providing secure positioning and dampening during operation
- ⑥ Type plate, with technical data, serial number, year of manufacture, etc.

#### Technical Data

##### Area of Application

- Function: Pressure-controlled assembly of cutting rings  
Light (L): 6, 8, 10, 12, 15, 18, 22, 28, 35, 42 mm  
Heavy (S): 6, 8, 10, 12, 14, 16, 20, 25, 30, 38 mm
- Pressure-controlled 37° flaring of metric tube ends (according to DIN 3949 bzw. SAE J 514 / ISO 8434-2):  
Light (L): from 6 x 1 mm to 42 x 4 mm  
Heavy (S): from 6 x 1 mm to 38 x 5 mm
- Pressure-controlled 37° flaring of imperial tube ends (according to SAE J 514 / ISO 8434-2):  
1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2 inch

##### Dimensions / Weight

- Dimensions (W x D x H): 660 mm x 515 mm x 265 mm  
25.98 in x 20.28 in x 10.43 in  
with lateral handle bars (detachable)
- Distance from the tube axis to the interfering edge of the machine housing: 65 mm / 2.56 in
- Clearance height: 30 mm / 1.18 in (height of the machine feet)
- Weight (basic machine): 66 kg / 145 lbs  
(incl. operating fluid, excl. assembly tools)
- Weight (tooling heads): SPR-PRC-TH-C-A: 6,0 kg / 13 lbs  
SPR-PRC-TH-C-M: 5,5 kg / 12 lbs  
SPR-PRC-TH-F-M: 19,5 kg / 43 lbs

##### Materials

- Machine frame: Steel
- Machine cover: Plastic
- Tool tray: NBR (Perbunan®)
- Machine feet: Natural rubber
- Assembly tools: Steel, uncoated, hardened

##### Operating Elements

- ⑦ Push/turn control button to select all relevant settings and assembly parameters
- ⑧ Smart programmable control panel with back-lit parameter display
- ⑨ Button for definite confirmation of entries made on the operating panel
- ⑩ Illuminated pushbutton to reset the cylinder and to indicate incorrect assemblies

##### Safety Devices

- ⑪ Selector switch to choose the operation mode (can be locked with a key and secured against unauthorised actuation, if required)
- ⑫ Main power switch
- ⑬ Separate emergency stop button to immediately stop all machine movements

##### Connections

- ⑭ Electrical connection according to IEC 60309 CEE 16A (cable length: 4 m / 13.12 ft)
- ⑮ USB connection for maintenance and data input by the manufacturer
- ⑯ Connections for tool heads for cutting ring assembly based on pre-defined pressure settings as well as for the external foot control switch SPR-PRC-FS (available on request)

##### Assembly Tools

- Tooling head SPR-PRC-TH-C-MA for cutting ring assembly based on automatic pressure setting (50% pre-assembly is pre-defined) and with tool size detection via the support plates
- Tooling head SPR-PRC-TH-C-M for cutting ring assembly based on manual settings
- Tooling head SPR-PRC-TH-F-M for 37° tube flaring based on manual settings
- Wear-resistant cutting ring assembly stud FI-MFK
- Support plate FI-GP-...-PRC
- Clamping jaws FI-KB-...-PRC for 37° tube flaring

##### Motor Configuration

- Power supply: 400 V AC @ 50 Hz - 3 phases
- Current consumption: 2,8 A
- Connected load: 1,2 kW
- Electrical connection: Phase reversing plug according to IEC 60309 CEE 16A
- Cable length: 4 m / 13.12 ft

Alternative motor configurations and plug types are available on request. Please contact STAUFF for details.

##### Hydraulic System

- Operating fluid: Hydraulic oil Shell Nuto H 32 or equivalent (filled and ready for operation when delivered)
- Fluid volume: 4 litres / .78 US Gallon
- Max working pressure: 200 bar / 2901 PSI

##### Operating Conditions

- Storage temperature: -10°C ... +70°C / +14°F ... +158°F
- Ambient temperature: +10°C ... +50°C / +50°F ... +122°F
- Ambient conditions: Dry, no condensing humidity, operation in horizontal position only
- Noise emission: less than 60 dB(A) as per EN ISO 11202



##### STAUFF Maintenance Contracts

Please contact STAUFF for a maintenance contract, that provides optimum service for your STAUFF assembly machine.



##### STAUFF Machine Rental

Please contact STAUFF for a rental machine and further details of what this service can offer.



## Tooling Head for Cutting Ring Assembly (based on pre-defined settings)

### Type SPR-PRC-TH-C-MA



- Tooling head SPR-PRC-TH-C-MA for cutting ring pre-assembly based on pre-defined settings and with automatic tool size detection via the support plates
- Requires cutting ring assembly studs FI-MFK and support plates FI-GP-PRC

## Tooling Head for Cutting Ring Assembly (based on manual settings)

### Type SPR-PRC-TH-C-M



- Tooling head SPR-PRC-TH-C-M for cutting ring pre-assembly based on manual settings
- Requires cutting ring assembly studs FI-MFK and support plates FI-GP-PRC

## Tooling Head for 37° Tube Flaring (based on manual settings)

### Type SPR-PRC-TH-F-M



- Tooling head SPR-PRC-TH-F-M for 37° tube flaring based on manual settings
- Requires clamping jaws FI-KB-PRC

P

## Assembly Tool Magazine

### Type SPR-TM



- Provides safe and convenient storage for up to 10 assembly studs (type FI-MFK) as well as up to 10 support plates (types FI-GP and FI-GP-PRC) for the machine-assisted cutting ring assembly
- Assembly studs and support plates are not included in the scope of delivery for this item and have to be ordered separately

## External Foot Control Switch

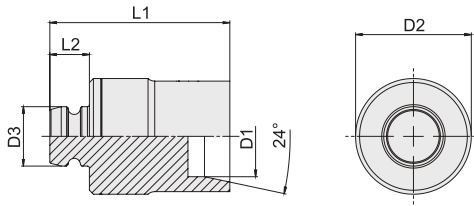
### Type SPR-PRC-FS



- Enables the operator to trigger assembly processes from a larger distance to the machine (cable length: 5 m / 16.40 ft)



## Cutting Ring Assembly Stud for Machine-Assisted Assembly Type FI-MFK • Series LL / L / S



| Series | Tube OD<br>(mm/in) |      | Dimensions<br>(mm/in) |      |     | Weight<br>(kg/lbs) ca.<br>per 100 | Ordering Codes   |
|--------|--------------------|------|-----------------------|------|-----|-----------------------------------|------------------|
|        | D1                 | D2   | D3                    | L1   | L2  |                                   |                  |
| LL     | 4                  | 30   | 14,8                  | 50   | 10  | 12,98                             | FI-MFK-04LL-W100 |
|        | .16                | 1.18 | .58                   | 1.97 | .39 | 28.55                             |                  |
|        | 6                  | 30   | 14,8                  | 50   | 10  | 13,28                             | FI-MFK-06LL-W100 |
|        | .24                | 1.18 | .58                   | 1.97 | .39 | 29.22                             |                  |
|        | 8                  | 30   | 14,8                  | 50   | 10  | 13,68                             | FI-MFK-08LL-W100 |
| L      | .31                | 1.18 | .58                   | 1.97 | .39 | 30.10                             |                  |
|        | 6                  | 30   | 14,8                  | 50   | 10  | 13,57                             | FI-MFK-06L-W100  |
|        | .24                | 1.18 | .58                   | 1.97 | .39 | 29.85                             |                  |
|        | 8                  | 30   | 14,8                  | 50   | 10  | 14,01                             | FI-MFK-08L-W100  |
|        | .31                | 1.18 | .58                   | 1.97 | .39 | 30.82                             |                  |
|        | 10                 | 30   | 14,8                  | 50   | 10  | 14,63                             | FI-MFK-10L-W100  |
|        | .39                | 1.18 | .58                   | 1.97 | .39 | 32.18                             |                  |
|        | 12                 | 30   | 14,8                  | 50   | 10  | 16,09                             | FI-MFK-12L-W100  |
|        | .47                | 1.18 | .58                   | 1.97 | .39 | 35.39                             |                  |
|        | 15                 | 30   | 14,8                  | 50   | 10  | 16,63                             | FI-MFK-15L-W100  |
|        | .59                | 1.18 | .58                   | 1.97 | .39 | 36.58                             |                  |
|        | 18                 | 30   | 14,8                  | 50   | 10  | 18,23                             | FI-MFK-18L-W100  |
|        | .71                | 1.18 | .58                   | 1.97 | .39 | 40.10                             |                  |
|        | 22                 | 30   | 14,8                  | 49   | 10  | 19,13                             | FI-MFK-22L-W100  |
|        | .87                | 1.18 | .58                   | 1.93 | .39 | 42.08                             |                  |
|        | 28                 | 33,8 | 14,8                  | 48   | 10  | 24,43                             | FI-MFK-28L-W100  |
|        | 1.10               | 1.33 | .58                   | 1.89 | .39 | 53.74                             |                  |
|        | 35                 | 42,8 | 14,8                  | 45   | 10  | 32,72                             | FI-MFK-35L-W100  |
|        | 1.38               | 1.69 | .58                   | 1.77 | .39 | 71.99                             |                  |
|        | 42                 | 49,8 | 14,8                  | 44   | 10  | 41,17                             | FI-MFK-42L-W100  |
|        | 1.65               | 1.96 | .58                   | 1.73 | .39 | 90.58                             |                  |
| S      | 6                  | 30   | 14,8                  | 50   | 10  | 14,14                             | FI-MFK-06S-W100  |
|        | .24                | 1.18 | .58                   | 1.97 | .39 | 31.11                             |                  |
|        | 8                  | 30   | 14,8                  | 50   | 10  | 14,68                             | FI-MFK-08S-W100  |
|        | .31                | 1.18 | .58                   | 1.97 | .39 | 32.29                             |                  |
|        | 10                 | 30   | 14,8                  | 50   | 10  | 15,23                             | FI-MFK-10S-W100  |
|        | .39                | 1.18 | .58                   | 1.97 | .39 | 33.51                             |                  |
|        | 12                 | 30   | 14,8                  | 50   | 10  | 15,89                             | FI-MFK-12S-W100  |
|        | .47                | 1.18 | .58                   | 1.97 | .39 | 34.95                             |                  |
|        | 14                 | 30   | 14,8                  | 49   | 10  | 15,98                             | FI-MFK-14S-W100  |
|        | .55                | 1.18 | .58                   | 1.93 | .39 | 35.15                             |                  |
|        | 16                 | 30   | 14,8                  | 49   | 10  | 16,65                             | FI-MFK-16S-W100  |
|        | .63                | 1.18 | .58                   | 1.93 | .39 | 36.64                             |                  |
|        | 20                 | 30   | 14,8                  | 45   | 10  | 16,43                             | FI-MFK-20S-W100  |
|        | .79                | 1.18 | .58                   | 1.77 | .39 | 36.15                             |                  |
|        | 25                 | 33,8 | 14,8                  | 42   | 10  | 19,02                             | FI-MFK-25S-W100  |
|        | .98                | 1.33 | .58                   | 1.65 | .39 | 41.84                             |                  |
|        | 30                 | 39,8 | 14,8                  | 40   | 10  | 22,88                             | FI-MFK-30S-W100  |
|        | 1.18               | 1.57 | .58                   | 1.57 | .39 | 50.34                             |                  |
|        | 38                 | 49,8 | 14,8                  | 36   | 10  | 26,41                             | FI-MFK-38S-W100  |
|        | 1.50               | 1.96 | .58                   | 1.42 | .39 | 58.10                             |                  |

Materials / surface finishings: **W100** Steel, PVD coated

### Accessories



Cone Gauges

Page 277



## Support Plate for Machine-Assisted Cutting Ring Assembly

### Type FI-GP-PRC ▪ Series L / S



| Series | Tube OD<br>( <sup>mm</sup> / <sub>in</sub> ) | Ordering Codes        |
|--------|----------------------------------------------|-----------------------|
| L      | 6                                            | FI-GP-06L/S-PRC-MA-W1 |
|        | .24                                          |                       |
|        | 8                                            | FI-GP-08L/S-PRC-MA-W1 |
|        | .31                                          |                       |
|        | 10                                           | FI-GP-10L/S-PRC-MA-W1 |
|        | .39                                          |                       |
|        | 12                                           | FI-GP-12L/S-PRC-MA-W1 |
|        | .47                                          |                       |
|        | 15                                           | FI-GP-15L-PRC-MA-W1   |
|        | .59                                          |                       |
|        | 18                                           | FI-GP-18L-PRC-MA-W1   |
|        | .71                                          |                       |
|        | 22                                           | FI-GP-22L-PRC-MA-W1   |
|        | .87                                          |                       |
|        | 28                                           | FI-GP-28L-PRC-MA-W1   |
|        | 1.10                                         |                       |
| S      | 35                                           | FI-GP-35L-PRC-MA-W1   |
|        | 1.38                                         |                       |
|        | 42                                           | FI-GP-42L-PRC-MA-W1   |
|        | 1.65                                         |                       |
|        | 6                                            | FI-GP-06S-PRC-MA-W1   |
|        | .24                                          |                       |
|        | 8                                            | FI-GP-08S-PRC-MA-W1   |
|        | .31                                          |                       |
|        | 10                                           | FI-GP-10S-PRC-MA-W1   |
|        | .39                                          |                       |
|        | 12                                           | FI-GP-12S-PRC-MA-W1   |
|        | .47                                          |                       |
|        | 14                                           | FI-GP-14S-PRC-MA-W1   |
|        | .55                                          |                       |
|        | 16                                           | FI-GP-16S-PRC-MA-W1   |
|        | .63                                          |                       |
| P      | 20                                           | FI-GP-20S-PRC-MA-W1   |
|        | .79                                          |                       |
|        | 25                                           | FI-GP-25S-PRC-MA-W1   |
|        | .98                                          |                       |
|        | 30                                           | FI-GP-30S-PRC-MA-W1   |
|        | 1.18                                         |                       |
|        | 38                                           | FI-GP-38S-PRC-MA-W1   |
|        | 1.50                                         |                       |

Materials / surface finishings: **W1** Steel, uncoated, hardened



## Clamping Jaws for 37° Tube Flaring Type FI-KB • Series L / S



### 37° Flaring of Metric Tube Ends

| Series | Tube OD<br>(mm/in) | Ordering Codes        |                         |
|--------|--------------------|-----------------------|-------------------------|
|        |                    | DIN 3949              | SAE J514 / ISO 8434-2   |
| L      | 6                  | FI-KB-06L/S-PRC-MF-W1 | FI-KB-06-PRC-F-W1       |
|        | .24                |                       |                         |
|        | 8                  | FI-KB-08L/S-PRC-MF-W1 | FI-KB-08/5/16-PRC-F-W1  |
|        | .31                |                       |                         |
|        | 10                 | FI-KB-10L/S-PRC-MF-W1 | FI-KB-10-PRC-F-W1       |
|        | .39                |                       |                         |
|        | 12                 | FI-KB-12L/S-PRC-MF-W1 | FI-KB-12-PRC-F-W1       |
|        | .47                |                       |                         |
|        | 15                 | FI-KB-15L-PRC-MF/F-W1 |                         |
|        | .59                |                       |                         |
|        | 18                 | FI-KB-18L-PRC-MF/F-W1 |                         |
|        | .71                |                       |                         |
|        | 22                 | FI-KB-22L-PRC-MF/F-W1 |                         |
|        | .87                |                       |                         |
|        | 28                 | FI-KB-28L-PRC-MF-W1   | FI-KB-28-PRC-F-W1       |
|        | 1.10               |                       |                         |
|        | 35                 | FI-KB-35L-PRC-MF-W1   | FI-KB-35-PRC-F-W1       |
|        | 1.38               |                       |                         |
| S      | 42                 | FI-KB-42L-PRC-MF-W1   | FI-KB-42-PRC-F-W1       |
|        | 1.65               |                       |                         |
|        | 6                  | FI-KB-06L/S-PRC-MF-W1 | FI-KB-06-PRC-F-W1       |
|        | .24                |                       |                         |
|        | 8                  | FI-KB-08L/S-PRC-MF-W1 | FI-KB-08/5/16-PRC-F-W1  |
|        | .31                |                       |                         |
|        | 10                 | FI-KB-10L/S-PRC-MF-W1 | FI-KB-10-PRC-F-W1       |
|        | .39                |                       |                         |
|        | 12                 | FI-KB-12L/S-PRC-MF-W1 | FI-KB-12-PRC-F-W1       |
|        | .47                |                       |                         |
|        | 14                 | FI-KB-14S-PRC-MF/F-W1 |                         |
|        | .55                |                       |                         |
|        | 16                 | FI-KB-16S-PRC-MF-W1   | FI-KB-16-PRC-F-W1       |
|        | .63                |                       |                         |
|        | 20                 | FI-KB-20S-PRC-MF-W1   | FI-KB-20-PRC-F-W1       |
|        | .79                |                       |                         |
|        | 25                 | FI-KB-25S-PRC-MF-W1   | FI-KB-25-PRC-F-W1       |
|        | .98                |                       |                         |
|        | 30                 | FI-KB-30S-PRC-MF/F-W1 |                         |
|        | 1.18               |                       |                         |
|        | 30 x 5             | FI-KB-30SX5-PRC-MF-W1 | FI-KB-38-1-1/2-PRC-F-W1 |
|        | 1.18 x .20         |                       |                         |
|        | 38                 | FI-KB-38S-PRC-MF-W1   |                         |
|        | 1.50               |                       |                         |
|        | 38 x 5             | FI-KB-38SX5-PRC-MF-W1 |                         |
|        | 1.50 x .20         |                       |                         |

Materials / surface finishings: **W1** Steel, uncoated, hardened

### 37° Flaring of Imperial Tube Ends

| Tube OD<br>(mm/in) | Ordering Codes          |
|--------------------|-------------------------|
|                    | SAE J514 / ISO 8434-2   |
| 1/4                | FI-KB-1/4-PRC-F-W1      |
| 5/16               | FI-KB-08/5/16-PRC-F-W1  |
| 3/8                | FI-KB-3/8-PRC-F-W1      |
| 1/2                | FI-KB-1/2-PRC-F-W1      |
| 5/8                | FI-KB-5/8-PRC-F-W1      |
| 3/4                | FI-KB-3/4-PRC-F-W1      |
| 7/8                | FI-KB-7/8-PRC-F-W1      |
| 1                  | FI-KB-1-PRC-F-W1        |
| 1-1/4              | FI-KB-1-1/4-PRC-F-W1    |
| 1-1/2              | FI-KB-38-1-1/2-PRC-F-W1 |





## STAUFF Press

### Portable Cutting Ring Assembly Machine with Manual Pressure Setting (Set) Type SPR-PRC-H-SET

#### Product Description

With the battery-operated STAUFF Press Assembly Machine SPR-PRC-H-M, STAUFF provides an ergonomically designed, light-weight and at the same time robust device for the assembly of cutting rings in the Light Series (L) as well as in the Heavy Series (S) according to ISO 8434-1 / DIN 2353 on metric tube ends with outer diameters from 6 mm to 42 mm.

The machine has been designed for hand-held, tripod- or table-mounted operation and offers the best technical compromise between maximum flexibility, economic efficiency and a high level of process reliability with considerable reduction of time and cost for the assembly of cutting ring fittings.

Short tool change and setup times (with only a few seconds required to manually adjust the assembly pressure) make it possible to carry out the assembly of medium and even small quantities of cutting ring fittings, e.g. during maintenance, servicing, conversion and repair works on hydraulic pipe and tube systems. With the rechargeable battery being able to typically cover more than 200 assembly cycles per charge (depending on pressure settings and other influencing factors), the machine is also suitable for mass processing and production.

The assembly machine is by default supplied in a heavy-duty trolley transport case that is equipped with a range of accessories and also provides suitable space for the assembly studs.



Mode dial to manually adjust the pressure  
(settings indicated on the machine housing)



Status lights on the back of the machine housing



Assembly machine attached to a tripod stand  
using a mounting bracket





# STAUFF Press Portable Cutting Ring Assembly Machine with Manual Pressure Setting (Set) Type SPR-PRC-H-SET

## Technical Data

### Area of Application

- Function: Pressure-controlled assembly of cutting rings acc. to ISO 8434-1 / DIN 2353 on metric tube ends  
Light (L): 6, 8, 10, 12, 15, 18, 22, 28, 35 and 42 mm  
Heavy (S): 6, 8, 10, 12, 14, 16, 20, 25, 30 and 38 mm

### Dimensions / Weight

- Dimensions (L x H x W): 440 mm x 330 mm x 80 mm  
17.32 in x 12.99 in x 3.15 in  
(including rechargeable battery)
- Weight (basic machine): 6,8 kg / 15 lbs  
(including rechargeable battery)
- Weight (case): 16,5 kg / 36 lbs  
(including assembly machine and accessories)
- Case: IP67 certified, equipped with o-ring seal and automatic pressure valve

### Materials

- Machine cover: Plastic
- Tool head: Steel, uncoated, hardened
- Assembly studs: Stainless steel, hardened

## List of Components

### Set supplied in a heavy-duty trolley transport case:

- Light-weight and ergonomically designed cutting ring assembly machine for the hand-held, tripod-mounted or table-mounted operation
- Rechargeable battery
- Additional replacement battery
- Battery quick charging unit
- Clips (to keep the assembly stud in position)

Not displayed: Shoulder strap

### Equipment to be ordered separately:

- Assembly oil with brush (to lubricate the taper of the assembly stud)
- Cutting Ring Assembly Studs **FI-MVK-PRC-H-M-HR**

### Spare Parts

- Assembly oil with brush **SPR-PRC-H-M-OS**  
(required to lubricate the taper of the assembly stud)
- Rechargeable Battery **SPR-PRC-H-M-BP**
- Battery Quick Charging Unit **SPR-PRC-H-M-BC**

### Rechargeable Battery

- Typically covers more than 200 assembly cycles per charge (depending on pressure settings and other influencing factors)
- Battery type: Lithium-ion (18V / 3.0 Ah)

### Charging Unit

- Charging time for empty batteries is approximately 75 minutes
- Power supply: 230 V AC @ 50 Hz - single-phase
- Electrical connection: 2-pin grounded safety plug (CEE 7/4, type F / Schuko)
- Cable length: 1,10 m / 3.61 ft

### Accessories



- Tripod Stand **SPR-PRC-H-M-TP**



- Table Stand **SPR-PRC-H-M-TS**



- Mounting Bracket **SPR-PRC-H-M-MH**  
(required as a machine holder for both the tripod stand and the table stand)



## Cutting Ring Assembly Stud for Machine-Assisted Assembly

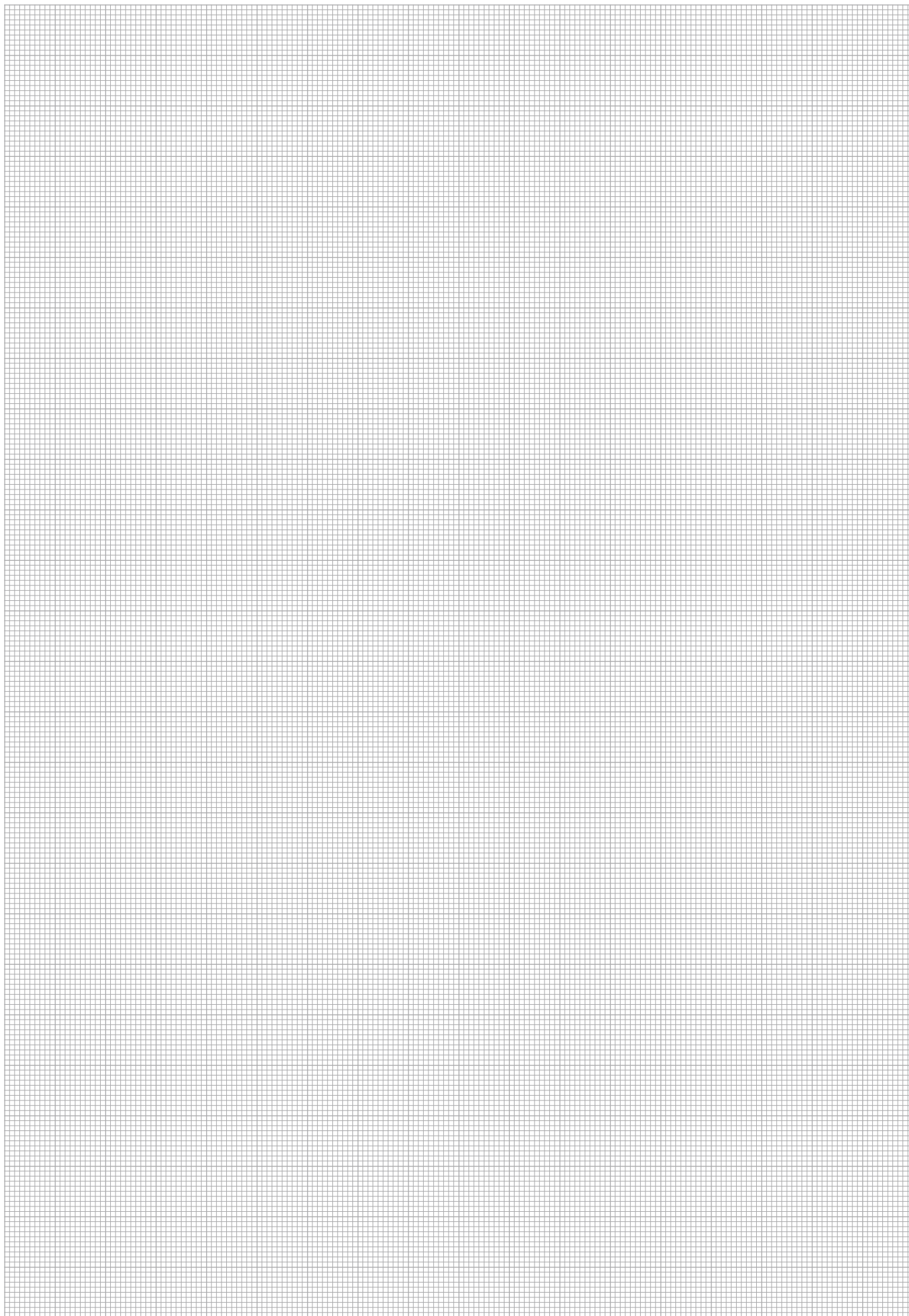
### Type FI-MVK-PRC-H-M ▪ Series L / S



| Series | Tube OD<br>( <sup>mm</sup> / <sub>in</sub> ) | Ordering Codes        |
|--------|----------------------------------------------|-----------------------|
| L      | 6                                            | FI-MVK-06L-PRC-H-M-HR |
|        | .24                                          |                       |
|        | 8                                            | FI-MVK-08L-PRC-H-M-HR |
|        | .31                                          |                       |
|        | 10                                           | FI-MVK-10L-PRC-H-M-HR |
|        | .39                                          |                       |
|        | 12                                           | FI-MVK-12L-PRC-H-M-HR |
|        | .47                                          |                       |
|        | 15                                           | FI-MVK-15L-PRC-H-M-HR |
|        | .59                                          |                       |
|        | 18                                           | FI-MVK-18L-PRC-H-M-HR |
|        | .71                                          |                       |
|        | 22                                           | FI-MVK-22L-PRC-H-M-HR |
|        | .87                                          |                       |
|        | 28                                           | FI-MVK-28L-PRC-H-M-HR |
|        | 1.10                                         |                       |
|        | 35                                           | FI-MVK-35L-PRC-H-M-HR |
|        | 1.38                                         |                       |
| S      | 42                                           | FI-MVK-42L-PRC-H-M-HR |
|        | 1.65                                         |                       |
|        | 6                                            | FI-MVK-06S-PRC-H-M-HR |
|        | .24                                          |                       |
|        | 8                                            | FI-MVK-08S-PRC-H-M-HR |
|        | .31                                          |                       |
|        | 10                                           | FI-MVK-10S-PRC-H-M-HR |
|        | .39                                          |                       |
|        | 12                                           | FI-MVK-12S-PRC-H-M-HR |
|        | .47                                          |                       |
|        | 14                                           | FI-MVK-14S-PRC-H-M-HR |
|        | .55                                          |                       |
|        | 16                                           | FI-MVK-16S-PRC-H-M-HR |
|        | .63                                          |                       |
|        | 20                                           | FI-MVK-20S-PRC-H-M-HR |
|        | .79                                          |                       |
|        | 25                                           | FI-MVK-25S-PRC-H-M-HR |
|        | .98                                          |                       |
|        | 30                                           | FI-MVK-30S-PRC-H-M-HR |
|        | 1.18                                         |                       |
|        | 38                                           | FI-MVK-38S-PRC-H-M-HR |
|        | 1.50                                         |                       |

Materials / surface finishing: **HR** Stainless steel, hardened





## STAUFF Form EVO Tube Forming Machine Type SF0-F-A-A



### Product Description

The type SF0-F-A-A tube forming machine facilitates the economical and most reliable production of tube ends made of steel, stainless steel and other materials with a contour typical for the STAUFF Form EVO tube forming system.

The machine is designed as a robust table-top device for continuous operation in the workshop. It is used in connection with FI-FST tube shapers and FI-FB clamping jaws. Tube shapers with FI-ID internal tube supports are used with selected tube dimensions, which prevent the tube from being constricted in the shaping area.

Tube shapers, clamping jaws and internal tube supports have been specifically designed for the mechanical forming process and can be quickly and simply replaced without the need for any tools, if required. The resulting short tool change and set-up times contribute to the high efficiency of the system as well as ensuring low cycle times.

All the tools needed for the forming process are clearly labelled with the tube dimensions so that assembly errors caused by incorrect assignment can be largely ruled out.



Operating elements of the tube forming machine



Noise-reducing tool tray with durable rubber mat



Lateral handle bars and rubber machine feet with suitable clearance height



Open clamping head with clamping jaws inserted



Inserting the tube shaper into the tool holder – with no tools required



Electrical connections

## Optional Cloud connection allows preventive maintenance via remote access and facilitates the documentation of assembly processes Type SF0-F-IOT



Tube forming machines type SF0-F-A-A can be equipped at the factory with a built-in module for direct connection to a cloud operated by STAUFF. This solution is realised with an integrated SIM card which can be used in all industrial regions of the world.

This enables software updates, for example, without having to connect the machine to a local network on site. Parameter sets, which have been determined by STAUFF for non-standard tube materials can also be transferred quickly and directly to the machine in this way.

Customers are given access to the cloud via a protected online portal, where they can get detailed information on the assembly processes performed, among other things.

The required data security is guaranteed by encryption in both directions.



# STAUFF Form EVO Tube Forming Machine Type SFO-F-A-A

## Characteristics

### Performance

- Constant high process safety, reliability and reproducibility by the position-control of the machine, which performs the shaping process following a manual start and monitors it by means of stored parameters
- Maximum efficiency thanks to short cycle times – ideal for series production
- Quick and simple replacement of tube shapers (with bayonet lock) and clamping jaws when changing the tube dimensions – with no tools required
- Potential risk of confusion and assembly errors caused by incorrect assignment can virtually be ruled out by the clear labelling of all assembly tools
- Surface-friendly clamping of the tube during the forming process
- Counters for lot/batch sizes and total quantities (separated by tool size)
- Predefined menu languages: English, German, French and Italian
- High degree of user comfort with clear information displayed on the operating panel

### Design

- ① Robust and ergonomically designed machine housing
- ② Easily accessible clamping head for simple positioning of the clamping jaws and optimised assembly area with approx. 110 mm / 4.33 in distance from the tube axis to the interfering edge of the machine housing, which allows processing of tubes with low bending radii or complex geometries
- ③ Noise-reducing tool tray with durable rubber mat
- ④ Lateral handle bars as attachment points for transport (e.g. with lifting belts)
- ⑤ Secure positioning thanks to flexible rubber machine feet
- ⑥ Type plate, with technical data, serial number, year of manufacture etc.

## Technical Data

### Area of Application

- Function: Cold forming of seamless cold drawn precision steel tubes acc. to EN 10305-1 (materials E235, E355) and stainless steel tubes (material 1.4571 / AISI 316 Ti)

Parameters for alternative materials can be added by the manufacturer, if required. Please contact STAUFF for details.

- Operating principle: Tube forming with combined pressure/position-control
- Series and dimensions: Light Series (L): 6 x 1,5 mm to 42 x 4 mm  
Heavy Series (S): 6 x 1,5 mm to 38 x 6 mm

### Dimensions / Weight

- Dimensions (W x D x H): 850 mm x 890 mm x 330 mm  
33.46 in x 35.04 in x 12.99 in  
with lateral handle bars (detachable)
- Distance from the tube axis to the interfering edge of the machine housing: 110 mm / 4.33 in
- Clearance height: 65 mm / 2.56 in (height of the machine feet)  
enables simple and safe transport  
using a forklift or pallet jack
- Weight: 210 kg / 463 lbs  
(including operating fluid, excluding forming tools)

### Materials

- Machine frame: Aluminium
- Machine housing: Steel, painted
- Tool tray: NBR (Perbunan®)
- Machine feet: Natural rubber
- Form rings: Steel, zinc/nickel-plated
- Form rings (seal): FKM (Viton®)

### Operating Elements

- ⑦ Operating panel for display and selection of all relevant settings and forming parameters
- ⑧ Button for definite confirmation of entries made on the operating panel
- ⑨ Status light to indicate readiness for operation and running assembly processes

### Safety Devices

- ⑩ Main power switch  
(can be secured against unauthorised actuation when required)
- ⑪ Separate emergency stop button to immediately stop all machine movements

### Connections (at the back of the machine)

- ⑫ Electrical connection according to IEC 60309 CEE 16A  
(cable length: 4 m / 13.12 ft)
- ⑬ Connection for External Foot Control Switch Type SFO/PRC-POC-FS
- ⑭ Ethernet connection (RJ45)  
for maintenance and data input by the manufacturer
- ⑮ Aerial IoT Gateway for preventive maintenance via remote access and facilitates the documentation of assembly processes

### Tube Forming Tools

- ⑯ Clamping Jaws FI-FB with clear identification of the tube dimension
- ⑰ Version of a Tube Shaper FI-FST with Internal Tube Support FI-ID
- ⑱ Tube Shaper FI-FST with clear identification of the tube dimensions

### Motor Configuration

- Power supply: 400 V AC @ 50 Hz - 3 phases  
460 V AC @ 60 Hz - 3 phases
- Current consumption: 2,55 A
- Connected load: 1,0 kW
- Electrical connection: Phase reversing plug  
according to IEC 60309 CEE 16A
- Cable length: 4 m / 13.12 ft

Alternative motor configurations and plug types are available on request. Please contact STAUFF for details.

### Hydraulic System

- Operating fluid: Hydraulic oil Shell Tellus S2 MA 46 or equivalent  
(filled and ready for operation when delivered)
- Fluid volume: 6,1 litres / 1.61 US Gallon
- Max working pressure: 700 bar / 10153 PSI

### Operating Conditions

- Storage temperature: -10°C ... +70°C / +14°F ... +158°F
- Ambient temperature: +15°C ... +35°C / +59°F ... +95°F
- Ambient conditions: Dry, no condensing humidity,  
operation in horizontal position only  
less than 69 dB(A) as per EN ISO 11202  
at full-load operation with maximum tube dimensions
- Noise emission:



#### STAUFF Maintenance Contracts

Please contact STAUFF for a maintenance contract, that provides optimum service for your STAUFF Tube Forming Machine.



#### STAUFF Machine Rental

Please contact STAUFF for a rental machine and further details of what this service can offer.



## STAUFF Form EVO Tube Shapers ▪ Type FI-FST

### STAUFF Form EVO Internal Tube Supports ▪ Type FI-ID



| Tube OD |      | Tube Wall Thickness |      | Weight per piece |           | Ordering Codes              |                        |
|---------|------|---------------------|------|------------------|-----------|-----------------------------|------------------------|
| (mm)    | (in) | (mm)                | (in) | (kg) ca.         | (lbs) ca. | Tube Shapers                | Internal Tube Supports |
| 6       | .24  | 1,5                 | .06  | 1,95             | 4.29      | FI-FST-06L/S-F2-S-A         |                        |
| 8       | .31  | 1,5                 | .06  | 1,97             | 4.33      | FI-FST-08L/S-F2-S-A         |                        |
|         |      | 2,0                 | .08  |                  |           |                             |                        |
| 10      | .39  | 1,5                 | .06  | 1,98             | 4.36      | FI-FST-10L/S-F2-S-A         |                        |
|         |      | 2,0                 | .08  |                  |           |                             |                        |
|         |      | 2,5                 | .10  |                  |           |                             |                        |
|         |      | 3,0                 | .12  |                  |           |                             |                        |
| 12      | .47  | 1,5                 | .06  | 1,99             | 4.38      | FI-FST-12L/S-1.5-F2-S-A     | FI-ID-12x1.5-HR/2      |
|         |      | 2,0                 | .08  |                  |           | FI-FST-12L/S-2/2.5/3-F2-S-A |                        |
|         |      | 2,5                 | .10  |                  |           |                             |                        |
|         |      | 3,0                 | .12  |                  |           |                             |                        |
| 15      | .59  | 1,5                 | .06  | 2,0              | 4.40      | FI-FST-15L-F2-S-A           | FI-ID-15x1.5-HR/2      |
|         |      | 2,0                 | .08  |                  |           |                             | FI-ID-15x2.0-HR/2      |
|         |      | 2,5                 | .10  |                  |           |                             | FI-ID-15x2.5-HR/2      |
| 16      | 63   | 2,0                 | .08  | 2,04             | 4.49      | FI-FST-16S-2/2.5-F2-S-A     | FI-ID-16x2.0-HR/2      |
|         |      | 2,5                 | .10  |                  |           | FI-FST-16S-3/4-F2-S-A       | FI-ID-16x2.5-HR/2      |
|         |      | 3,0                 | .12  |                  |           |                             |                        |
|         |      | 4,0                 | .16  |                  |           |                             |                        |
| 18      | .71  | 1,5                 | .06  | 1,97             | 4.33      | FI-FST-18L-2/2.5-F2-S-A     | FI-ID-18x1.5-HR/2      |
|         |      | 2,0                 | .08  |                  |           | FI-ID-18x2.0-HR/2           |                        |
|         |      | 2,5                 | .10  |                  |           | FI-ID-18x2.5-HR/2           |                        |
|         |      | 3,0                 | .12  |                  |           | FI-FST-18L-3-F2-S-A         |                        |
| 20      | .79  | 2,0                 | .08  | 1,98             | 4.36      | FI-FST-20S-2/2.5-F2-S-A     | FI-ID-20x2.0-HR/2      |
|         |      | 2,5                 | .10  |                  |           | FI-ID-20x2.5-HR/2           |                        |
|         |      | 3,0                 | .12  |                  |           | FI-FST-20S-3/3.5/4-F2-S-A   |                        |
|         |      | 4,0                 | .16  |                  |           |                             |                        |
| 22      | .87  | 2,0                 | .08  | 1,95             | 4.29      | FI-FST-22L-2/2.5-F2-S-A     | FI-ID-22x2.0-HR/2      |
|         |      | 2,5                 | .10  |                  |           | FI-ID-22x2.5-HR/2           |                        |
|         |      | 3,0                 | .12  |                  |           | FI-FST-22L-3/3.5-F2-S-A     |                        |
|         |      | 3,5                 | .14  |                  |           |                             |                        |
| 25      | .98  | 2,0                 | .08  | 1,96             | 4.31      | FI-FST-25S-2/2.5-F2-S-A     | FI-ID-25x2.0-HR/2      |
|         |      | 2,5                 | .10  |                  |           | FI-ID-25x2.5-HR/2           |                        |
|         |      | 3,0                 | .12  |                  |           | FI-FST-25S-3/3.5/4/5-F2-S-A |                        |
|         |      | 3,5                 | .14  |                  |           |                             |                        |
|         |      | 4,0                 | .16  |                  |           |                             |                        |
| 28      | 1.10 | 5,0                 | .20  | 1,96             | 4.31      | FI-FST-28L-2/2.5/3-F2-S-A   | FI-ID-28x2.0-HR/2      |
|         |      | 2,0                 | .08  |                  |           | FI-ID-28x2.5-HR/2           |                        |
|         |      | 2,5                 | .10  |                  |           | FI-ID-28x3.0-HR/2           |                        |
|         |      | 3,0                 | .12  |                  |           | FI-FST-28L-3.5/4-F2-S-A     |                        |
|         |      | 3,5                 | .14  |                  |           |                             |                        |
| 30      | 1.18 | 4,0                 | .16  | 1,95             | 4.29      | FI-FST-30S-2.5/3-F2-S-A     | FI-ID-30x2.5-HR/2      |
|         |      | 3,0                 | .12  |                  |           | FI-ID-30x3.0-HR/2           |                        |
|         |      | 4,0                 | .16  |                  |           | FI-FST-30S-4/5/6-F2-S-A     |                        |
|         |      | 5,0                 | .20  |                  |           |                             |                        |
|         |      | 6,0                 | .24  |                  |           |                             |                        |
| 35      | 1.38 | 2,5                 | .10  | 2,0              | 4.40      | FI-FST-35L-2.5/3-F2-S-A     | FI-ID-35x2.5-HR/2      |
|         |      | 3,0                 | .12  |                  |           | FI-ID-35x3.0-HR/2           |                        |
|         |      | 4,0                 | .16  |                  |           | FI-FST-35L-4/5-F2-S-A       |                        |
|         |      | 5,0                 | .20  |                  |           |                             |                        |
| 38      | 1.50 | 3,0                 | .12  | 1,82             | 4.00      | FI-FST-38S-3/4-F2-S-A       | FI-ID-38x3.0-HR/2      |
|         |      | 4,0                 | .16  |                  |           | FI-ID-38x4.0-HR/2           |                        |
|         |      | 5,0                 | .20  |                  |           | FI-FST-38S-5/6-F2-S-A       |                        |
|         |      | 6,0                 | .24  |                  |           |                             |                        |
| 42      | 1.65 | 3,0                 | .12  | 1,94             | 4.27      | FI-FST-42L-F2-S-A           | FI-ID-42x3.0-HR/2      |
|         |      | 3,5                 | .14  |                  |           | FI-ID-42x3.5-HR/2           |                        |
|         |      | 4,0                 | .16  |                  |           | FI-ID-42x4.0-HR/2           |                        |

Materials / surface finishings: HR Steel, uncoated, hardened

Please note:

The selection chart is only applicable in conjunction with seamless cold drawn precision steel tubes according to EN 10305-1 (materials E235, E355) and stainless steel tubes (material 1.4571 / AISI 316 Ti).

Please consult STAUFF for information regarding the processing of tubes made from stainless steel and other materials.





## STAUFF Form EVO Clamping Jaws ▪ Type FI-FB



| Tube OD<br>(mm/in) | Series | Weight per piece<br>(kg/lbs) ca. | Ordering Codes     |
|--------------------|--------|----------------------------------|--------------------|
| 6                  | L / S  | 2,37                             | FI-FB-06L/S-F2-S-A |
| .24                |        | 5.21                             |                    |
| 8                  | L / S  | 2,36                             | FI-FB-08L/S-F2-S-A |
| .31                |        | 5.19                             |                    |
| 10                 | L / S  | 2,32                             | FI-FB-10L/S-F2-S-A |
| .39                |        | 5.10                             |                    |
| 12                 | L / S  | 2,30                             | FI-FB-12L/S-F2-S-A |
| .47                |        | 5.06                             |                    |
| 15                 | L      | 2,37                             | FI-FB-15L-F2-S-A   |
| .59                |        | 5.21                             |                    |
| 16                 | S      | 2,31                             | FI-FB-16S-F2-S-A   |
| .63                |        | 5.08                             |                    |
| 18                 | L      | 2,28                             | FI-FB-18L-F2-S-A   |
| .71                |        | 5.02                             |                    |
| 20                 | S      | 2,24                             | FI-FB-20S-F2-S-A   |
| .79                |        | 4.93                             |                    |
| 22                 | L      | 2,32                             | FI-FB-22L-F2-S-A   |
| .87                |        | 5.10                             |                    |
| 25                 | S      | 2,17                             | FI-FB-25S-F2-S-A   |
| .98                |        | 4.77                             |                    |
| 28                 | L      | 2,32                             | FI-FB-28L-F2-S-A   |
| 1.10               |        | 5.10                             |                    |
| 30                 | S      | 2,05                             | FI-FB-30S-F2-S-A   |
| 1.18               |        | 4.51                             |                    |
| 35                 | L      | 1,92                             | FI-FB-35L-F2-S-A   |
| 1.38               |        | 4.22                             |                    |
| 38                 | S      | 1,92                             | FI-FB-38S-F2-S-A   |
| 1.50               |        | 4.22                             |                    |
| 42                 | L      | 1,77                             | FI-FB-42L-F2-S-A   |
| 1.65               |        | 3.89                             |                    |

## Overview tube dimensions Parameter and Tools STAUFF Form EVO

### Carbon Steel

| Size | Wallthickness |               |               |               |               |               |               |               |               |
|------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|      | 1             | 1,5           | 2             | 2,5           | 3             | 3,5           | 4             | 5             | 6             |
|      | E235/<br>E355 | E235/<br>E355 | E235/<br>E355 | E235/<br>E355 | E235/<br>E355 | E235/<br>E355 | E235/<br>E355 | E235/<br>E355 | E235/<br>E355 |
| 6    | -             |               | -             | -             | -             | -             | -             | -             | -             |
| 8    | -             |               |               |               | -             | -             | -             | -             | -             |
| 10   | -             |               |               |               |               | -             | -             | -             | -             |
| 12   | -             | ▪             |               |               |               | -             | -             | -             | -             |
| 15   | -             | ▪             | ▪             | ▪             | -             | -             | -             | -             | -             |
| 16   | -             | -             | ▪             | ▪             |               | -             |               | -             | -             |
| 18   | -             | ▪             | ▪             | ▪             |               | -             | -             | -             | -             |
| 20   | -             | -             | ▪             | ▪             |               |               |               | -             | -             |
| 22   | -             | -             | ▪             | ▪             |               |               | -             | -             | -             |
| 25   | -             | -             | ▪             | ▪             |               |               |               | -             | -             |
| 28   | -             | -             | -             | ▪             | ▪             |               |               | -             | -             |
| 30   | -             | -             | -             | ▪             | ▪             | -             |               |               | -             |
| 35   | -             | -             | -             | ▪             | ▪             | -             |               |               | -             |
| 38   | -             | -             | -             | -             | ▪             | -             | ▪             |               | -             |
| 42   | -             | -             | -             | -             | ▪             | ▪             | ▪             | -             | -             |

Parameter set and tools available. To use without tube supports.

### Stainless Steel

| Wallthickness | 1     | 1,5   | 2     | 2,5   | 3     | 3,5   | 4     | 5     | 6     |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|               | 316ti | 316ti | 316ti | 316ti | 316ti | 316ti | 316ti | 316ti | 316ti |
| -             |       |       |       | -     | -     | -     | -     | -     | -     |
| -             |       |       |       | -     | -     | -     | -     | -     | -     |
| -             |       |       |       | -     | -     | -     | -     | -     | -     |
| -             |       |       |       | -     | -     | -     | -     | -     | -     |
| -             | ▪     | ▪     | -     | -     | -     | -     | -     | -     | -     |
| -             | -     | ▪     | ▪     | ▪     |       | -     | -     | -     | -     |
| -             | -     | -     | ▪     | ▪     |       | -     | -     | -     | -     |
| -             | -     | -     | ▪     | ▪     |       | -     | -     | -     | -     |
| -             | -     | -     | ▪     | ▪     |       | -     | -     | -     | -     |
| -             | -     | -     | ▪     | ▪     |       | -     | -     | -     | -     |
| -             | -     | -     | -     | ▪     | ▪     | -     | -     | -     | -     |
| -             | -     | -     | -     | ▪     | ▪     | -     | ▪     |       | -     |
| -             | -     | -     | -     | -     | ▪     | -     | -     | -     | -     |
| -             | -     | -     | -     | -     | ▪     | -     | -     | -     | -     |

Parameter set and tools available. To use with internal tube supports.



## External Foot Control Switch Type SFO/PRC-POC-FS



- Enables the operator to trigger assembly processes from a larger distance to the machine (cable length: 7 m / 22.97 ft)

## STAUFF Form EVO Oil Type Oel-Stauff-Form-1L



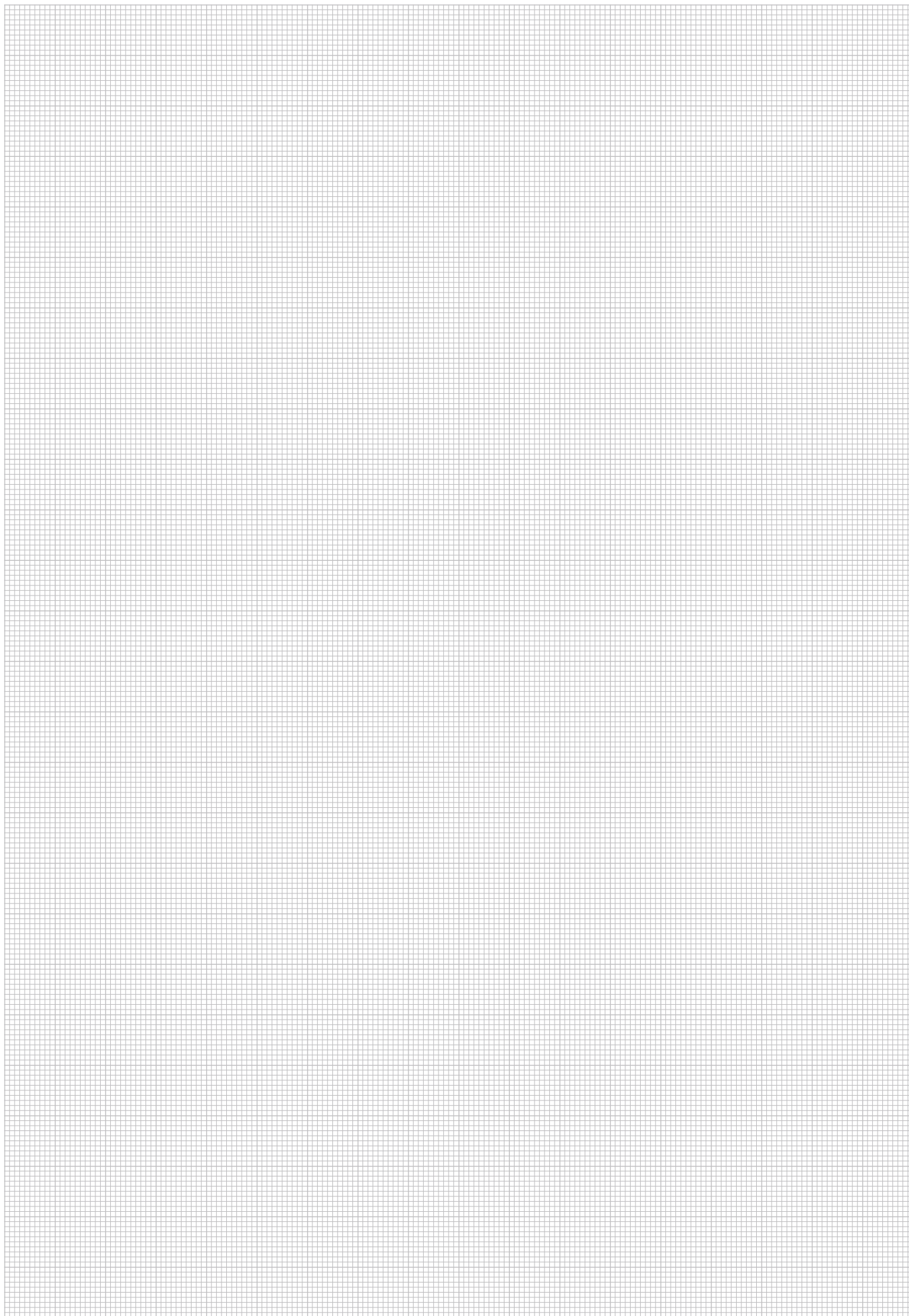
- Enables faultless, mechanical tube forming with STAUFF Form EVO machines when using stainless steel tubes

## STAUFF Oil with brush Type SPR-PRC-H-M-OS



- Enables faultless, mechanical tube forming with STAUFF Form EVO machines when using stainless steel tubes









#### Thread Identification Board

FI-TIB

276



#### Cone Gauges

FI-KOL

277



## Thread Identification Board Type FI-TIB

### Product Description

The STAUFF Thread Identification Board is intended to be used as a universal tool for workshops, warehouses or sales counters allowing quick and easy determination of common thread types and sizes, e.g. for male stud tube connectors and test couplings.

The board is available in two different versions:

#### FI-TIB-M/G

##### ■ 13 Metric Parallel Threaded Ports

M8 x 1 / M10 x 1 / M12 x 1,5 / M14 x 1,5 /  
M16 x 1,5 / M18 x 1,5 / M20 x 1,5 / M22 x 1,5 /  
M26 x 1,5 / M27 x 2 / M33 x 2 / M42 x 2 / M48 x 2

##### ■ 8 Whitworth Parallel Pipe Threaded Ports

G1/8 / G1/4 / G3/8 / G1/2 / G3/4 / G1 / G1 1/4 / G1 1/2

#### FI-TIB-N/U

##### ■ 8 National Pipe Threaded Ports

1/8–27 NPT / 1/4–18 NPT / 3/8–18 NPT /  
1/2–14 NPT / 3/4–14 NPT / 1–11.5 NPT /  
1 1/4–11.5 NPT / 1 1/2–11.5 NPT

##### ■ 9 UNF/UN Threaded Ports

7/16–20 UNF / 1/2–20 UNF / 9/16–18 UNF /  
3/4–16 UNF / 7/8–14 UNF / 1 1/16–12 UN /  
1 5/16–12 UN / 1 5/8–12 UN / 1 7/8–12 UN



### Product Features

- Covering all relevant thread type and sizes of male stud tube connectors and test couplings
- Boards made of hardened quality steel
- Finished with an extremely resistant cathodic electrodeposition coating
- Laser markings indicating the thread types and sizes next to the threaded ports
- Non-slip rubber feet providing good stability

### Technical Data

- Dimensions (W x D x H): 275 mm x 190 mm x 31 mm  
10.82 in x 7.48 in x 1.22 in
- Clearance height: 13 mm / .51 in  
(height of the rubber feet)
- Weight: 6,0 kg / 13.2 lbs

### Note

Thread identification boards are intended to be tools for the basic determination of thread types and sizes. They do not replace high-precision thread gauges and measurement devices (should these become necessary at any point).

Q





## Cone Gauges Type FI-KOL

### Product Description

These cone gauges are designed for wear checks on the 24° cone for all STAUFF final assembly studs 6 - 42 mm. To ensure accuracy during cutting ring assembly, the assembly stud has to be checked for wear and damage after max. 50 assembly processes (DIN 3859-2).

This set is suitable for all final assembly studs of type FI-MFK as well as for manual assembly cones of type FI-FK.

The cone gauges are available individually or as a complete set for all sizes in a convenient case.

### Product Features

- Ensure accurate cutting ring assembly because the target cone in the stud can be verified with precision
- Prevents premature replacement of the studs
- Easy handling

### Technical Data

- Dimensions Case (W x D x H):  
357 mm x 305 mm x 80 mm  
14.06 in x 12.01 in x 3.15 in
- Dimensions Cone Gauges (H)  
95 mm / 3.74 in



### Ordering Code

- Cone Gauge Kit in Box (Size 6 to 42)

**FI-Box-Cone-Gauge-Kit-6-42**

### Single Cone Gauges

| Size  | Ordering Codes  |
|-------|-----------------|
| 06L/S | FI-KOL-06L/S-W1 |
| 08L/S | FI-KOL-08L/S-W1 |
| 10L/S | FI-KOL-10L/S-W1 |
| 12L/S | FI-KOL-12L/S-W1 |
| 14S   | FI-KOL-14S-W1   |
| 15L   | FI-KOL-15L-W1   |
| 16S   | FI-KOL-16S-W1   |
| 18L   | FI-KOL-18L-W1   |
| 20S   | FI-KOL-20S-W1   |
| 22L   | FI-KOL-22L-W1   |
| 25S   | FI-KOL-25S-W1   |
| 28L   | FI-KOL-28L-W1   |
| 30S   | FI-KOL-30S-W1   |
| 35L   | FI-KOL-35L-W1   |
| 38S   | FI-KOL-38S-W1   |
| 42L   | FI-KOL-42L-W1   |



Q







**STAUFF Clean**  
Pipe, Tube and Hose Cleaning System  
SC

280



**Manual Tube Bender**

TUB-MA

282



**Tube Bending and Saw Device**

TUBSD-MA

283



**Tube Saw Device**

TUSD-MA

284



**Tube Reamer**

TUD-MA

285



## STAUFF Clean Pipe, Tube and Hose Cleaning System

### Product Description

The STAUFF Clean System comprises of a pneumatic launcher and a range of specially designed nozzles and projectiles.

The launcher uses standard industrial compressed air pressure between 6 and 8 bar / 87 and 116 PSI to propel a foam projectile through the nozzle and into the pipe, tube or hose bore to have their inside surface cleaned from any unwanted contamination.

This provides a safe and environmentally friendly tool that requires little formal expertise to operate and apply.

The **launcher** is the part of the system that controls the air supply to propel the projectile from start to finish of the cleaning job.

The **nozzles** are specially designed to affect an airtight seal on any pipe, tube or hose with or without end fittings. Its main purpose is to compress the foam projectile allowing it to enter the internal diameter of the pipe, tube or hose to be cleaned.

The **projectile** is the part of the system that does the cleaning: The foam projectile is sized to be approximately 15 % larger than the internal diameter of the pipe, tube or hose to be cleaned. The compression of the projectile against the internal wall cleans the internal surface and expels any loose contaminants from the end of the pipe, tube or hose.

The STAUFF Clean System is available as separate components or in a variety of kit forms comprising various nozzle types, adaptor and launcher, all contained in a heavy duty carrying case.



R

### STAUFF Clean Launchers / Launcher Kits



#### Characteristics

- Pneumatic pistol-grip launcher
- Light-weight and ergonomic design
- Easy to operate and apply
- Connection to air supply with quick release coupling
- Suitable for any type of nozzle
- Delivered separately or in a variety of kit forms including carrying case, adaptor ring and nozzles (if required)

#### Technical Data

- Air compressor requirement:  
6 ... 8 bar / 87 ... 116 PSI
- Effective air volume:  
250 ... 400 l/min / 66 ... 106 US GPM

#### Ordering Codes

- Launcher only **SC-LG**
- Launcher kit (launcher, kit and adaptor) **SC-LK**
- Kit (as above)  
with set of 10 Universal nozzles **SC-10UV-K**
- Kit (as above)  
with set of 18 Metric Tube nozzles **SC-18MT-K**
- Kit (as above)  
with set of 10 JIC nozzles **SC-10J-K**
- Kit (as above)  
with set of 7 BSP nozzles **SC-7B-K**
- Kit (as above)  
with set of 7 NPT nozzles **SC-7N-K**

Contact STAUFF for alternative connection adaptors and couplings.



## STAUFF Clean Nozzles / Nozzle Sets

### Universal Nozzle Set (SC-U-SET)

The Universal Nozzle is designed with a tapered seat that will allow it to suit for 90% of applications, including Hose, Tube and Pipe, with or without fittings, in hydraulic and pneumatic pipe systems, condenser tubes, boiler tubes and food lines.

The Universal Nozzle kit fits all and will accommodate applications with JIC, SAE and BSP end fittings.

The set of 10 nozzles consists of the following sizes: 6 mm, 8 mm, 10 mm, 13 mm, 16 mm, 19 mm, 25 mm and 32 mm.

### JIC Nozzle Set (SC-J-SET)

The JIC Nozzle is designed specifically for use with JIC and SAE type fittings. The nozzles are machined to accommodate both male and female configuration, ensuring a perfect airtight seal every time.

The set of 10 nozzles consist of the following sizes: 6 mm, 8 mm, 10 mm, 13 mm, 16 mm, 19 mm, 25 mm, 32 mm, 38 mm and 50 mm.

### Metric Tube Nozzle Set (SC-M-SET)

The Metric Tube Nozzle is intended for use specifically with Metric sized tube and is designed to fit over the outside of the tube or pipe being cleaned.

The inside diameter of the nozzle is reduced to match the inside diameter of the tube. The nozzles are machined from solid bar stock and designed for superior strength.

The set of 18 nozzles consist of the following sizes: 6 mm, 8 mm, 10 mm, 12 mm, 14 mm, 15 mm, 16 mm, 18 mm, 20 mm, 22 mm, 25 mm, 28 mm, 30 mm, 35 mm, 38 mm, 42 mm, 50 mm and 60 mm.

### BSP Nozzle Set (SC-B-SET)

The BSP Nozzle is designed specifically for BSP configuration fittings. The nozzles are machined to accommodate both male and female configurations, ensuring a perfect airtight seal every time.

The set of 7 nozzles consist of the following sizes: 6 mm, 10 mm, 13 mm, 16 mm, 19 mm, 25 mm and 32 mm.



**Adaptor Ring for Nozzels (SCN-AR)**  
Required for sizes 6-32 mm / 1/4-1 1/4 in

If required, nozzles can be supplied separately. Contact STAUFF for details.

### NPT Nozzle Set (SC-N-SET)

The NPT Nozzle is designed specifically for NPT configuration fittings. The nozzles are machined to accommodate both male and female configurations, ensuring a perfect airtight seal every time.

The set of 7 nozzles consist of the following sizes: 1/4 in, 3/8 in, 1/2 in, 5/8 in, 3/4 in, 1 in and 1 1/4 in.

## STAUFF Clean Projectiles

### Coupling Series (SCP-C)

Intended for the cleaning of hose assemblies (hose with end fittings, adjustments, etc.) or the removal of loose contamination from pipe, tube or hose.



### Abrasive Series (SCP-A)

Intended for the internal cleaning of metal pipe and tube to remove light contaminants (rust and scale). They are recognised by the shorter abrasive pad fixed to one end of the projectile.



### Grinding Series (SCP-G)

Intended for the internal cleaning of metal pipe and tube to remove medium and heavy contamination (rust and scale) from the internal surface. They are recognised by the longer abrasive pad fixed to one end of the projectile that is coated in Silicon Carbide.



| Size | Pipe / Tube / Hose ID |        | Ordering Codes          |                         |                         |
|------|-----------------------|--------|-------------------------|-------------------------|-------------------------|
|      | (mm)                  | (in)   | Coupling Series (SCP-C) | Abrasive Series (SCP-A) | Grinding Series (SCP-G) |
| 07   | 4,8                   | 3/16   | SCP-C-07                | SCP-A-07                | SCP-G-07                |
| 09   | 6,4                   | 1/4    | SCP-C-09                | SCP-A-09                | SCP-G-09                |
| 10   | 6,4                   | 1/4    | SCP-C-10                | SCP-A-10                | SCP-G-10                |
| 12   | 7,9                   | 5/16   | SCP-C-12                | SCP-A-12                | SCP-G-12                |
| 14   | 9,5                   | 3/8    | SCP-C-14                | SCP-A-14                | SCP-G-14                |
| 16   | 11,1                  | 7/16   | SCP-C-16                | SCP-A-16                | SCP-G-16                |
| 18   | 12,7                  | 1/2    | SCP-C-18                | SCP-A-18                | SCP-G-18                |
| 20   | 14,3                  | 9/16   | SCP-C-20                | SCP-A-20                | SCP-G-20                |
| 22   | 15,9                  | 5/8    | SCP-C-22                | SCP-A-22                | SCP-G-22                |
| 26   | 19,1                  | 3/4    | SCP-C-26                | SCP-A-26                | SCP-G-26                |
| 28   | 20,6                  | 13/16  | SCP-C-28                | SCP-A-28                | SCP-G-28                |
| 30   | 22,2                  | 7/8    | SCP-C-30                | SCP-A-30                | SCP-G-30                |
| 33   | 25,4                  | 1      | SCP-C-33                | SCP-A-33                | SCP-G-33                |
| 36   | 26 / 27               | 1 1/16 | SCP-C-36                | SCP-A-36                | SCP-G-36                |
| 38   | 28,6                  | 1 1/8  | -                       | SCP-A-38                | SCP-G-38                |
| 40   | 31,8                  | 1 1/4  | SCP-C-40                | SCP-A-40                | SCP-G-40                |
| 45   | 34,9                  | 1 3/8  | SCP-C-45                | SCP-A-45                | SCP-G-45                |
| 50   | 38,1                  | 1 1/2  | SCP-C-50                | SCP-A-50                | SCP-G-50                |
| 55   | 44,5                  | 1 3/4  | SCP-C-55                | SCP-A-55                | SCP-G-55                |
| 60   | 50,8                  | 2      | SCP-C-60                | SCP-A-60                | SCP-G-60                |

Please note: For optimum cleaning, it is recommended that projectiles are used once and then discarded and disposed of in an appropriate way.

Safety note: A mesh collection bag should be secured to the pipe, tube or hose exit to avoid possible injury to personnel by the projectile exiting at high velocity.

Always wear protective safety glasses, ear protection and a dust mask when operating this system.





## Manual Tube Bender Typ TUB-MA

### Product Description

When used with a commercially available vice, STAUFF manual tube benders, type TUB-MA, enable common hydraulic tubes to be bent manually.

They are suitable for steel and stainless steel tubes with diameters of 6, 8, 10, 12, 14, 15, 16, 18 and 22 mm with a defined minimum wall thickness.

In addition to the metric version, a model for handling inch-gauge tubes with diameters of between 1/4 and 7/8 inches is also available.

The eight bending rollers – six in the imperial version – ensure maximum wear.

A scale lasered onto the bending rollers enhances the accuracy of the required bending angle with superior precision.

The manual tube bender is supplied with all the necessary components and multilingual instructions for use as a complete kit in a high-quality steel case.

### Product Features

- Small bending radii allow for compact assemblies
- Optimised bending contour, which enables tube bends free of flattening and constriction
- hard wearing steel bending rolls
- ideal for versatile site use, possibly for installation work on site

### Technical Data

- Dimensions (W x D x H):  
640 mm x 165 mm x 70 mm  
25.20 in x 6.50 in x 2.76 in
- Weight (incl. Case):  
Metric Version 13,8 kg / 30.4 lbs  
Imperial Version 12,1 kg / 26.7 lbs



### Ordering Codes

- Manual Tube Bender Set in Steelcase (metric Version) **TUB-MA-M622-LV-KIT**
- Manual Tube Bender Set in Steelcase (imperial Version) **TUB-MA-I4140D-LV-KIT**

### Spare Parts / Accessories

| Description             | Ordering Codes                     |
|-------------------------|------------------------------------|
| Bending Lever           | TUB-MA-S-Bending-Lever             |
| Baseplate               | TUB-MA-S-Baseplate                 |
| Guide Roller            | TUB-MA-S-Guide-Roller-W32          |
| Hold Roll               | TUB-MA-S-Hold-Roll-W101            |
| Guide Roller Mount      | TUB-MA-S-Guide-Roller-Mount        |
| Bolt                    | TUB-MA-S-Bolt-M12x32               |
| Pivot Pin               | TUB-MA-S-Pivot-Pin                 |
| Bending Lever Support   | TUB-MA-S-Bending-Lever-Support-W32 |
| Bending Roller 6/8 mm   | TUB-T-BE-M6/8-MIOD-W32             |
| Bending Roller 10 mm    | TUB-T-BE-M10-MIOD-W32              |
| Bending Roller 12 mm    | TUB-T-BE-M12-M622-W32              |
| Bending Roller 14/15 mm | TUB-T-BE-M14/15-M622-W32           |
| Bending Roller 16 mm    | TUB-T-BE-M16-MIOD-W32              |
| Bending Roller 18 mm    | TUB-T-BE-M18-M622-W101             |
| Bending Roller 20 mm    | TUB-T-BE-M20-M622-W101             |
| Bending Roller 22 mm    | TUB-T-BE-M22-MIOD-W101             |
| Bending Roller 1/2"     | TUB-T-BE-080D-I4140D-W32           |
| Bending Roller 3/4"     | TUB-T-BE-120D-I4140D-W101          |

Parts assignment: [www.stauff.com/en/category/025000/025025/025021B](http://www.stauff.com/en/category/025000/025025/025021B)



| Outer Diameter        | Metric | Inch | Radius          | Minimum Wall Thickness |
|-----------------------|--------|------|-----------------|------------------------|
| 6/8 mm (1/4" / 5/16") | •      | •    | 33 mm / 1.30 in | 1,5 mm / .06 in        |
| 10 mm (3/8")          | •      |      |                 | 1,5 mm / .06 in        |
| 12 mm                 | •      |      |                 |                        |
| 1/2"                  |        | •    | 40 mm / 1.57 in | 2,0 mm / .08 in        |
| 14 mm                 | •      |      |                 | 1,5 mm / .06 in        |
| 15 mm                 | •      |      |                 |                        |
| 16 mm (5/8")          | •      | •    | 48 mm / 1.89 in | 1,5 mm / .06 in        |
| 18 mm                 | •      |      |                 | 2,0 mm / .08 in        |
| 3/4"                  |        | •    |                 |                        |
| 20 mm                 | •      |      |                 |                        |
| 22 mm (7/8")          | •      | •    |                 |                        |





## Tube Bending and Saw Device Type TUBSD-MA



### Product Description

This sturdy steel case is designed for short-term use on the go, providing all components required for bending and sawing off hydraulic tubes made of steel or stainless steel. The case contains a combined manual tube bending and sawing device which can be attached with a standard vice or directly to a work-bench top with a thickness of up to 35 mm. The contour of the holding fixture ensures that cuts are made at a 90° angle.

Three low-wear bending rollers made of steel allow processing of steel or stainless steel tubes with an outer diameter of 6, 8, 10 or 12 mm. The optimised bending contour of the rollers prevents deformation of the tube even for smaller bending radii. A bending lever is also included in the set.

A standard hacksaw is used for sawing off the tube.

The case also has space for the STAUFF universal internal and external tube reamer for tube diameters from 6 to 35 mm. The reamer is not included in the set, but can be purchased separately, as can all components of this convenient repair set in a robust steel case.

### Ordering Code

- Tube Bending and Saw Device in Steelcase

**TUBSD-MA-M612-LV-KIT**

### Spare Parts / Accessories

| Description                         | Ordering Codes                   |
|-------------------------------------|----------------------------------|
| Bending roll 6/8mm (Radius 19/20mm) | TUBSD-T-BE-M6/8-W101             |
| Bending roll 10mm (Radius 25mm)     | TUBSD-T-BE-M10-W101              |
| Bending roll 12mm (Radius 26mm)     | TUBSD-T-BE-M12-W101              |
| Bending-Lever-compl                 | TUBSD-S-Bending-Lever-compl-W101 |
| Baseplate-compl                     | TUBSD-S-Baseplate-compl-W101     |
| Hold-Roll                           | TUBSD-S-Hold-Roll-W101           |
| Bending-Roll-Mount                  | TUBSD-S-Bending-Roll-Mount-W101  |
| Round-Head-Rivet Kit 4 pcs.         | Kit-TUBSD-S-Round-Head-Rivet-W5  |
| SAW-Guide Kit 2 pcs.                | Kit-TUBSD-S-SAW-Guide-W101       |
| Pivot-Pin                           | TUBSD-S-Pivot-Pin-W101           |
| Guide-Roller-Mount                  | TUBSD-S-Guide-Roller-Mount-W101  |
| Guide-Roller                        | TUBSD-S-Guide-Roller-W101        |
| Butterfly lock bolt                 | TUBSD-S-Butterfly lock bolt W101 |

Parts assignment: [www.stauff.com/en/category/025000/025026/025022D](http://www.stauff.com/en/category/025000/025026/025022D)

### Product Features

- Bending and sawing with one device
- Wear-resistant steel bending rollers
- Small bending radii for compact installations
- Optimised bending contour: The tube diameter is not deformed during the bending process
- Saw blade guiding ensures 90° cuts
- Can be used with or without a vice
- Ideal for flexible mobile use, e.g. for installation work at a construction site

### Technical Data

- Dimensions (W x D x H):  
355 mm x 125 mm x 56 mm  
13.98 in x 4.92 in x 2.20 in
- Weight (incl. Case): 3,4kg / 7.50 lbs



## Tube Saw Device Type TUSD-MA

### Product Description

This device can be used to cut steel and stainless steel tubes with an outer diameter between 6 and 42 mm at a precise 90° angle. It can either be used with a vice or simply clamped onto the tube for cutting.

A standard hacksaw is used for sawing off the tube.

### Product Features

- 90° cut on tubes up to 42 mm
- Tube diameter is not deformed during the clamping process
- Robust, durable design
- No vice required, device can also simply be clamped onto the tube
- The saw blade guide can easily be replaced separately when it is worn
- Ideal for flexible mobile use, e.g. for installation work at a construction site

### Technical Data

- Dimensions (W x D x H):  
80 mm x 70 mm x 140 mm  
3.15 in x 2.76 in x 5.51 in
- Weight: 1,6 kg / 3.5 lbs



### Ordering Code

- Tube Saw Device

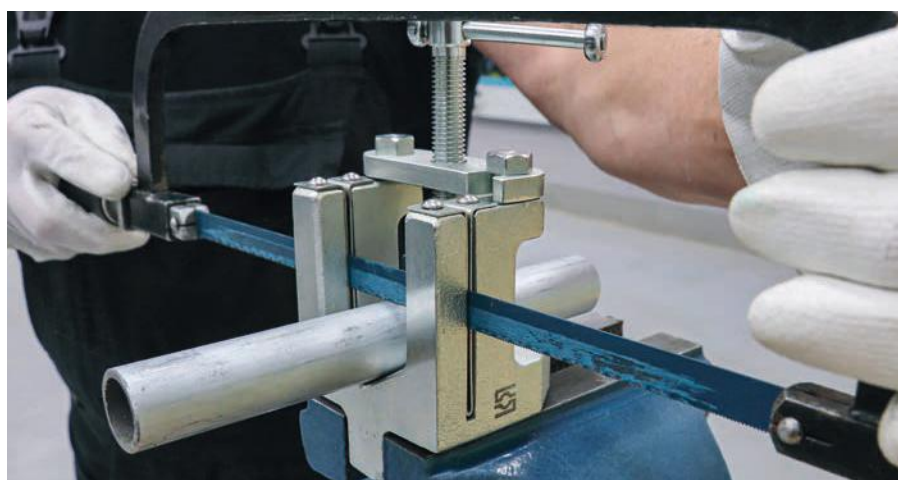
**TUSD-MA-M642**

### Spare Parts / Accessories

| Description                 | Ordering Codes                  |
|-----------------------------|---------------------------------|
| Round-Head-Rivet Kit 4 pcs. | Kit-SD-MA-S-Round-Head-Rivet-W5 |
| SAW-Guide Kit 2 pcs.        | Kit-SD-MA-S-Saw-Guide-W101      |
| Barcked Bolt Kit 2 pcs.     | Kit-SD-MA-S-Bolt-W32            |
| Bracked-compl.              | SD-MA-S-Bracked-compl.-W32      |

Parts assignment: [www.stauff.com/en/category/025000/025027/025022E](http://www.stauff.com/en/category/025000/025027/025022E)

R



## Tube Reamer Type TUD-MA

### Product Description

The STAUFF universal internal and external tube reamer for tube diameters from 6 to 35 mm features high-quality sharpened cutting edges made of hardened special steel and ensures a flowing, "chatter-free" work process. Also available for tubes with an outer diameter from 10 to 54 mm.

Particularly convenient: An adapter for using the device with an electric drill at low speed is available for both sizes.

### Product Features

- Easy and quick burr removal on steel and stainless steel tubes
- High-quality sharpened cutting edges made of hardened special steel
- Chatter-free working

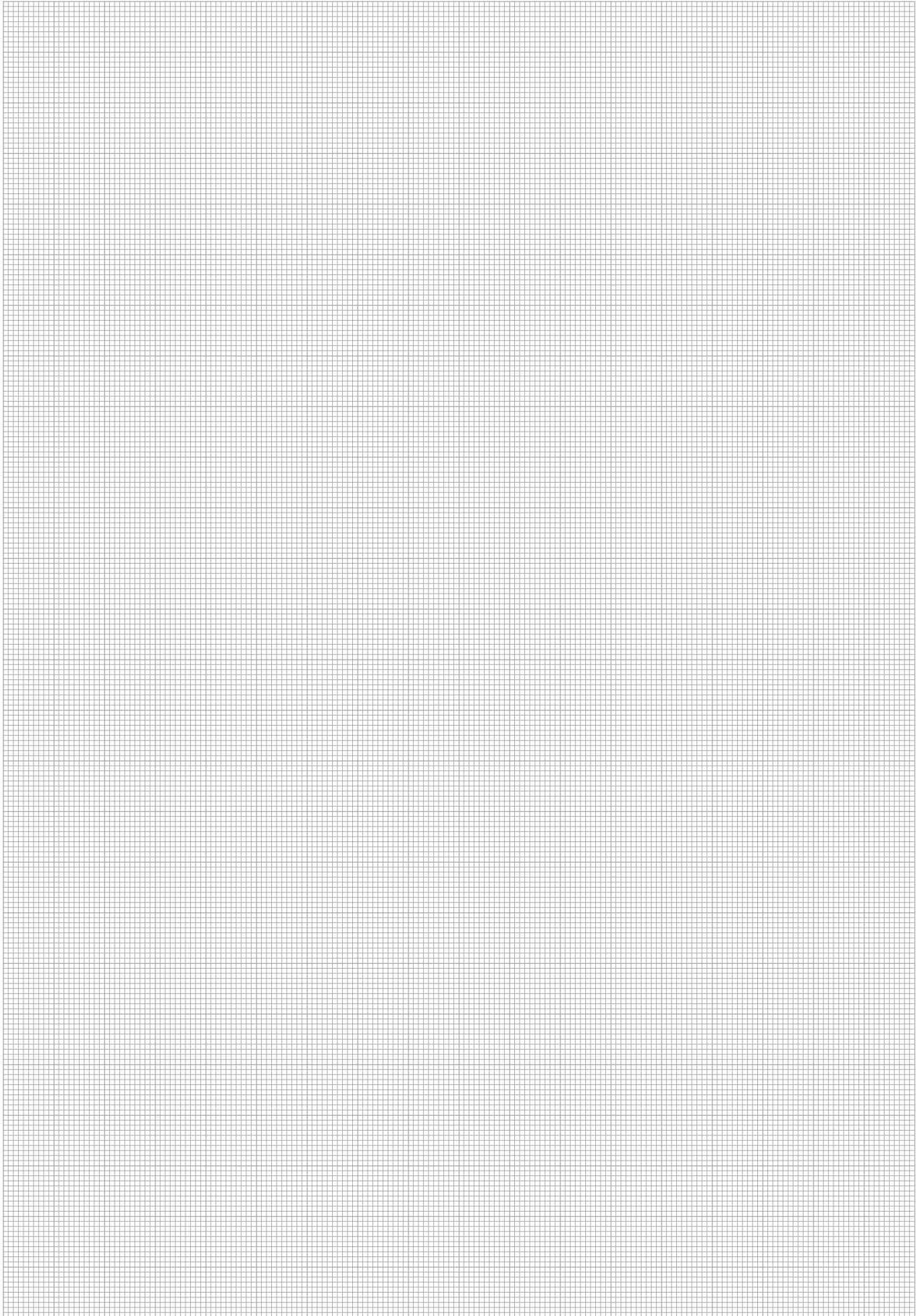
### Technical Data

- Dimensions TUD-MA-0635 (Ø x H):  
48 mm x 60 mm  
1.89 in x 2.36 in
- Weight: 0,2 kg / .44 lbs
- Dimensions TUD-MA-1054 (Ø x H):  
70 mm x 90 mm  
2.76 in x 3.54 in
- Weight: 0,6 kg / 1.32 lbs
- Dimensions TUD-ADA1-0635 (Ø x H):  
65 mm x 85 mm inkl. Welle  
2.55 in x 3.35 in
- Weight: 0,2 kg / .44 lbs
- Dimensions TUD-ADA2-1054 (Ø x H):  
91 mm x 92 mm inkl. Welle  
3.58 in x 3.62 in
- Weight: 0,4 kg / .88 lbs

### Ordering Codes

| Description                     | Ordering Codes |
|---------------------------------|----------------|
| Tube reamer 6-35mm              | TUD-MA-0635    |
| Adapter for Tube reamer 6-35mm  | TUD-ADA1-0635  |
| Tube reamer 10-54mm             | TUD-MA-1054    |
| Adapter for Tube reamer 10-54mm | TUD-ADA2-1054  |

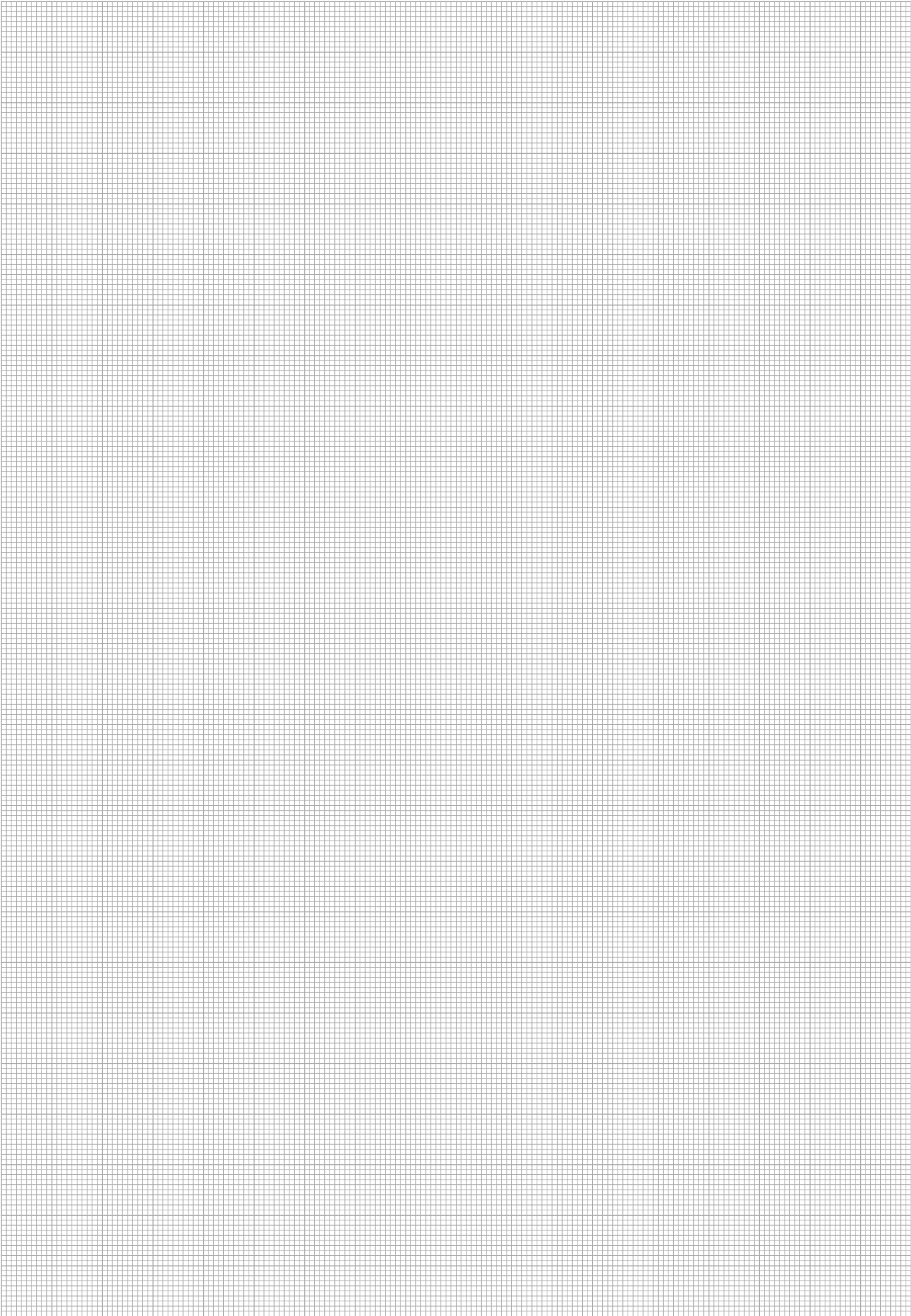




R







R







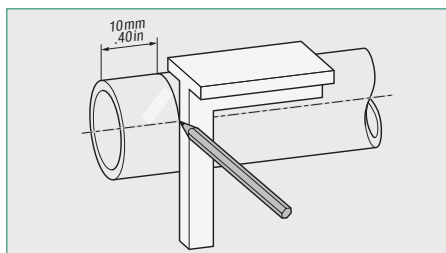
|                                                                                                                 |                |
|-----------------------------------------------------------------------------------------------------------------|----------------|
| <b>Assembly Instructions for STAUFF Connect 24° Tube Fittings with Double Edge Cutting Ring (Type FI-DS)</b>    | <b>290-297</b> |
| 100% Assembly with the Manual Final Assembly Stud (Type FI-FK) and Assembly with the Fitting Body               | 290            |
| 50% Assembly with the Manual Pre-Assembly Stud (Type FI-VK) and Assembly with the Fitting Body                  | 292            |
| Direct Assembly with the Fitting Body                                                                           | 294            |
| Machine-Assisted 100% Assembly with a STAUFF Press Assembly Machine and Assembly with the Fitting Body          | 296            |
| Machine-Assisted 50% Assembly with a STAUFF Press Assembly Machine and Assembly with the Fitting Body           | 297            |
| <b>Assembly Instructions for STAUFF Connect 24° Tube Fittings with Soft-Sealing Cutting Ring (Type FI-WDDS)</b> | <b>298-303</b> |
| 100% Assembly with the Manual Final Assembly Stud (Type FI-FK) and Assembly with the Fitting Body               | 298            |
| Direct Assembly with the Fitting Body                                                                           | 300            |
| Machine-Assisted 100% Assembly with a STAUFF Press Assembly Machine and Assembly with the Fitting Body          | 302            |
| <b>Assembly Instructions for Support Sleeves</b>                                                                | <b>304</b>     |
| <b>Assembly Instructions for STAUFF Form EVO Tube Fittings</b>                                                  | <b>306</b>     |
| <b>Assembly Instructions for STAUFF Connect 37° Flared Tube Fittings</b>                                        | <b>310</b>     |
| <b>Assembly Instructions for 24° Weld Cones with O-Ring</b>                                                     | <b>314</b>     |
| <b>Assembly Instructions for Tube Fittings with 24° Taper and O-Ring</b>                                        | <b>316</b>     |
| <b>Assembly Instructions for Tube Fittings with Standpipe</b>                                                   | <b>316</b>     |
| <b>Assembly Instructions for Tube Fittings with Male Threaded Stud</b>                                          | <b>317</b>     |
| <b>Assembly Instructions for Banjo Fittings</b>                                                                 | <b>320</b>     |
| <b>Assembly Instructions for Adjustable Fitting with Locknut (WEE, VEE, TEE, LEE)</b>                           | <b>321</b>     |



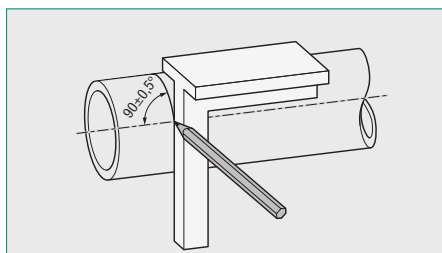
## Assembly Instructions for STAUFF Connect 24° Tube Fittings with Double Edge Cutting Ring (Type FI-DS)

100% Assembly with the Manual Final Assembly Stud (Type FI-FK) and Assembly with the Fitting Body

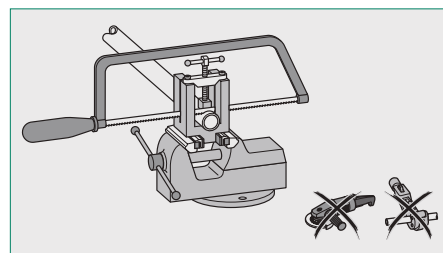
### 1. Tube Preparation



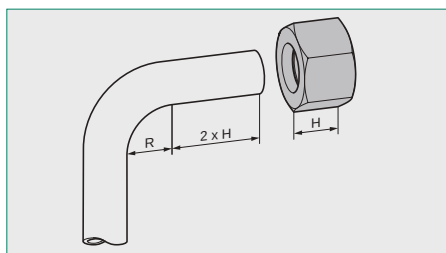
Saw off tube in right angle and at least 10 mm / .40 in from the cut made by the tube manufacturer / supplier in order to avoid failures caused during shipment.



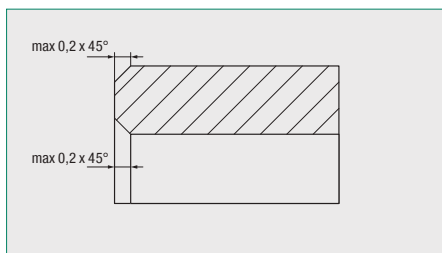
A maximum angular deviation / tolerance of  $\pm 0,5^\circ$  relative to the tube axis is permissible.



Only use proper tube sawing machinery or equipment. Do not use tube cutters or grinders as this may result in unwanted angled cuts and cause severe burring.



For tube bends, the length of the straight section of the tube end to the start of the bending radius has to be twice the height of the union nut.

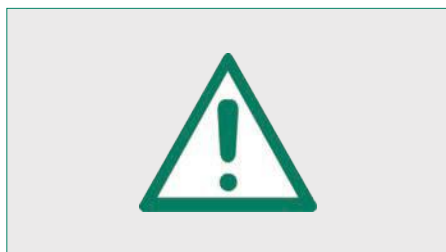


Slightly deburr inside and outside of the tube end (max 0,2 x 45°). The assembly area of the tube has to be free of contamination, chips and paint.

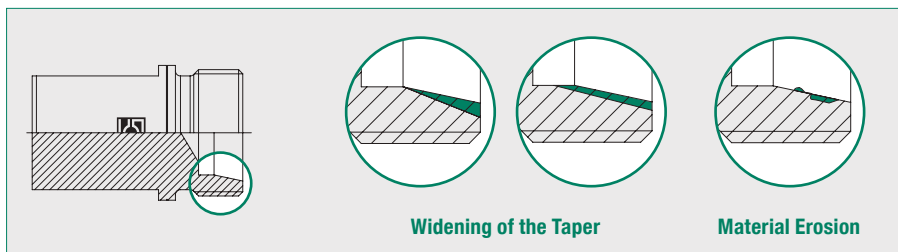


Please note: Improperly prepared and contaminated tubes will affect the service life of the connection and may result in leakage.

### 2. Assembly Preparation

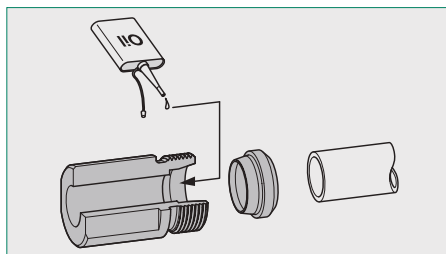


Please note: Hardened final assembly studs are wear-resistant, thus allowing for consistent assembly results with a maximum degree of accuracy, reliability and process stability.



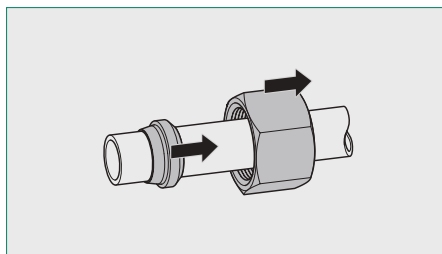
However, they have to be checked for dimensional accuracy regularly. Assembly studs that are damaged and/or dimensionally not accurate must be replaced under any circumstances!

Typical damages include widening of the 24° angle or the entire taper, as well as material erosion.



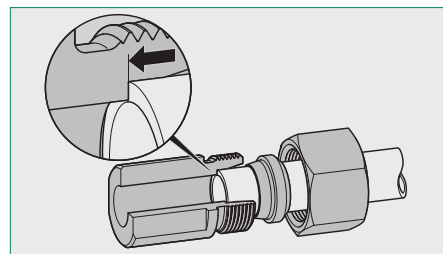
Lightly lubricate the 24° taper of the final assembly stud (e.g. using mineral-oil based hydraulic fluid HLP32). Do not use lubricating grease!

Immediately proceed with the assembly in order to avoid exposure to contamination.



Consecutively put the union nut first and then the cutting ring onto the tube end.

Pay attention to the correct alignment of the cutting ring: The cutting edges have to face to the tube end.



Carefully insert the tube end into the 24° taper of the final assembly stud and push it firmly against the inner stop.

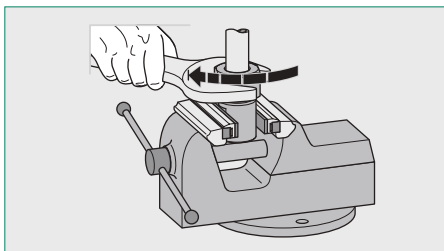
The tube must be held in this position during the entire assembly process in order to avoid faulty assembly.



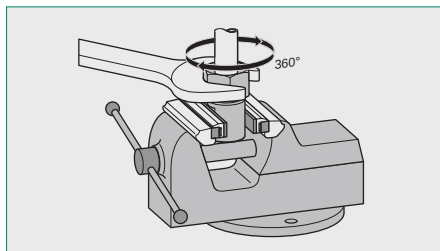
## Assembly Instructions for STAUFF Connect 24° Tube Fittings with Double Edge Cutting Ring (Type FI-DS)

### 100% Assembly with the Manual Final Assembly Stud (Type FI-FK) and Assembly with the Fitting Body

#### 3. Assembly in the Assembly Stud

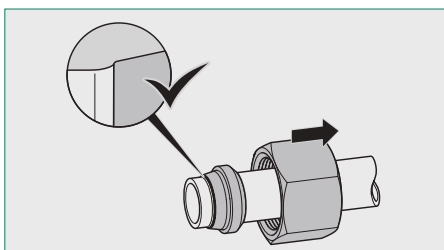


Tighten the union nut until the noticeable increase in force (pressure point). The cutting ring now grips the tube, which can no longer be rotated.



Use a suitable spanner to tighten the union nut another full turn (360°) beyond the pressure point. In doing so, the cutting ring will uniformly cut into the tube.

#### 4. Inspection



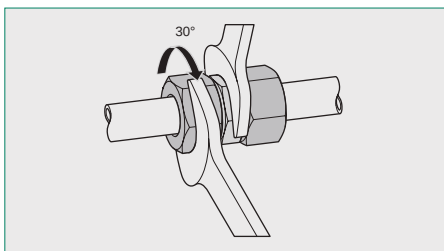
Fully untighten the union nut for a visual inspection after the assembly. A raise of tube material must be clearly visible in front of the cutting edge.

In this position, it is still permissible for the cutting ring to turn on the tube, but not to be displaced in axial direction of the tube.



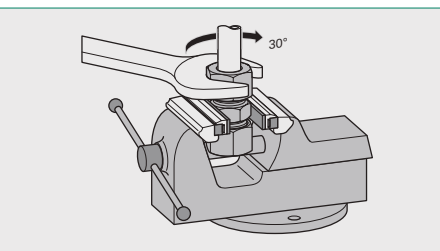
Please note: If not enough tube material has been raised in front of the cutting edge or if the cutting ring is still capable of being displaced in axial direction, the assembly procedure must be repeated by using more force, and the result must be re-checked.

#### 5. Assembly with the Fitting Body



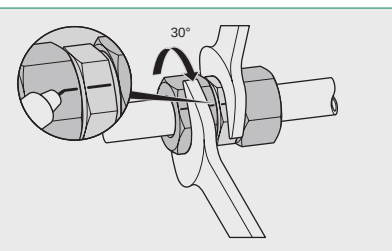
Carefully insert the assembled tube end into the 24° taper of the fitting body.

Use a suitable spanner to tighten the union nut until the noticeable increase in force, and then finish the assembly with another approximately 1/12 a turn (30°) beyond this point.



Always use a second spanner to hold the fitting body during the entire assembly procedure.

In case of unfavourable mounting conditions or larger tube dimensions, use a bench vice for the assembly.



A marking line applied on the union nut and the fitting body makes it easier to indicate the sufficient tightening angle.

#### 6. Repeated Assembly

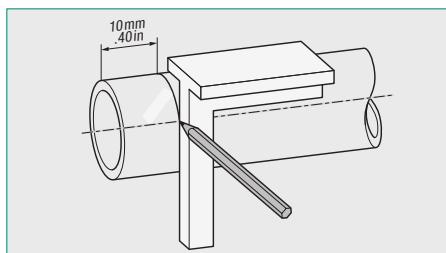
For repeated assemblies, please use a suitable spanner to tighten the union nut until the noticeable increase in force, and then finish the assembly with another approximately 1/12 a turn (30°) beyond this point.



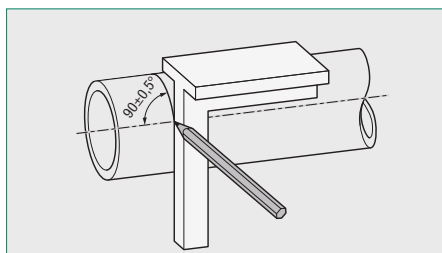
## Assembly Instructions for STAUFF Connect 24° Tube Fittings with Double Edge Cutting Ring (Type FI-DS)

### 50% Assembly with the Manual Pre-Assembly Stud (Type FI-VK) and Assembly with the Fitting Body

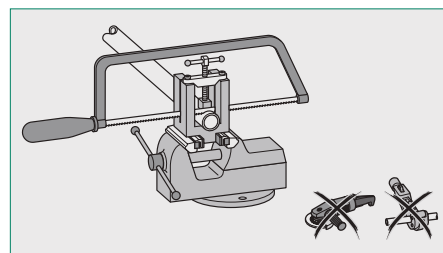
#### 1. Tube Preparation



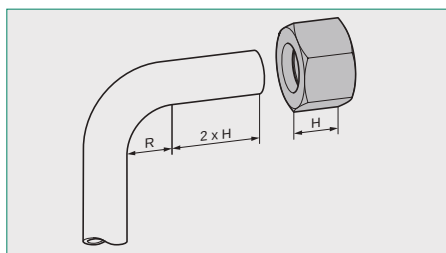
Saw off tube in right angle and at least 10 mm / .40 in from the cut made by the tube manufacturer / supplier in order to avoid failures caused during shipment.



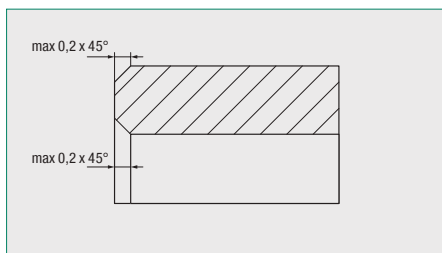
A maximum angular deviation / tolerance of  $\pm 0,5^\circ$  relative to the tube axis is permissible.



Only use proper tube sawing machinery or equipment. Do not use tube cutters or grinders as this may result in unwanted angled cuts and cause severe burring.



For tube bends, the length of the straight section of the tube end to the start of the bending radius has to be twice the height of the union nut.

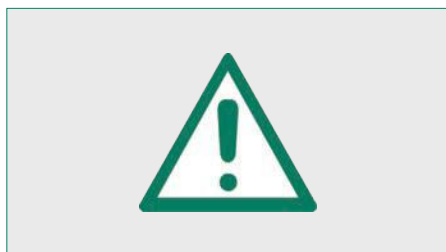


Slightly deburr inside and outside of the tube end (max 0,2 x 45°). The assembly area of the tube has to be free of contamination, chips and paint.

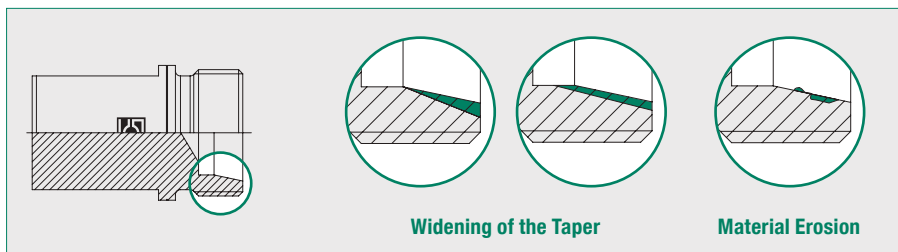


Please note: Improperly prepared and contaminated tubes will affect the service life of the connection and may result in leakage.

#### 2. Assembly Preparation

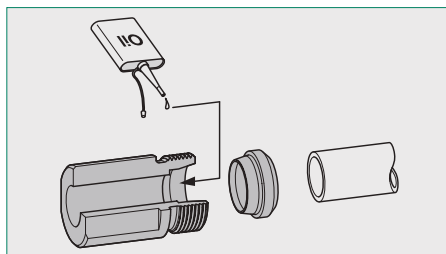


Please note: Hardened pre-assembly studs are wear-resistant, thus allowing for consistent assembly results with a maximum degree of accuracy, reliability and process stability.



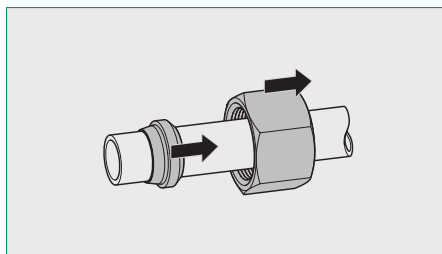
However, they have to be checked for dimensional accuracy regularly. Assembly studs that are damaged and/or dimensionally not accurate must be replaced under any circumstances!

Typical damages include widening of the 24° angle or the entire taper, as well as material erosion.



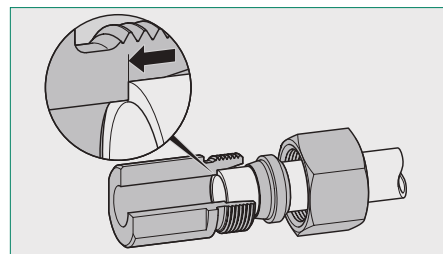
Lightly lubricate the 24° taper of the pre-assembly stud (e.g. using mineral-oil based hydraulic fluid HLP32). Do not use lubricating grease!

Immediately proceed with the assembly in order to avoid exposure to contamination.



Consecutively put the union nut first and then the cutting ring onto the tube end.

Pay attention to the correct alignment of the cutting ring: The cutting edges have to face to the tube end.



Carefully insert the tube end into the 24° taper of the pre-assembly stud and push it firmly against the inner stop.

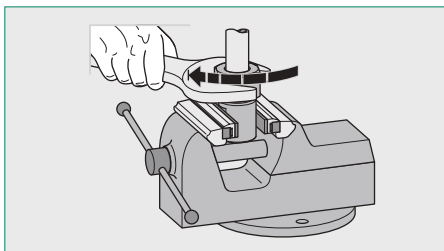
The tube must be held in this position during the entire assembly process in order to avoid faulty assembly.



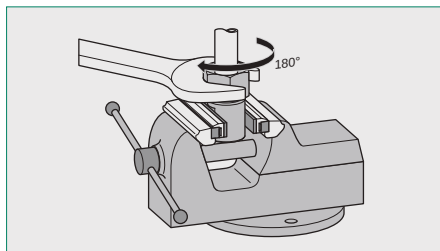
## Assembly Instructions for STAUFF Connect 24° Tube Fittings with Double Edge Cutting Ring (Type FI-DS)

### 50% Assembly with the Manual Pre-Assembly Stud (Type FI-VK) and Assembly with the Fitting Body

#### 3. Assembly in the Assembly Stud

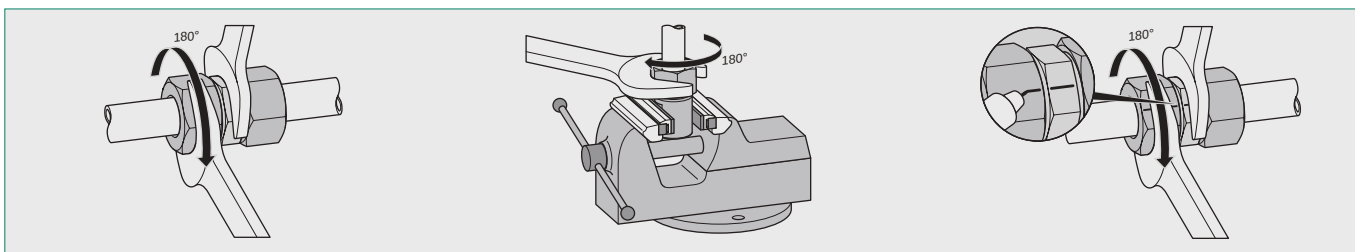


Tighten the union nut until the noticeable increase in force (pressure point). The cutting ring now grips the tube, which can no longer be rotated.



Use a suitable spanner to tighten the union nut another 1/2 a turn (180°) beyond the pressure point. In doing so, the cutting ring will uniformly cut into the tube.

#### 4. Assembly with the Fitting Body



Carefully insert the assembled tube end into the 24° taper of the fitting body.

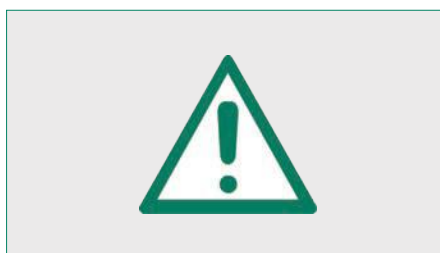
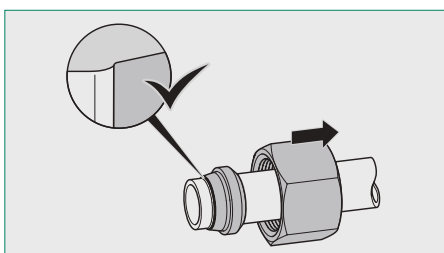
Use a suitable spanner to tighten the union nut until the noticeable increase in force, and then finish the assembly with another approximately 1/2 a turn (180°) beyond this point.

Always use a second spanner to hold the fitting body during the entire assembly procedure.

In case of unfavourable mounting conditions or larger tube dimensions, use a bench vice for the assembly.

A marking line applied on the union nut and the fitting body makes it easier to indicate the sufficient tightening angle.

#### 5. Inspection



Fully untighten the union nut for a visual inspection after the assembly. A raise of tube material must be clearly visible in front of the cutting edge.

In this position, it is still permissible for the cutting ring to turn on the tube, but not to be displaced in axial direction of the tube.

Please note: If not enough tube material has been raised in front of the cutting edge or if the cutting ring is still capable of being displaced in axial direction, the assembly procedure must be repeated by using more force, and the result must be re-checked.

#### 6. Repeated Assembly

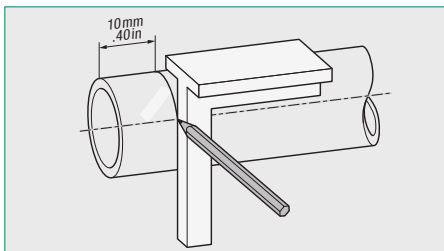
For repeated assemblies, please use a suitable spanner to tighten the union nut until the noticeable increase in force, and then finish the assembly with another approximately 1/12 a turn (30°) beyond this point.



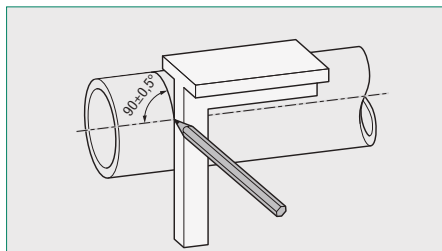
## Assembly Instructions for STAUFF Connect 24° Tube Fittings with Double Edge Cutting Ring (Type FI-DS)

### Direct Assembly with the Fitting Body

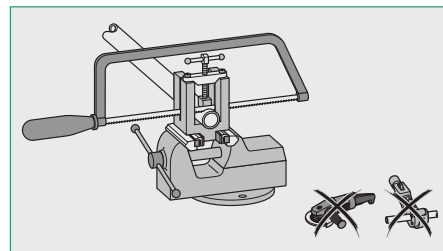
#### 1. Tube Preparation



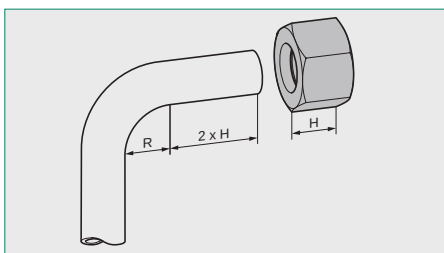
Saw off tube in right angle and at least 10 mm / .40 in from the cut made by the tube manufacturer / supplier in order to avoid failures caused during shipment.



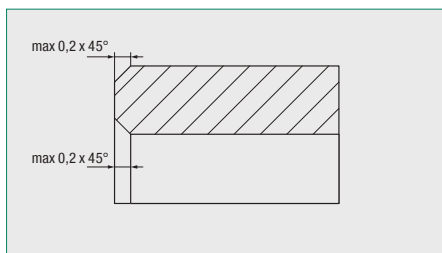
A maximum angular deviation / tolerance of  $\pm 0,5^\circ$  relative to the tube axis is permissible.



Only use proper tube sawing machinery or equipment. Do not use tube cutters or grinders as this may result in unwanted angled cuts and cause severe burring.



For tube bends, the length of the straight section of the tube end to the start of the bending radius has to be twice the height of the union nut.

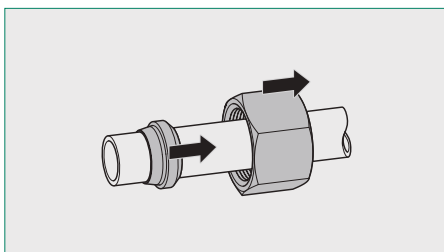


Slightly deburr inside and outside of the tube end (max  $0,2 \times 45^\circ$ ). The assembly area of the tube has to be free of contamination, chips and paint.

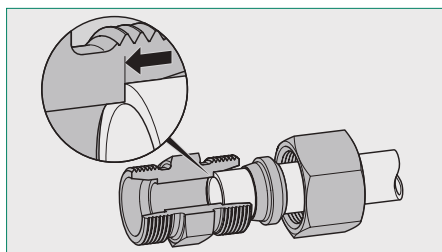


Please note: Improperly prepared and contaminated tubes will affect the service life of the connection and may result in leakage.

#### 2. Assembly Preparation



Consecutively put the union nut first and then the cutting ring onto the tube end.



Carefully insert the tube end into the 24° taper of the fitting body and push it firmly against the inner stop.

Pay attention to the correct alignment of the cutting ring: The cutting edges have to face to the tube end.

The tube must be held in this position during the entire assembly process in order to avoid faulty assembly.

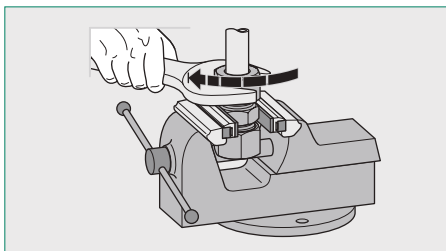




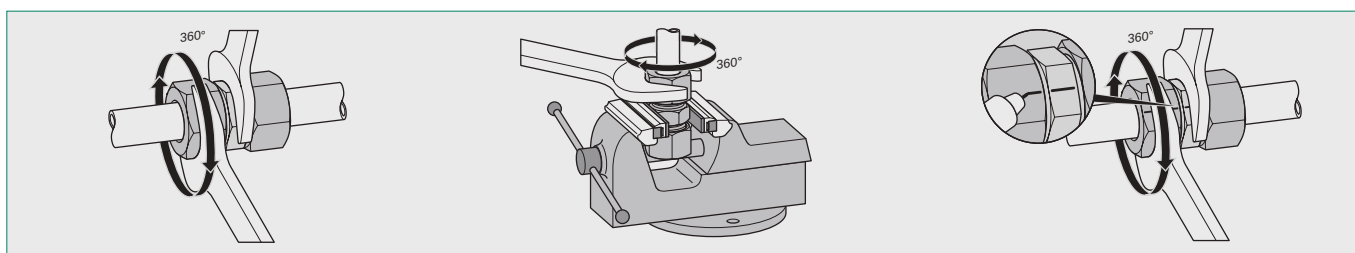
## Assembly Instructions for STAUFF Connect 24° Tube Fittings with Double Edge Cutting Ring (Type FI-DS)

### Direct Assembly with the Fitting Body

#### 3. Assembly in the Fitting Body



Tighten the union nut until the noticeable increase in force (pressure point). The cutting ring now grips the tube, which can no longer be rotated.



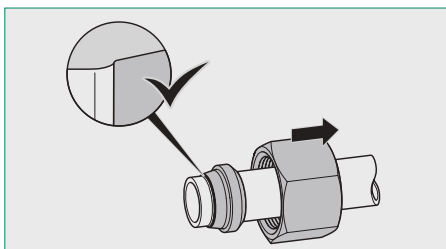
Use a suitable spanner to tighten the union nut another full turn (360°) beyond the pressure point. In doing so, the cutting ring will uniformly cut into the tube.

Always use a second spanner to hold the fitting body during the entire assembly procedure.

In case of unfavourable mounting conditions or larger tube dimensions, use a bench vice for the assembly.

A marking line applied on the union nut and the fitting body makes it easier to indicate the sufficient tightening angle.

#### 4. Inspection



Fully untighten the union nut for a visual inspection after the assembly. A raise of tube material must be clearly visible in front of the cutting edge.

In this position, it is still permissible for the cutting ring to turn on the tube, but not to be displaced in axial direction of the tube.



Please note: If not enough tube material has been raised in front of the cutting edge or if the cutting ring is still capable of being displaced in axial direction, the assembly procedure must be repeated by using more force, and the result must be re-checked.

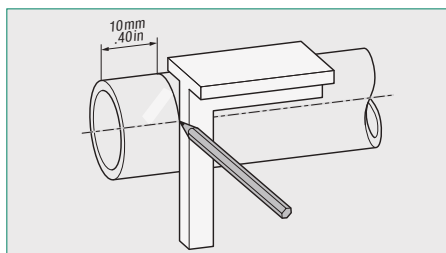
#### 5. Repeated Assembly

For repeated assemblies, please use a suitable spanner to tighten the union nut until the noticeable increase in force, and then finish the assembly with another approximately 1/12 a turn (30°) beyond this point.

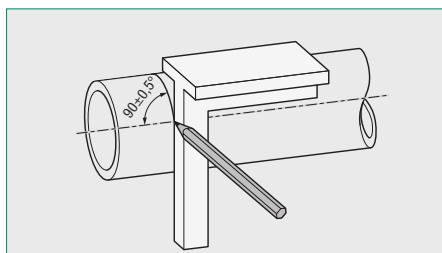
## Assembly Instructions for STAUFF Connect 24° Tube Fittings with Double Edge Cutting Ring (Type FI-DS)

### Machine-Assisted 100% Assembly with a STAUFF Press Assembly Machine and Assembly with the Fitting Body

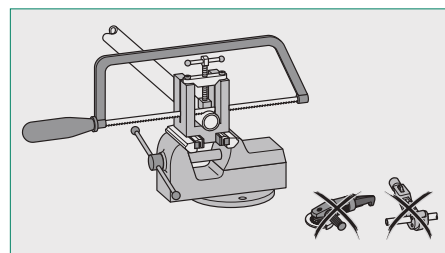
#### 1. Tube Preparation



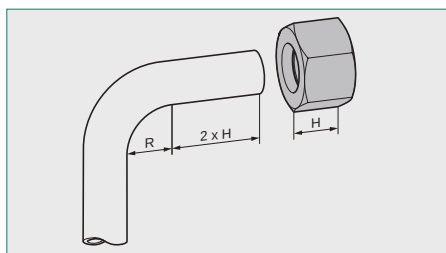
Saw off tube in right angle and at least 10 mm / .40 in from the cut made by the tube manufacturer / supplier in order to avoid failures caused during shipment.



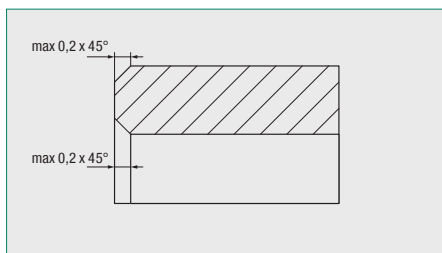
A maximum angular deviation / tolerance of  $\pm 0,5^\circ$  relative to the tube axis is permissible.



Only use proper tube sawing machinery or equipment. Do not use tube cutters or grinders as this may result in unwanted angled cuts and cause severe burring.



For tube bends, the length of the straight section of the tube end to the start of the bending radius has to be twice the height of the union nut.



Slightly deburr inside and outside of the tube end (max 0,2 x 45°). The assembly area of the tube has to be free of contamination, chips and paint.



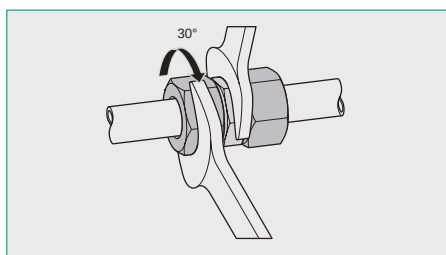
Please note: Improperly prepared and contaminated tubes will affect the service life of the connection and may result in leakage.

#### 2. Assembly Preparation, Machine-Assisted Assembly and Inspection

With regards to assembly preparation, the actual assembly as well as the inspection of assembled tube ends, please follow the detailed instructions in the operating manual of the machine.

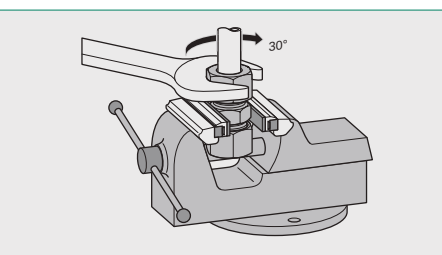


#### 3. Assembly with the Fitting Body



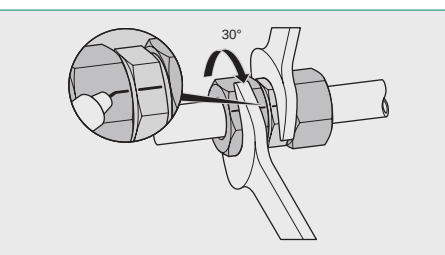
Carefully insert the assembled tube end into the 24° taper of the fitting body.

Use a suitable spanner to tighten the union nut until the noticeable increase in force, and then finish the assembly with another approximately 1/12 a turn (30°) beyond this point.



Always use a second spanner to hold the fitting body during the entire assembly procedure.

In case of unfavourable mounting conditions or larger tube dimensions, use a bench vice for the assembly.



A marking line applied on the union nut and the fitting body makes it easier to indicate the sufficient tightening angle.

#### 4. Repeated Assembly

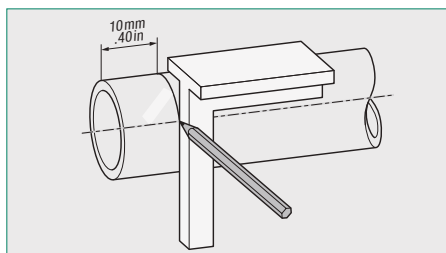
For repeated assemblies, please use a suitable spanner to tighten the union nut until the noticeable increase in force, and then finish the assembly with another approximately 1/12 a turn (30°) beyond this point.



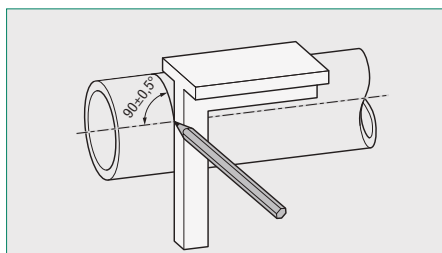
## Assembly Instructions for STAUFF Connect 24° Tube Fittings with Double Edge Cutting Ring (Type FI-DS)

### Machine-Assisted 50% Assembly with a STAUFF Press Assembly Machine and Assembly with the Fitting Body

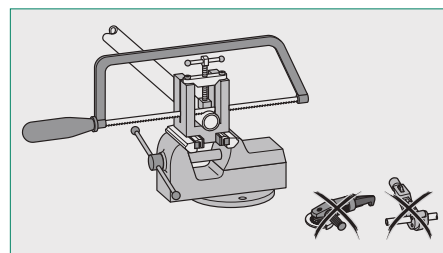
#### 1. Tube Preparation



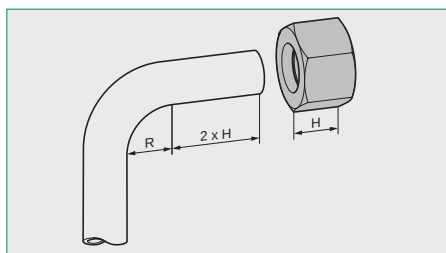
Saw off tube in right angle and at least 10 mm / .40 in from the cut made by the tube manufacturer / supplier in order to avoid failures caused during shipment.



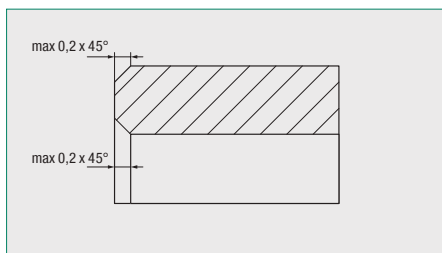
A maximum angular deviation / tolerance of  $\pm 0,5^\circ$  relative to the tube axis is permissible.



Only use proper tube sawing machinery or equipment. Do not use tube cutters or grinders as this may result in unwanted angled cuts and cause severe burring.



For tube bends, the length of the straight section of the tube end to the start of the bending radius has to be twice the height of the union nut.



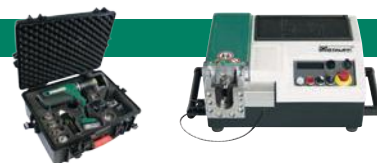
Slightly deburr inside and outside of the tube end (max 0,2 x 45°). The assembly area of the tube has to be free of contamination, chips and paint.



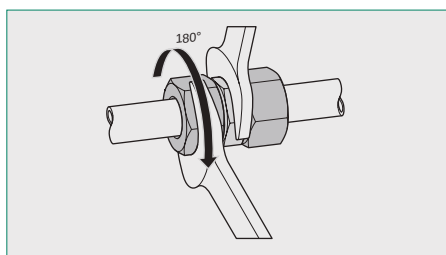
Please note: Improperly prepared and contaminated tubes will affect the service life of the connection and may result in leakage.

#### 2. Assembly Preparation, Machine-Assisted Assembly and Inspection

With regards to assembly preparation, the actual assembly as well as the inspection of assembled tube ends, please follow the detailed instructions in the operating manual of the machine.

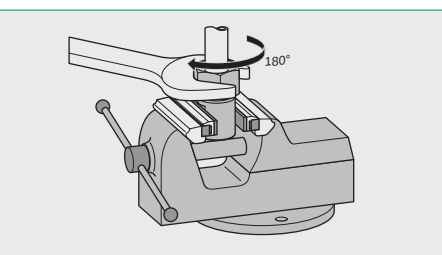


#### 3. Assembly with the Fitting Body



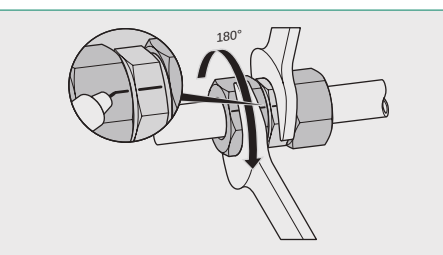
Carefully insert the assembled tube end into the 24° taper of the fitting body.

Use a suitable spanner to tighten the union nut until the noticeable increase in force, and then finish the assembly with another approximately 1/2 a turn (180°) beyond this point.



Always use a second spanner to hold the fitting body during the entire assembly procedure.

In case of unfavourable mounting conditions or larger tube dimensions, use a bench vice for the assembly.



A marking line applied on the union nut and the fitting body makes it easier to indicate the sufficient tightening angle.

#### 4. Repeated Assembly

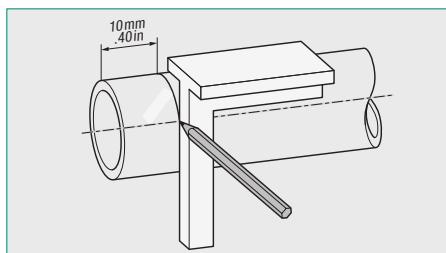
For repeated assemblies, please use a suitable spanner to tighten the union nut until the noticeable increase in force, and then finish the assembly with another approximately 1/12 a turn (30°) beyond this point.



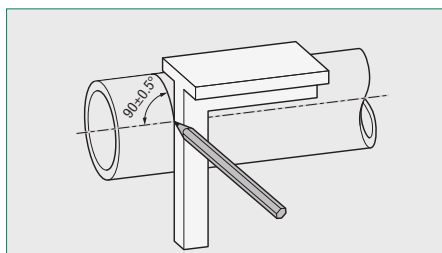
## Assembly Instructions for 24° Tube Connectors with Soft-Sealing Cutting Ring (Type FI-WDDS/FI-WDDS-W5)

### 100% Assembly with the Manual Final Assembly Stud Type FI-FK and Assembly in the Fitting Body

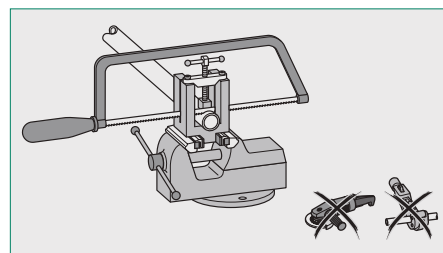
#### 1. Tube Preparation



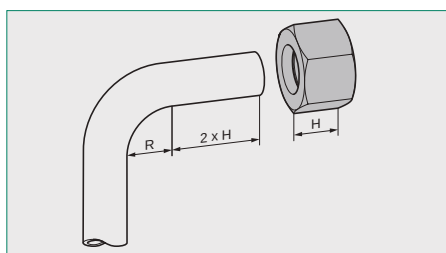
Saw off tube at a right angle (90°) and at least 10 mm from the cut made by the manufacture / supplier.



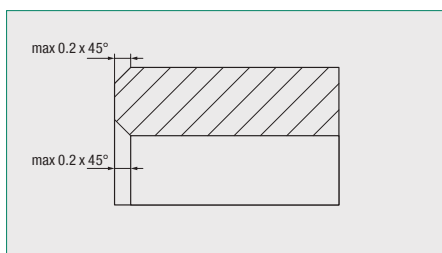
A maximum angular deviation of  $\pm 0.5^\circ$  to the tube axis is permissible.



Do not use tube cutters or grinders.



The length of the straight sections of the tube of tube bends has to be twice the length of the union nut.



Slightly deburr the inside and outside of the tube end (max 0.2 x 45°). The assembly area of the tube has to be free of dirt, chips and paint.

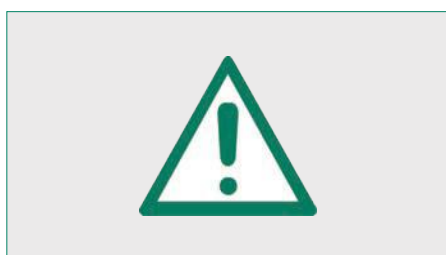


Please note: Improperly prepared and contaminated tubes will affect the service life of the tube connectors and may result in leakage. Poorly deburred tube ends can result in damage to the internal O-ring!

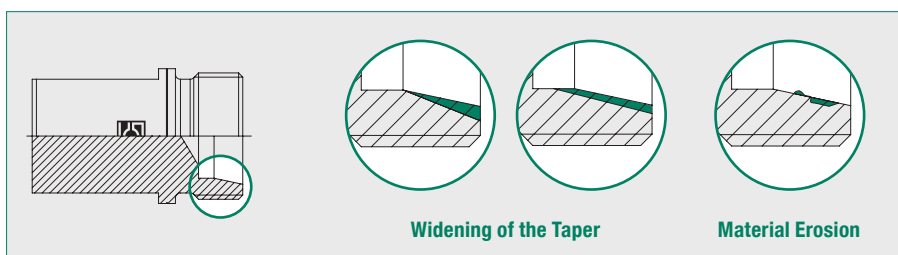


Please note: Assembly of reinforcing sleeves is essential when using thin-walled tubes. Refer to page 304.

#### 2. Assembly Preparation

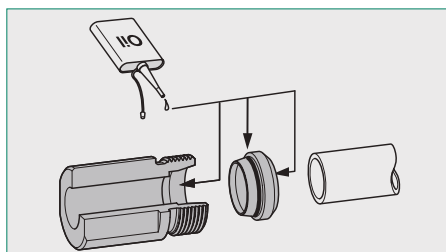


Hardened assembly studs are wear-resistant, thus allowing for consistent assembly results with a maximum degree of accuracy, reliability and process stability.



Assembly studs must be checked regularly for damage and dimensional accuracy. Replace assembly studs that are damaged and/or dimensionally inaccurate in all cases.

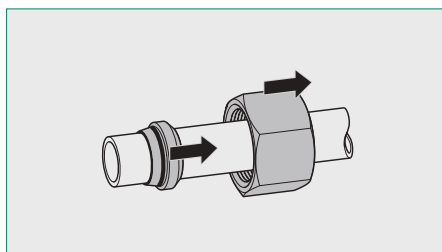
Typical damage includes the partial or complete widening of the 24° taper, as well as material erosion.



Please note when use FI-WDDS-W5 with Stainless Steel Fitting Body: Thread and 45° cone of the union nut and thread of the fitting body grease with special stainless steel fitting grease or use a silver coated union nut.

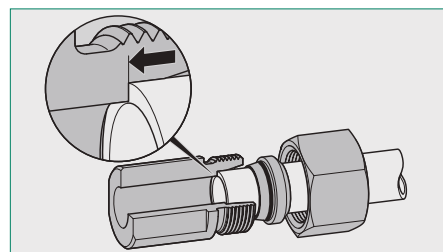
Lubricate the 24° taper of the assembly stud as well as the two soft-sealing elements of the cutting ring (e.g. using hydraulic oil HLP32). Do not use lubricating grease!

Immediately proceed with assembly to avoid the adhesion of dirt.



Consecutively push the union nut and then the cutting ring onto the tube end.

Pay attention to the correct alignment of the cutting ring: the cutting edges of the cutting ring have to face the tube end.



Carefully insert the tube end into the 24° taper of the assembly stud until it is flush with the stop.

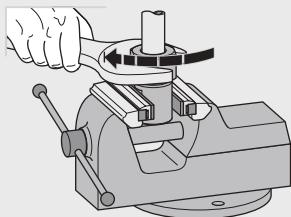
The tube must be held in this position during the entire assembly process.



## Assembly Instructions for 24° Tube Connectors with Soft-Sealing Cutting Ring (Type FI-WDDS/FI-WDDS-W5)

### 100% Assembly with the Manual Final Assembly Stud Type FI-FK and Assembly in the Fitting Body

#### 3. Assembly in the Assembly Stud



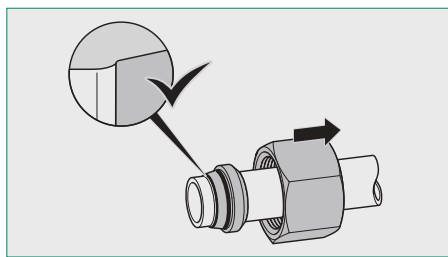
Please note when use FI-WDDS-W5 with Stainless Steel Fitting Body: Thread and 45° cone of the union nut and thread of the fitting body grease with special stainless steel fitting grease or use a silver coated union nut.

Use a suitable spanner.  
Tighten the union nut to the point where there is a first increase in force, the pressure point.  
The pressure point defines the point at which the cutting ring starts gripping the tube.

The tube can then no longer be rotated in the fitting. Now tighten the union nut to the end of the assembly. The end of the assembly is situated approx. 1 to 1-1/4 turns (360° - 450°) beyond the pressure point and is signalled by a significant increase in force.

The cutting ring comes into contact with the face side of the fitting body.

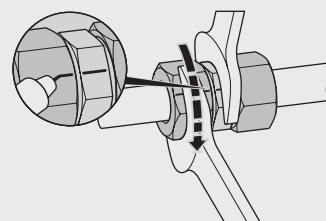
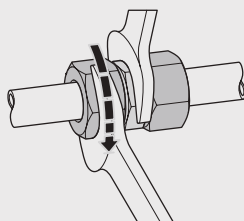
#### 4. Inspection



Fully loosen the union nut to visually inspect the assembly. There must be raised material clearly visible in front of the cutting edge.

Under certain circumstances, it is still possible at this time to turn the cutting ring on the tube (radial direction). It can no longer be moved in the direction of the tube (axial direction).

#### 5. Assembly with the Fitting Body



Please note when use FI-WDDS-W5 with Stainless Steel Fitting Body: Thread and 45° cone of the union nut and thread of the fitting body grease with special stainless steel fitting grease or use a silver coated union nut.

Lightly lubricate the soft-sealing element located on the 24° taper of the cutting ring (e.g. using hydraulic oil HLP32). Do not use lubricating grease!

Immediately proceed with assembly to avoid the adhesion of dirt.

Carefully insert the assembled tube end into the 24° taper of the fitting body.

Tighten the union nut to the point where there is a first increase in force. Then tighten the union nut to the end of the assembly.

The cutting ring comes into contact with the face side of the fitting body after approx. 90° - 150°. The end of the assembly is once again indicated by a significant increase in force.

Use a suitable spanner to hold the fitting body within the tube during the entire assembly process. Use a bench vice for assembly in the event of unfavourable assembly conditions or larger tube dimensions.

A marking line on the union nut and the fitting body makes it easier to note and check the correct tightening angle.

#### 6. Repeated Assembly

Check the soft-sealing element located on the 24° taper of the cutting ring for possible damage.

Carefully insert the tube end into the 24° taper of the fitting body.

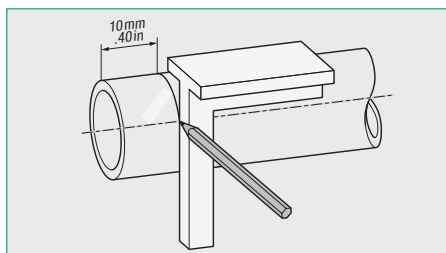
Then tighten the union nut to the end of the assembly. The cutting ring comes into contact with the face side of the fitting body after approx. 90° - 150°. The end of the assembly is once again indicated by a significant increase in force.



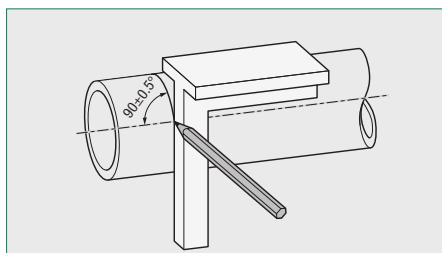
## Assembly Instructions for 24° Tube Connectors with Soft-Sealing Cutting Ring (Type FI-WDDS/FI-WDDS-W5)

### Direct Assembly in the Fitting Body

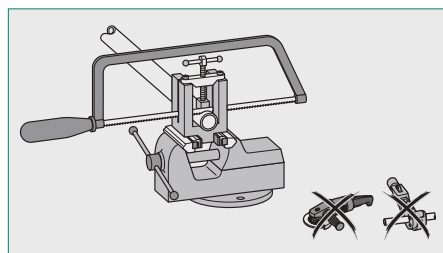
#### 1. Tube Preparation



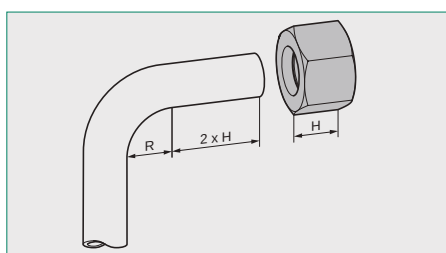
Saw off tube at a right angle (90°) and at least 10 mm from the cut made by the manufacture / supplier.



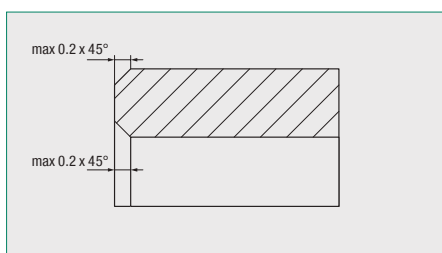
A maximum angular deviation of  $\pm 0.5^\circ$  to the tube axis is permissible.



Do not use tube cutters or grinders.



The length of the straight sections of the tube of tube bends has to be twice the length of the union nut.



Slightly deburr the inside and outside of the tube end (max 0.2 x 45°). The assembly area of the tube has to be free of dirt, chips and paint.

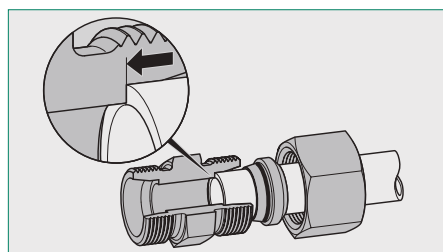
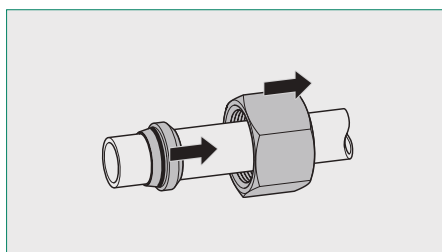
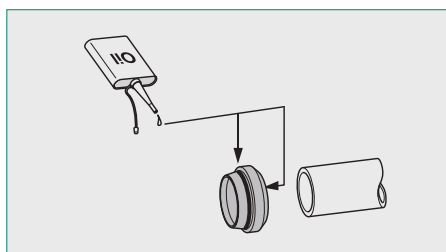


Please note: Improperly prepared and contaminated tubes will affect the service life of the tube connectors and may result in leakage. Poorly deburred tube ends can result in damage to the internal O-ring!



Please note: Assembly of reinforcing sleeves is essential when using thin-walled tubes. Refer to page 304.

#### 2. Assembly Preparation



Please note when use FI-WDDS-W5 with Stainless Steel Fitting Body: Thread and 45° cone of the union nut and thread of the fitting body grease with special stainless steel fitting grease or use a silver coated union nut.

Lightly lubricate the two soft-sealing elements of the cutting ring (e.g. using hydraulic oil HLP32). Do not use lubricating grease!

Immediately proceed with assembly to avoid the adhesion of dirt.

Consecutively push the union nut and then the cutting ring onto the tube end.

Pay attention to the correct alignment of the cutting ring: the cutting edges of the cutting ring have to face the tube end.

Carefully insert the tube end into the 24° taper of the fitting body until it is flush with the stop.

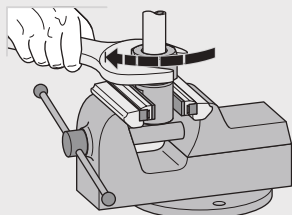
The tube must be held in this position during the entire assembly process.





## Assembly Instructions for 24° Tube Connectors with Soft-Sealing Cutting Ring (Type FI-WDDS/FI-WDDS-W5) Direct Assembly in the Fitting Body

### 3. Assembly in the Fitting Body



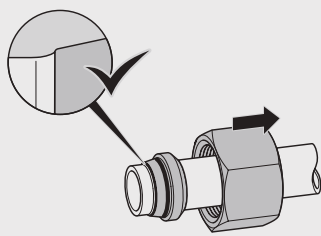
Please note when use FI-WDDS-W5 with Stainless Steel Fitting Body: Thread and 45° cone of the union nut and thread of the fitting body grease with special stainless steel fitting grease or use a silver coated union nut.

Use a suitable spanner. Tighten the union nut to the point where there is a first increase in force, the pressure point. The pressure point defines the point at which the cutting ring starts gripping the tube.

The tube can then no longer be rotated in the fitting. Now tighten the union nut to the end of the assembly. The end of the assembly is situated approx. 1 to 1-1/4 turns (360° - 450°) beyond the pressure point and is

signalled by a significant increase in force. The cutting ring comes into contact with the face side of the fitting body.

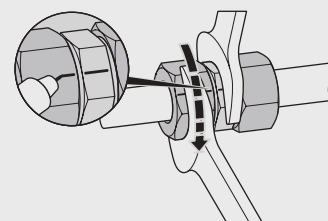
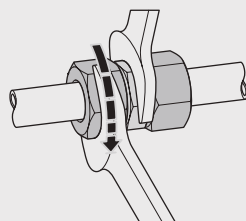
### 4. Inspection



Fully loosen the union nut to visually inspect the assembly. There must be raised material clearly visible in front of the cutting edge.

Under certain circumstances, it is still possible at this time to turn the cutting ring on the tube (radial direction). It can no longer be moved in the direction of the tube (axial direction).

### 5. Assembly with the Fitting Body



Please note when use FI-WDDS-W5 with Stainless Steel Fitting Body: Thread and 45° cone of the union nut and thread of the fitting body grease with special stainless steel fitting grease or use a silver coated union nut.

Lightly lubricate the soft-sealing element located on the 24° taper of the cutting ring (e.g. using hydraulic oil HLP32). Do not use lubricating grease!

Immediately proceed with assembly to avoid the adhesion of dirt.

Carefully insert the assembled tube end into the 24° taper of the fitting body.

Tighten the union nut to the point where there is a first increase in force. Then tighten the union nut to the end of the assembly.

The cutting ring comes into contact with the face side of the fitting body after approx. 90° - 150°. The end of the assembly is once again indicated by a significant increase in force.

Use a suitable spanner to hold the fitting body within the tube during the entire assembly process. Use a bench vice for assembly in the event of unfavourable assembly conditions or larger tube dimensions.

A marking line on the union nut and the fitting body makes it easier to note and check the correct tightening angle.

### 6. Repeated Assembly

Check the soft-sealing element located on the 24° taper of the cutting ring for possible damage.

Carefully insert the tube end into the 24° taper of the fitting body.

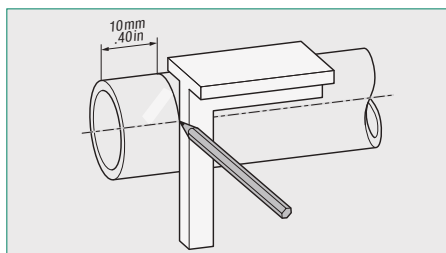
Then tighten the union nut to the end of the assembly. The cutting ring comes into contact with the face side of the fitting body after approx. 90° - 150°. The end of the assembly is once again indicated by a significant increase in force.



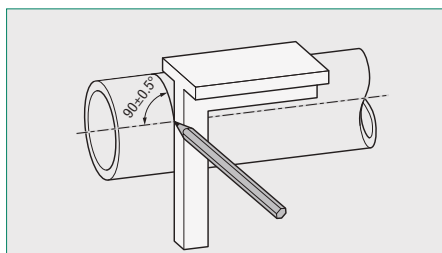
## Assembly Instructions for 24° Tube Connectors with Soft-Sealing Cutting Ring (Type FI-WDDS/FI-WDDS-W5)

### Machine-Assisted 100% Assembly with a STAUFF Press Assembly Machine and Assembly with the Fitting Body

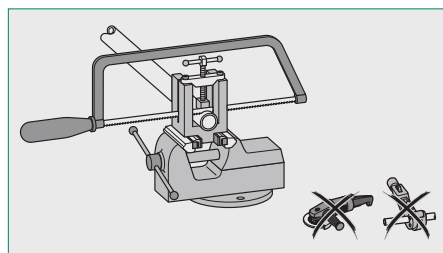
#### 1. Tube Preparation



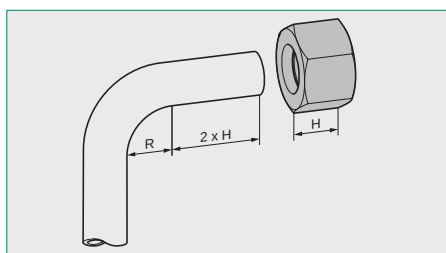
Saw off tube at a right angle (90°) and at least 10 mm from the cut made by the manufacture / supplier.



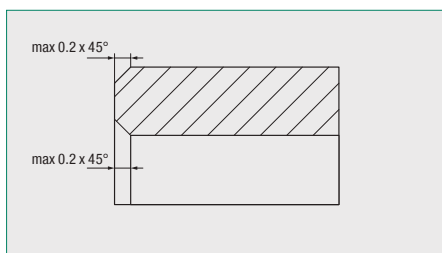
A maximum angular deviation of  $\pm 0.5^\circ$  to the tube axis is permissible.



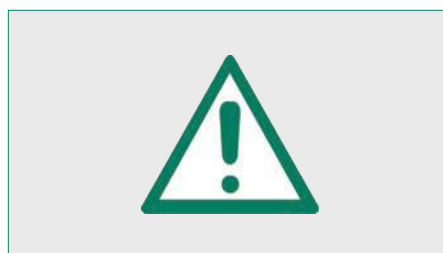
Do not use tube cutters or grinders.



The length of the straight sections of the tube of tube bends has to be twice the length of the union nut.



Slightly deburr the inside and outside of the tube end (max 0.2 x 45°). The assembly area of the tube has to be free of dirt, chips and paint.



Please note: Improperly prepared and contaminated tubes will affect the service life of the tube connectors and may result in leakage. Poorly deburred tube ends can result in damage to the internal O-ring!



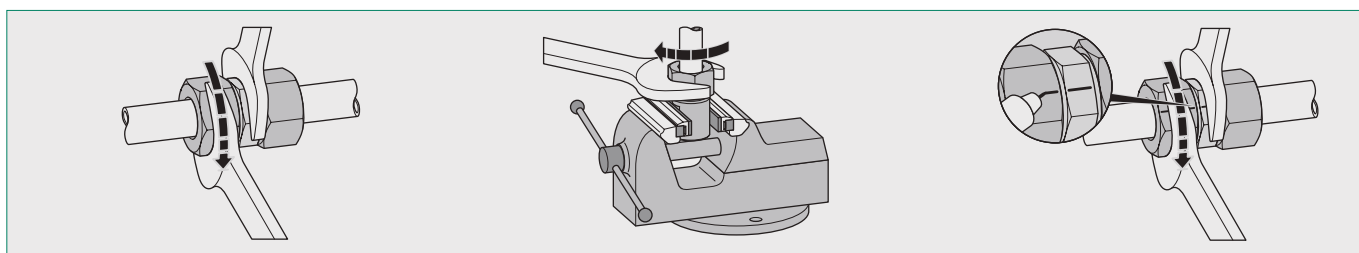
Please note: Assembly of reinforcing sleeves is essential when using thin-walled tubes. Refer to page 304.

#### 2. Assembly Preparation, Machine-Assisted Assembly and Inspection

Please refer to the detailed instructions in the operating manual for the machine with regard to assembly preparation, actual assembly and inspection of the assembled tube ends.



#### 3. Assembly with the Fitting Body



Please note when use FI-WDDS-W5 with Stainless Steel Fitting Body: Thread and 45° cone of the union nut and thread of the fitting body grease with special stainless steel fitting grease or use a silver coated union nut.

Lightly lubricate the soft-sealing element located on the 24° taper of the cutting ring (e.g. using hydraulic oil HLP32). Do not use lubricating grease!

Immediately proceed with assembly to avoid the adhesion of dirt.

Carefully insert the assembled tube end into the 24° taper of the fitting body.

Tighten the union nut to the point where there is a first increase in force. Then tighten the union nut to the end of the assembly.

The cutting ring comes into contact with the face side of the fitting body after approx. 90° - 150°. The end of the assembly is once again indicated by a significant increase in force.

Use a suitable spanner to hold the fitting body within the tube during the entire assembly process. Use a bench vice for assembly in the event of unfavourable assembly conditions or larger tube dimensions.

A marking line on the union nut and the fitting body makes it easier to note and check the correct tightening angle.

#### 6. Repeated Assembly

Check the soft-sealing element located on the 24° taper of the cutting ring for possible damage.

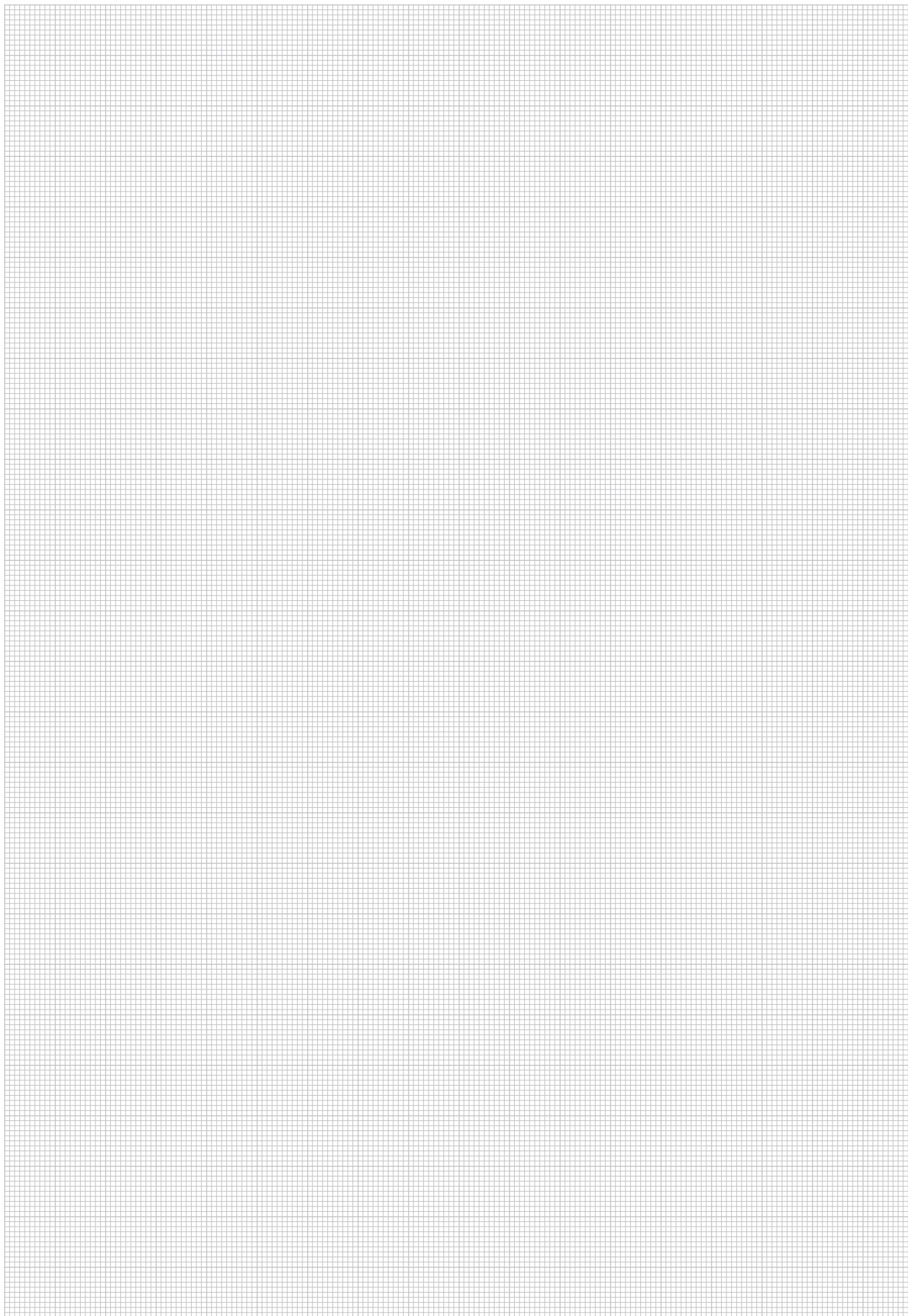
Carefully insert the tube end into the 24° taper of the fitting body.

Then tighten the union nut to the end of the assembly. The cutting ring comes into contact with the face side of the fitting body after approx. 90° - 150°. The end of the assembly is once again indicated by a significant increase in force.



Please note when use FI-WDDS-W5 with Stainless Steel Fitting Body: Thread and 45° cone of the union nut and thread of the fitting body grease with special stainless steel fitting grease or use a silver coated union nut.





## Assembly Instructions for Support Sleeves (Type FI-VH)

**Selection Chart for Tubes made of Steel / Stainless Steel**

| Series | Tube OD |      | Tube Wall Thickness |     |      |     |     |     |     |     |     |     |
|--------|---------|------|---------------------|-----|------|-----|-----|-----|-----|-----|-----|-----|
|        | (mm)    | (in) | (mm)                | 0,5 | 0,75 | 1,0 | 1,5 | 2,0 | 2,5 | 3,0 | 3,5 | 4,0 |
| LL     | 4       | .16  |                     |     |      |     |     |     |     |     |     |     |
|        | 6       | .24  | ●                   |     |      |     |     |     |     |     |     |     |
|        | 8       | .31  | ●                   |     |      |     |     |     |     |     |     |     |
| L      | 6       | .24  | ●                   | ●   |      |     |     |     |     |     |     |     |
|        | 8       | .31  | ●                   | ●   |      |     |     |     |     |     |     |     |
|        | 10      | .39  | ●                   | ●   |      |     |     |     |     |     |     |     |
|        | 12      | .47  | ●                   | ●   | ○    |     |     |     |     |     |     |     |
|        | 15      | .59  | ●                   | ●   | ●    |     |     |     |     |     |     |     |
|        | 18      | .71  | ●                   | ●   | ●    | ○   |     |     |     |     |     |     |
|        | 22      | .87  | ●                   | ●   | ●    | ○   | ○   |     |     |     |     |     |
|        | 28      | 1.10 | ●                   | ●   | ●    | ○   | ○   | ○   |     |     |     |     |
|        | 35      | 1.38 | ●                   | ●   | ●    | ●   | ○   | ○   | ○   |     |     |     |
|        | 42      | 1.65 | ●                   | ●   | ●    | ●   | ○   | ○   | ○   |     |     |     |
| S      | 6       | .24  | ●                   | ●   |      |     |     |     |     |     |     |     |
|        | 8       | .31  | ●                   | ●   |      |     |     |     |     |     |     |     |
|        | 10      | .39  | ●                   | ●   |      |     |     |     |     |     |     |     |
|        | 12      | .47  | ●                   | ●   | ○    |     |     |     |     |     |     |     |
|        | 14      | .55  | ●                   | ●   | ●    |     |     |     |     |     |     |     |
|        | 16      | .63  | ●                   | ●   | ●    | ○   |     |     |     |     |     |     |
|        | 20      | .79  | ●                   | ●   | ●    | ●   | ○   |     |     |     |     |     |
|        | 25      | .98  | ●                   | ●   | ●    | ●   | ○   | ○   |     |     |     |     |
|        | 30      | 1.18 | ●                   | ●   | ●    | ●   | ●   | ○   | ○   |     |     |     |
|        | 38      | 1.50 | ●                   | ●   | ●    | ●   | ●   | ●   | ○   | ○   |     |     |

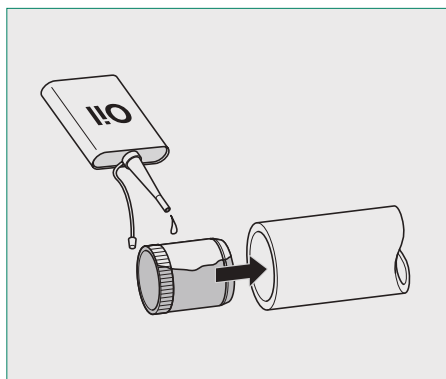
**Selection Chart for Tubes made of Non-Ferrous Metals**

| Series | Tube OD |      | Tube Wall Thickness |     |      |     |     |     |     |     |     |     |
|--------|---------|------|---------------------|-----|------|-----|-----|-----|-----|-----|-----|-----|
|        | (mm)    | (in) | (mm)                | 0,5 | 0,75 | 1,0 | 1,5 | 2,0 | 2,5 | 3,0 | 3,5 | 4,0 |
| LL     | 4       | .16  |                     |     |      |     |     |     |     |     |     |     |
|        | 6       | .24  | ●                   | ●   |      |     |     |     |     |     |     |     |
|        | 8       | .31  | ●                   | ●   |      |     |     |     |     |     |     |     |
| L      | 6       | .24  | ●                   | ●   | ●    |     |     |     |     |     |     |     |
|        | 8       | .31  | ●                   | ●   | ●    |     |     |     |     |     |     |     |
|        | 10      | .39  | ●                   | ●   | ●    | ○   |     |     |     |     |     |     |
|        | 12      | .47  | ●                   | ●   | ●    | ●   |     |     |     |     |     |     |
|        | 15      | .59  | ●                   | ●   | ●    | ●   |     |     |     |     |     |     |
|        | 18      | .71  | ●                   | ●   | ●    | ●   | ●   |     |     |     |     |     |
|        | 22      | .87  | ●                   | ●   | ●    | ●   | ●   | ●   |     |     |     |     |
|        | 28      | 1.10 | ●                   | ●   | ●    | ●   | ●   | ●   | ●   |     |     |     |
|        | 35      | 1.38 | ●                   | ●   | ●    | ●   | ●   | ●   | ●   | ●   |     |     |
|        | 42      | 1.65 | ●                   | ●   | ●    | ●   | ●   | ●   | ●   | ●   | ●   |     |
| S      | 6       | .24  | ●                   | ●   | ●    |     |     |     |     |     |     |     |
|        | 8       | .31  | ●                   | ●   | ●    |     |     |     |     |     |     |     |
|        | 10      | .39  | ●                   | ●   | ●    |     |     |     |     |     |     |     |
|        | 12      | .47  | ●                   | ●   | ●    |     |     |     |     |     |     |     |
|        | 14      | .55  | ●                   | ●   | ●    | ●   |     |     |     |     |     |     |
|        | 16      | .63  | ●                   | ●   | ●    | ●   | ●   |     |     |     |     |     |
|        | 20      | .79  | ●                   | ●   | ●    | ●   | ●   | ●   |     |     |     |     |
|        | 25      | .98  | ●                   | ●   | ●    | ●   | ●   | ●   | ●   |     |     |     |
|        | 30      | 1.18 | ●                   | ●   | ●    | ●   | ●   | ●   | ●   | ●   |     |     |
|        | 38      | 1.50 | ●                   | ●   | ●    | ●   | ●   | ●   | ●   | ●   | ●   |     |

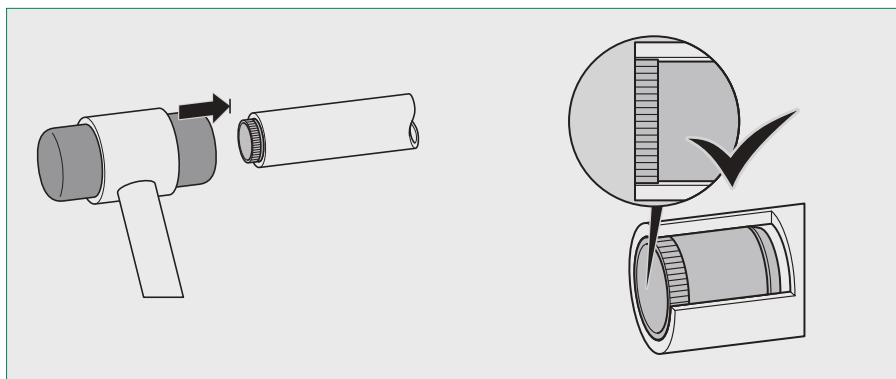
- Generally required ○ Highly recommended, especially for adverse operating conditions (vibrations, risks of self-loosening of fittings etc.)

Support sleeves are generally required for use with tubes made of plastics.

### Assembly



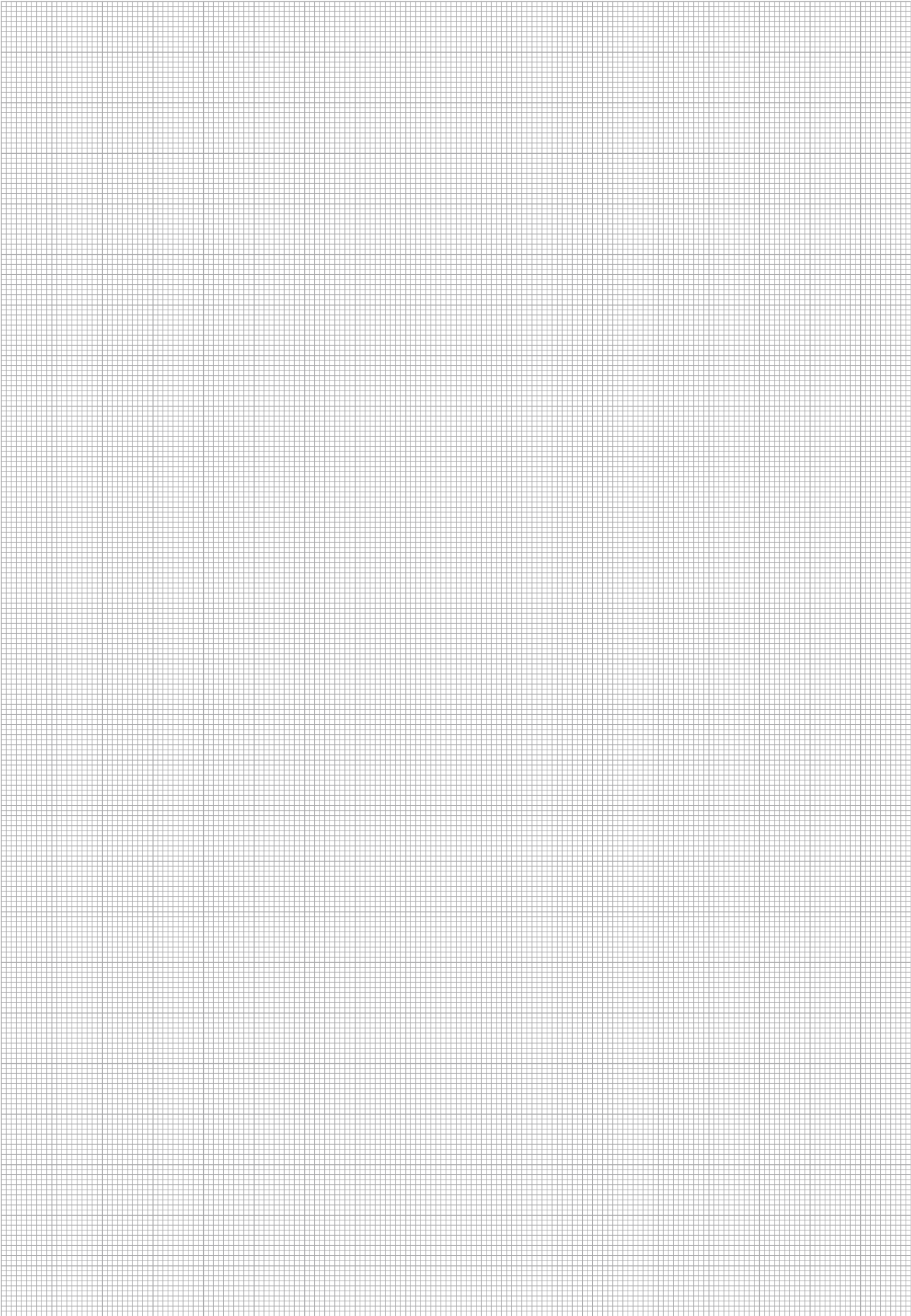
Lubricate the outside of the support sleeve (e.g. using mineral-oil based hydraulic fluid HLP32) and insert it into the tube end up to the knurled section.



Use a hammer (plastic or rubber) to fully drive the support sleeve into the tube end, so that the knurled section is pressed against the inner wall of the tube and the sleeve is firmly flush with the tube end.

In doing so, the support sleeve is prevented from subsequent turning, sliding and falling out.





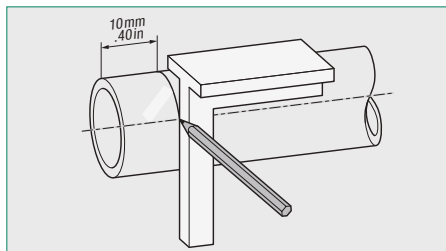
S



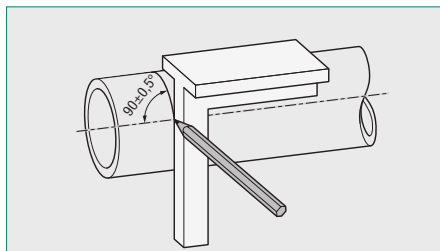
## Assembly Instructions for STAUFF Form EVO Tube Fittings

### Tube End Forming with a STAUFF Form EVO Machine and Assembly with the Fitting Body

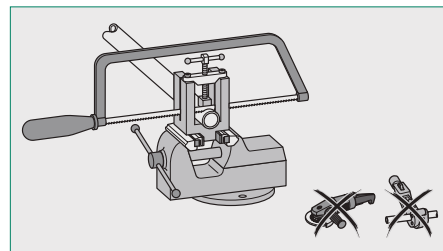
#### 1. Tube Preparation



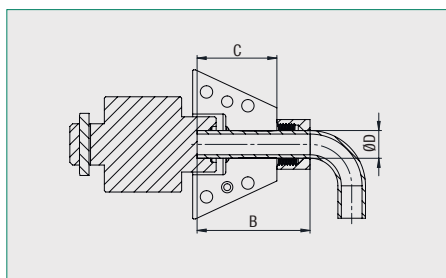
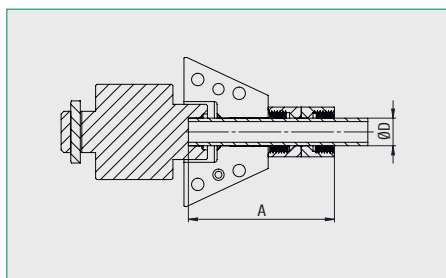
Saw off tube in right angle and at least 10 mm / .40 in from the cut made by the tube manufacturer / supplier in order to avoid failures caused during shipment.



A maximum angular deviation / tolerance of  $\pm 0,5^\circ$  relative to the tube axis is permissible.

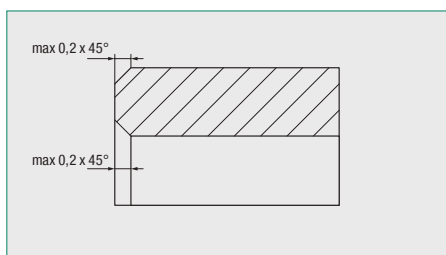


Only use proper tube sawing machinery or equipment. Do not use tube cutters or grinders as this may result in unwanted angled cuts and cause severe burring.



| Series | Tube OD |      | Minimum Length A   |      | Minimum Length B                     |      | Insertion Depth C          |      |
|--------|---------|------|--------------------|------|--------------------------------------|------|----------------------------|------|
|        |         |      | Straight Tube Ends |      | Straight Sections next to Tube Bends |      | incl. 10 mm Door thickness |      |
|        | (mm)    | (in) | (mm)               | (in) | (mm)                                 | (in) | (mm)                       | (in) |
| L      | 6       | .24  | 75                 | 2.95 | 52                                   | 2.05 | 52                         | 2.05 |
|        | 8       | .31  | 75                 | 2.95 | 52                                   | 2.05 | 52                         | 2.05 |
|        | 10      | .39  | 74                 | 2.91 | 52                                   | 2.05 | 52                         | 2.05 |
|        | 12      | .47  | 75                 | 2.95 | 54                                   | 2.13 | 54                         | 2.13 |
|        | 15      | .59  | 89                 | 3.50 | 66                                   | 2.60 | 59                         | 2.32 |
|        | 18      | .71  | 99                 | 3.90 | 74                                   | 2.91 | 67                         | 2.64 |
|        | 22      | .87  | 106                | 4.17 | 82                                   | 3.23 | 72                         | 2.83 |
|        | 28      | 1.10 | 112                | 4.41 | 87                                   | 3.43 | 75                         | 2.95 |
|        | 35      | 1.38 | 138                | 5.43 | 106                                  | 4.17 | 81                         | 3.19 |
|        | 42      | 1.65 | 139                | 5.47 | 106                                  | 4.17 | 81                         | 3.19 |
| S      | 6       | .24  | 77                 | 3.03 | 54                                   | 2.13 | 54                         | 2.05 |
|        | 8       | .31  | 77                 | 3.03 | 54                                   | 2.13 | 52                         | 2.05 |
|        | 10      | .39  | 77                 | 3.03 | 54                                   | 2.13 | 52                         | 2.05 |
|        | 12      | .47  | 78                 | 3.07 | 56                                   | 2.20 | 54                         | 2.13 |
|        | 16      | .63  | 98                 | 3.86 | 72                                   | 2.83 | 61                         | 2.40 |
|        | 20      | .79  | 115                | 4.53 | 84                                   | 3.31 | 70                         | 2.76 |
|        | 25      | .98  | 129                | 5.08 | 96                                   | 3.78 | 79                         | 3.11 |
|        | 30      | 1.18 | 148                | 5.83 | 111                                  | 4.37 | 82                         | 3.23 |
|        | 38      | 1.50 | 170                | 6.69 | 126                                  | 4.96 | 94                         | 3.70 |

Please note the minimum lengths for straight tube ends (dimension A) as well as for straight tube sections next to tube bends (dimension B) that are listed in the table.



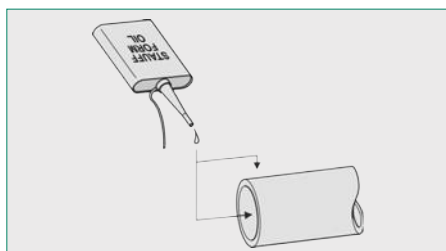
Slightly deburr inside and outside of the tube end (max 0,2 x 45°). The assembly area of the tube has to be free of contamination, chips and paint.



Please note: Improperly prepared and contaminated tubes will affect the service life of the connection and may result in leakage.



#### 2. Preparation and Machine-Assisted Tube Forming



Lightly lubricate the inside and outside of the tube end (e.g. with a thin film of mineral-oil based hydraulic fluid HLP32) before starting the machine-assisted tube forming process. Do not use lubricating grease!

**Important: For tube ends made of stainless steel, always and only use original STAUFF Form EVO Oil. The use of any other fluid is not allowed and may result in damage of the assembly tools.**

Immediately proceed with the assembly in order to avoid exposure to contamination.

If the lubricant film on the outside of the tube end is too thick, fluid will be trapped between the forming tool and the tube end, thus resulting in inaccurate contours.

With regards to the actual tube forming process, please follow the detailed instructions in the operating manual of the machine.

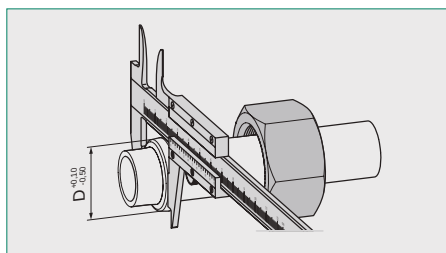




## Assembly Instructions for STAUFF Form EVO Tube Fittings

### Tube End Forming with a STAUFF Form EVO Machine and Assembly with the Fitting Body

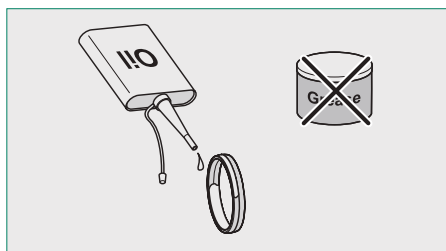
#### 3. Inspection



Use a suitable measuring device (caliper gauge) to check control diameter D of the formed tube end based on the dimension table on the right.

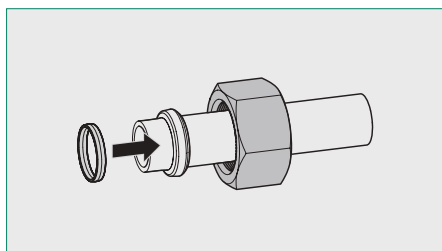
| Series | Tube OD |      | Dimensions D |      |
|--------|---------|------|--------------|------|
|        | (mm)    | (in) | (mm)         | (in) |
| L      | 6       | .24  | 9,5          | .37  |
|        | 8       | .31  | 12,1         | .48  |
|        | 10      | .39  | 14,0         | .55  |
|        | 12      | .47  | 16,1         | .63  |
|        | 15      | .59  | 20,1         | .79  |
|        | 18      | .71  | 23,7         | .93  |
|        | 22      | .87  | 27,1         | 1.07 |
|        | 28      | 1.10 | 33,1         | 1.30 |
|        | 35      | 1.38 | 42,1         | 1.66 |
|        | 42      | 1.65 | 49,4         | 1.94 |
|        | 6       | .24  | 9,5          | .37  |
| S      | 8       | .31  | 12,1         | .48  |
|        | 10      | .39  | 14,0         | .55  |
|        | 12      | .47  | 16,1         | .63  |
|        | 16      | .63  | 21,7         | .85  |
|        | 20      | .79  | 26,1         | 1.03 |
|        | 25      | .98  | 31,1         | 1.22 |
|        | 30      | 1.18 | 37,1         | 1.46 |
|        | 38      | 1.50 | 46,9         | 1.85 |

#### 4. Assembly with the Fitting Body

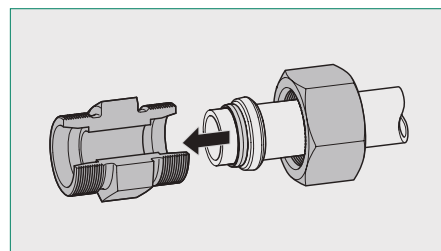


Lightly lubricate the inside and outside of the sealing element of the form ring (e.g. using mineral-oil based hydraulic fluid HLP32). Do not use lubricating grease!

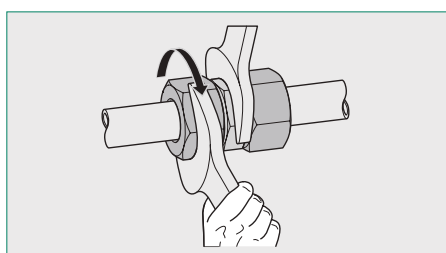
Immediately proceed with the assembly in order to avoid exposure to contamination.



Slide the sealing ring onto the formed tube end (laterally identical profile to avoid assembly errors).

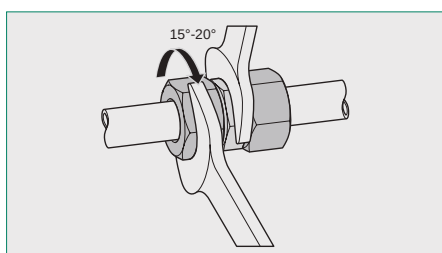


Carefully insert the formed tube end with the assembled sealing into the 24° taper of the fitting body.



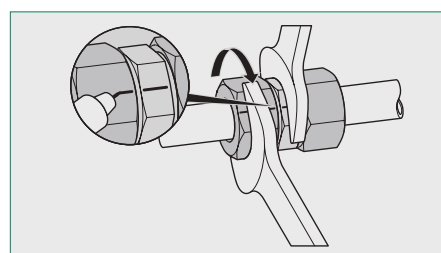
Use a suitable spanner to tighten the nut until there is a noticeable increase in force required (fixed point).

Avoid over-tightening by gripping the spanner close to the union nut.



Finish the assembly by using a suitable spanner to tighten the union nut approximately 15-20° beyond the fixed point. Always use a second spanner to hold the fitting body during the entire assembly procedure.

Alternatively, the assembly can be done via a torque.  
Table with torques see point 6.



A marking line applied on the union nut and the fitting body makes it easier to indicate the sufficient tightening angle.



Please note when using stainless steel components: Thread and 45° cone of the union nut and thread of the fitting body grease with special stainless steel fitting grease or use a silver coated union nut.

#### 5. Repeated Assembly

For repeated assemblies, please follow the instructions from point 4 on.



## Assembly Instructions for STAUFF Form EVO Tube Fittings

Tube End Forming with a STAUFF Form Machine and Assembly with the Fitting Body

### 6. Torques for alternative assembly for STAUFF Form EVO Tube Fittings

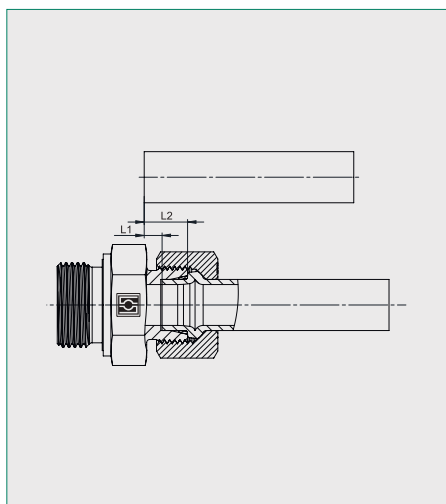
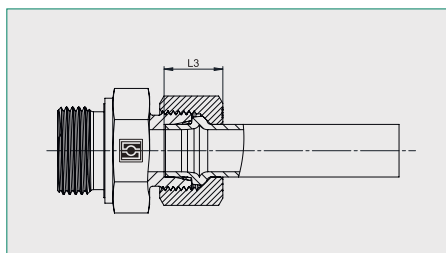
| Series | Tube OD<br>(mm/in) | Dimensions<br>(mm/in)<br>Thread | Turn till increase in force (fix point),<br>than<br>Assembly Angle | Torque<br>(N·m/lb·ft) |
|--------|--------------------|---------------------------------|--------------------------------------------------------------------|-----------------------|
| L      | 6                  | M 12 x 1,5                      | 15° ... 20°                                                        | 23                    |
|        | .24                |                                 |                                                                    | 17                    |
|        | 8                  | M 14 x 1,5                      |                                                                    | 32                    |
|        | .31                |                                 |                                                                    | 23.6                  |
|        | 10                 | M 16 x 1,5                      |                                                                    | 40                    |
|        | .39                |                                 |                                                                    | 29.5                  |
|        | 12                 | M 18 x 1,5                      |                                                                    | 50                    |
|        | .47                |                                 |                                                                    | 36.9                  |
|        | 15                 | M 22 x 1,5                      |                                                                    | 65                    |
|        | .59                |                                 |                                                                    | 47.9                  |
|        | 18                 | M 26 x 1,5                      |                                                                    | 110                   |
|        | .71                |                                 |                                                                    | 81.1                  |
|        | 22                 | M 30 x 2                        |                                                                    | 120                   |
|        | .87                |                                 |                                                                    | 88.5                  |
|        | 28                 | M 36 x 2                        |                                                                    | 160                   |
|        | 1.10               |                                 |                                                                    | 118                   |
|        | 35                 | M 45 x 2                        |                                                                    | 275                   |
|        | 1.38               |                                 |                                                                    | 202.8                 |
|        | 42                 | M 52 x 2                        |                                                                    | 410                   |
|        | 1.65               |                                 |                                                                    | 302.4                 |
| S      | 6                  | M 14 x 1,5                      |                                                                    | 30                    |
|        | .24                |                                 |                                                                    | 22.1                  |
|        | 8                  | M 16 x 1,5                      |                                                                    | 40                    |
|        | .31                |                                 |                                                                    | 29.5                  |
|        | 10                 | M 18 x 1,5                      |                                                                    | 55                    |
|        | .39                |                                 |                                                                    | 40.6                  |
|        | 12                 | M 20 x 1,5                      |                                                                    | 60                    |
|        | .47                |                                 |                                                                    | 44.3                  |
|        | 16                 | M 24 x 1,5                      |                                                                    | 85                    |
|        | .63                |                                 |                                                                    | 62.7                  |
|        | 20                 | M 30 x 2                        |                                                                    | 160                   |
|        | .79                |                                 |                                                                    | 118                   |
|        | 25                 | M 36 x 2                        |                                                                    | 200                   |
|        | .98                |                                 |                                                                    | 147.5                 |
|        | 30                 | M 42 x 2                        |                                                                    | 270                   |
|        | 1.18               |                                 |                                                                    | 199.1                 |
|        | 38                 | M52 x 2                         |                                                                    | 400                   |
|        | 1.50               |                                 |                                                                    | 295                   |



## Assembly Instructions for STAUFF Form EVO Tube Fittings

### Tube End Forming with a STAUFF Form EVO Machine and Assembly with the Fitting Body

#### Calculation Dimensions



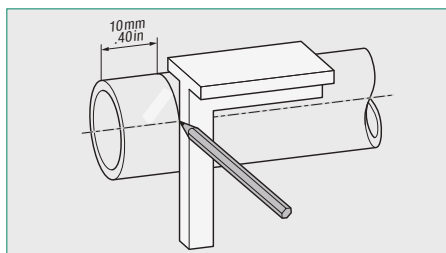
| Tube OD |      | Tube Wall Thickness |      | L1   |      | L2   |      | L3         |           |
|---------|------|---------------------|------|------|------|------|------|------------|-----------|
| (mm)    | (in) | (mm)                | (in) | (mm) | (in) | (mm) | (in) | (mm)       | (in)      |
| 6       | .24  | 1,5                 | .06  | 7,3  | .29  | 13,8 | .54  | 14,6 (L+S) | .57 (L+S) |
| 8       | .31  | 1,5                 | .06  | 7,5  | .30  | 14,0 | .55  | 14,6 (L+S) | .57 (L+S) |
|         |      | 2,0                 | .08  | 7,1  | .28  | 13,6 | .54  |            |           |
|         |      | 2,5                 | .10  | 6,6  | .26  | 13,1 | .52  |            |           |
| 10      | .39  | 1,5                 | .06  | 6,0  | .24  | 12,4 | .49  | 14,5 (L)   | .57 (L+S) |
|         |      | 2,0                 | .08  | 6,3  | .25  | 12,7 | .50  |            |           |
|         |      | 2,5                 | .10  | 6,0  | .24  | 12,4 | .49  | 15,5 (S)   | .61 (L+S) |
|         |      | 3,0                 | .12  | 5,7  | .22  | 12,1 | .48  |            |           |
| 12      | .47  | 1,5                 | .06  | 5,2  | .20  | 11,7 | .46  | 14,6 (L)   | .57 (L)   |
|         |      | 2,0                 | .08  | 5,4  | .21  | 11,9 | .47  |            |           |
|         |      | 2,5                 | .10  | 5,1  | .20  | 11,6 | .46  | 15,6 (S)   | .61 (L+S) |
|         |      | 3,0                 | .12  | 4,9  | .19  | 11,4 | .45  |            |           |
| 15      | .59  | 1,5                 | .06  | 6    | .24  | 12,5 | .49  | 15,6       | .61       |
|         |      | 2,0                 | .08  | 6,4  | .25  | 12,9 | .51  |            |           |
|         |      | 2,5                 | .10  | 6,4  | .25  | 12,9 | .51  |            |           |
| 16      | .63  | 2,0                 | .08  | 7,4  | .29  | 15,3 | .60  | 18,4       | .72       |
|         |      | 2,5                 | .10  | 7,0  | .28  | 14,9 | .59  |            |           |
|         |      | 3,0                 | .12  | 7,0  | .28  | 14,9 | .59  |            |           |
|         |      | 4,0                 | .16  | 6,2  | .24  | 14,1 | .56  |            |           |
| 18      | .71  | 1,5                 | .06  | 6,2  | .24  | 14,1 | .56  | 16,4       | .65       |
|         |      | 2,0                 | .08  | 6,8  | .27  | 13,7 | .54  |            |           |
|         |      | 2,5                 | .10  | 6,5  | .26  | 13,4 | .53  |            |           |
|         |      | 3,0                 | .12  | 6,8  | .27  | 13,7 | .54  |            |           |
|         |      | 4,0                 | .16  | 6,4  | .25  | 13,3 | .52  |            |           |
| 20      | .79  | 2,0                 | .08  | 7,7  | .30  | 17,7 | .70  | 21,6       | .85       |
|         |      | 2,5                 | .10  | 7,8  | .31  | 17,8 | .70  |            |           |
|         |      | 3,0                 | .12  | 7,7  | .30  | 17,7 | .70  |            |           |
|         |      | 4,0                 | .16  | 7,3  | .29  | 17,3 | .68  |            |           |
|         |      | 2,0                 | .08  | 5,5  | .22  | 12,5 | .49  | 17,5       | .69       |
| 22      | .87  | 2,5                 | .10  | 5,7  | .22  | 12,7 | .50  |            |           |
|         |      | 3,0                 | .12  | 5,8  | .23  | 12,8 | .50  |            |           |
|         |      | 3,5                 | .14  | 5,9  | .23  | 12,9 | .51  |            |           |
|         |      | 2,0                 | .08  | 7,1  | .28  | 18,6 | .73  | 24,5       | .96       |
| 25      | .98  | 2,5                 | .10  | 7,6  | .30  | 19,1 | .75  |            |           |
|         |      | 3,0                 | .12  | 7,7  | .30  | 19,2 | .76  |            |           |
|         |      | 3,5                 | .14  | 7,7  | .30  | 19,2 | .76  |            |           |
|         |      | 4,0                 | .16  | 7,8  | .31  | 19,3 | .76  |            |           |
| 28      | 1.10 | 5,0                 | .20  | 7,8  | .31  | 19,3 | .76  |            |           |
|         |      | 2,0                 | .08  | 5,4  | .21  | 12,4 | .49  | 18         | .71       |
|         |      | 2,5                 | .10  | 5,8  | .23  | 12,8 | .50  |            |           |
|         |      | 3,0                 | .12  | 5,7  | .22  | 12,7 | .50  |            |           |
|         |      | 3,5                 | .14  | 5,3  | .21  | 12,3 | .48  |            |           |
| 30      | 1.18 | 4,0                 | .16  | 6,2  | .24  | 13,2 | .52  |            |           |
|         |      | 2,5                 | .10  | 7,9  | .31  | 20,8 | .82  | 27,2       | 1.07      |
|         |      | 3,0                 | .12  | 8,0  | .31  | 20,9 | .82  |            |           |
|         |      | 4,0                 | .16  | 8,2  | .32  | 21,1 | .83  |            |           |
|         |      | 5,0                 | .20  | 8,5  | .33  | 21,4 | .84  |            |           |
| 35      | 1.38 | 6,0                 | .24  | 8,2  | .32  | 21,1 | .83  |            |           |
|         |      | 2,5                 | .10  | 7,7  | .30  | 17,6 | .69  | 22         | .87       |
|         |      | 3,0                 | .12  | 7,8  | .31  | 17,7 | .70  |            |           |
|         |      | 4,0                 | .16  | 8,6  | .34  | 18,5 | .73  |            |           |
| 38      | 1.50 | 5,0                 | .20  | 8,7  | .34  | 18,6 | .73  |            |           |
|         |      | 3,0                 | .12  | 9,8  | .39  | 25,2 | .99  | 31         | 1.22      |
|         |      | 4,0                 | .16  | 11,0 | .43  | 26,4 | 1.4  |            |           |
|         |      | 5,0                 | .20  | 11,3 | .44  | 26,7 | 1.5  |            |           |
| 42      | 1.65 | 6,0                 | .24  | 11,4 | .45  | 26,8 | 1.6  |            |           |
|         |      | 3,0                 | .12  | 8,1  | .32  | 18,5 | .73  | 22,7       | .89       |
|         |      | 3,5                 | .14  | 7,9  | .31  | 18,3 | .72  |            |           |
|         |      | 4,0                 | .16  | 8,6  | .34  | 19,0 | .75  |            |           |



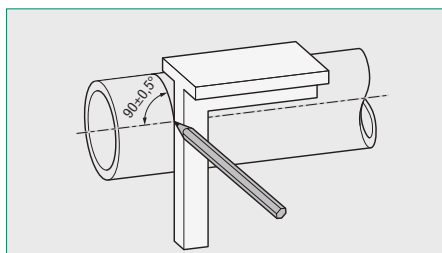
## Assembly Instructions for STAUFF Connect 37° Flared Tube Fittings

### Tube Flaring with a STAUFF Press Machine and Assembly with the Fitting Body

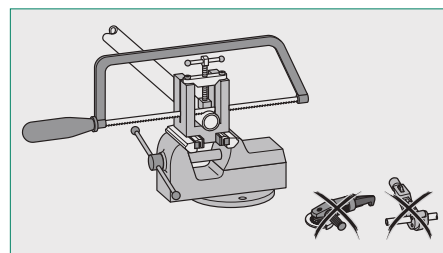
#### 1. Tube Preparation



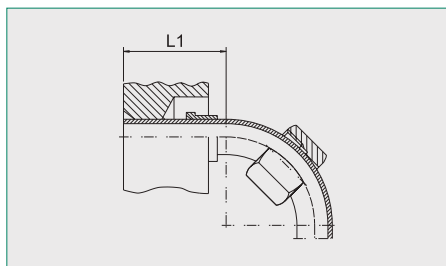
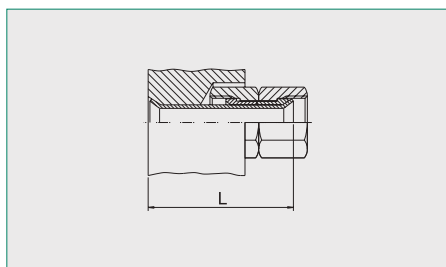
Saw off tube in right angle and at least 10 mm / .40 in from the cut made by the tube manufacturer / supplier in order to avoid failures caused during shipment.



A maximum angular deviation / tolerance of  $\pm 0,5^\circ$  relative to the tube axis is permissible.

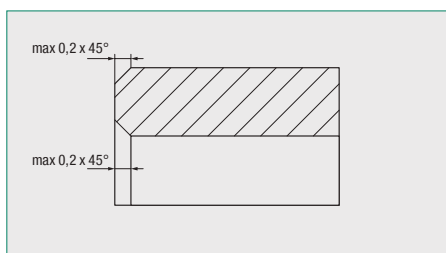


Only use proper tube sawing machinery or equipment. Do not use tube cutters or grinders as this may result in unwanted angled cuts and cause severe burring.

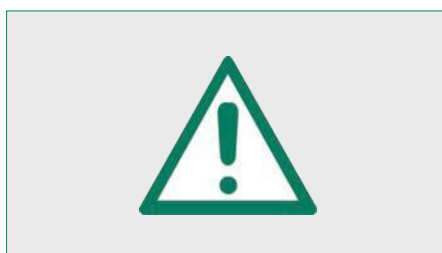


| Series | Tube OD |      | Minimum Length L<br>Straight Tube Sections |      | Minimum Length L1<br>Straight Tube Sections next to Tube Bends |      |
|--------|---------|------|--------------------------------------------|------|----------------------------------------------------------------|------|
|        | (mm)    | (in) | (mm)                                       |      | (mm)                                                           | (in) |
| L      | 6       | .24  | 59                                         | 2.32 | 43                                                             | 1.69 |
|        | 8       | .31  | 62                                         | 2.44 | 44                                                             | 1.73 |
|        | 10      | .39  | 64                                         | 2.52 | 46                                                             | 1.81 |
|        | 12      | .47  | 67                                         | 2.64 | 47                                                             | 1.85 |
|        | 15      | .59  | 75                                         | 2.95 | 50                                                             | 1.97 |
|        | 18      | .71  | 76                                         | 2.99 | 58                                                             | 2.28 |
|        | 22      | .87  | 81                                         | 3.19 | 60                                                             | 2.36 |
|        | 28      | 1.10 | 88                                         | 3.46 | 60                                                             | 2.36 |
|        | 35      | 1.38 | 92                                         | 3.62 | 62                                                             | 2.44 |
|        | 42      | 1.65 | 130                                        | 5.12 | 70                                                             | 2.76 |
| S      | 6       | .24  | 61                                         | 2.40 | 43                                                             | 1.69 |
|        | 8       | .31  | 64                                         | 2.52 | 44                                                             | 1.73 |
|        | 10      | .39  | 66                                         | 2.60 | 46                                                             | 1.81 |
|        | 12      | .47  | 68                                         | 2.68 | 47                                                             | 1.85 |
|        | 16      | .63  | 79                                         | 3.11 | 52                                                             | 2.05 |
|        | 20      | .79  | 82                                         | 3.23 | 58                                                             | 2.28 |
|        | 25      | .98  | 94                                         | 3.70 | 60                                                             | 2.36 |
|        | 30      | 1.18 | 96                                         | 3.78 | 62                                                             | 2.44 |
|        | 38      | 1.50 | 136                                        | 5.35 | 70                                                             | 2.76 |

Please note the minimum lengths for straight tube ends (dimension L) as well as for straight tube sections next to tube bends (dimension L1) that are listed in the table. If installation situations demand that the length of straight tube sections next to tube bends (dimension L1) has to be shorter than indicated in the table, tube bending has to be carried out after flaring.



Slightly deburr inside and outside of the tube end (max 0,2 x 45°). The assembly area of the tube has to be free of contamination, chips and paint.



Please note: Improperly prepared and contaminated tubes will affect the service life of the connection and may result in leakage.

#### 2. Preparation and Machine-Assisted Tube Flaring

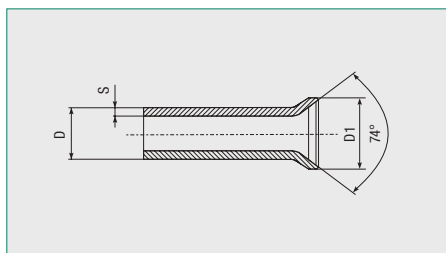
With regards to assembly preparation as well as the actual tube flaring process, please follow the detailed instructions in the operating manual of the machine.



## Assembly Instructions for STAUFF Connect 37° Flared Tube Fittings

### Tube Flaring with a STAUFF Press Machine and Assembly with the Fitting Body

#### 3. Inspection



Check the flared tube end for cracking and impurities after flaring.

Always verify the dimensional accuracy of the flare.

The checking diameter corresponds to the outside diameter D1 of the flared tube end (according to dimension table on the right). The flare must be at right angle to the tube axis and concentric with the tube.

Please note: If the flare is eccentric, too short or not wide enough, perfect function of the tube fitting cannot be guaranteed!

#### 4. Assembly with the Fitting Body

Lubricate the o-rings of the 24°/37° flared tube adaptor (e.g. using mineral-oil based hydraulic fluid HLP32) and carefully insert it into the 24° taper of the fitting body.

It is recommended to use a bench vice to press and permanently capture the 24°/37° flared tube adaptor into the 24° taper of the tube fitting – a great help to the tube fitter during re-assembly. In this case, please make sure that all components are suitably protected against damage.

Apply the flared tube end to the 24°/37° flared tube adaptor, which is attached to the fitting body, tighten the union nut until the noticeable increase in force, and then finish the assembly with another approximately 1/2 a turn (180°) beyond this point.

Important: Always use a spanner to hold the fitting body during the assembly procedure.

| Tube OD |      | Dimensions |      | D1 <sub>min</sub> |      | D1 <sub>max</sub> |      |
|---------|------|------------|------|-------------------|------|-------------------|------|
| D       | (mm) | S          | (in) | (mm)              | (in) | (mm)              | (in) |
| 6       | .24  | 1          | .04  | 9,1               | .36  | 10                | .39  |
|         |      | 1,5        | .06  |                   |      |                   |      |
| 8       | .31  | 1          | .04  | 11,3              | .44  | 12                | .47  |
|         |      | 1,5        | .06  |                   |      |                   |      |
|         |      | 2          | .08  |                   |      |                   |      |
| 10      | .39  | 1          | .04  | 13,1              | .52  | 14                | .55  |
|         |      | 1,5        | .06  |                   |      |                   |      |
|         |      | 2          | .08  |                   |      |                   |      |
| 12      | .47  | 1          | .04  | 15,3              | .60  | 16                | .63  |
|         |      | 1,5        | .06  |                   |      |                   |      |
|         |      | 2          | .08  |                   |      |                   |      |
| 14      | .55  | 1,5        | .06  | 18,6              | .73  | 19,6              | .77  |
|         |      | 2          | .08  |                   |      |                   |      |
|         |      | 2,5        | .10  |                   |      |                   |      |
|         |      | 3          | .12  |                   |      |                   |      |
| 15      | .59  | 1,5        | .06  | 19,1              | .75  | 20                | .79  |
|         |      | 2          | .08  |                   |      |                   |      |
|         |      | 2,5        | .10  |                   |      |                   |      |
| 16      | .63  | 1,5        | .06  | 20,6              | .81  | 22                | .87  |
|         |      | 2          | .08  |                   |      |                   |      |
|         |      | 2,5        | .10  |                   |      |                   |      |
|         |      | 3          | .12  |                   |      |                   |      |
| 18      | .71  | 1,5        | .06  | 23,2              | .91  | 24                | .94  |
|         |      | 2          | .08  |                   |      |                   |      |
|         |      | 2,5        | .10  |                   |      |                   |      |
| 20      | .79  | 2          | .08  | 25,6              | 1.01 | 26,8              | 1.06 |
|         |      | 2,5        | .10  |                   |      |                   |      |
|         |      | 3          | .12  |                   |      |                   |      |
|         |      | 3,5        | .14  |                   |      |                   |      |
| 22      | .87  | 1,5        | .06  | 26,5              | 1.04 | 27,5              | 1.08 |
|         |      | 2          | .08  |                   |      |                   |      |
|         |      | 2,5        | .10  |                   |      |                   |      |
|         |      | 3          | .12  |                   |      |                   |      |
| 25      | .98  | 2          | .08  | 31,1              | 1.22 | 33                | 1.30 |
|         |      | 2,5        | .10  |                   |      |                   |      |
|         |      | 3          | .12  |                   |      |                   |      |
|         |      | 4          | .16  |                   |      |                   |      |
| 28      | 1.10 | 2          | .08  | 32,7              | 1.29 | 33,3              | 1.31 |
|         |      | 2,5        | .10  |                   |      |                   |      |
|         |      | 3          | .12  |                   |      |                   |      |
|         |      | 4          | .16  |                   |      |                   |      |
| 30      | 1.18 | 2          | .08  | 37                | 1.46 | 38,7              | 1.52 |
|         |      | 2,5        | .10  |                   |      |                   |      |
|         |      | 3          | .12  |                   |      |                   |      |
|         |      | 4          | .16  |                   |      |                   |      |
|         |      | 5          | .20  |                   |      |                   |      |
| 35      | 1.38 | 2          | .08  | 41,8              | 1.65 | 42,7              | 1.68 |
|         |      | 2,5        | .10  |                   |      |                   |      |
|         |      | 3          | .12  |                   |      |                   |      |
|         |      | 4          | .16  |                   |      |                   |      |
| 38      | 1.50 | 2,5        | .10  | 46                | 1.81 | 47,2              | 1.86 |
|         |      | 3          | .12  |                   |      |                   |      |
|         |      | 4          | .16  |                   |      |                   |      |
|         |      | 5          | .20  |                   |      |                   |      |
| 42      | 1.65 | 2          | .08  | 48,8              | 1.92 | 49,8              | 1.96 |
|         |      | 3          | .12  |                   |      |                   |      |
|         |      | 4          | .16  |                   |      |                   |      |

#### 5. Repeated Assembly

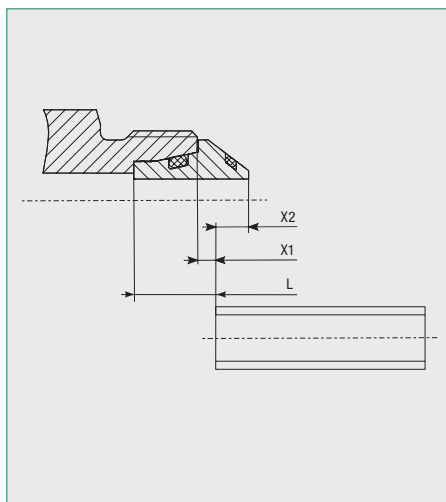
For repeated assembly, the union nut has to be tightened using exactly the same force as for the original assembly.



## Assembly Instructions for STAUFF Connect 37° Flared Tube Fittings

### Tube Flaring with a STAUFF Press Machine and Assembly with the Fitting Body

#### Calculation Dimensions



The correct tube length can be determined by measuring the distance between the 24°/37° flared tube adaptors pressed into the fitting bodies. Dimension X2 has then to be added for each of the connections.

The correct tube length can also be determined by measuring the distance between the fitting bodies. Dimension X1 has then to be subtracted for each of the connections.

Dimension L corresponds to the difference in tube length compared to cutting ring fittings. When changing over from cutting ring fittings to flared tube fittings, the tube has to be shortened by dimension L.

| Tube OD<br>D<br>(mm) | (in) | Dimensions |      | X2<br>(mm) | (in) | L<br>(mm) | (in) |
|----------------------|------|------------|------|------------|------|-----------|------|
|                      |      | X1<br>(mm) | (in) |            |      |           |      |
| 6                    | .24  | 1          | .04  | 3,5        | .14  | 8         | .31  |
|                      |      | 2          | .08  | 2,5        | .10  | 9         | .35  |
| 8                    | .31  | 1          | .04  | 4          | .16  | 8         | .31  |
|                      |      | 2          | .08  | 3          | .12  | 9         | .35  |
|                      |      | 2,5        | .10  | 2,5        | .10  | 9,5       | .37  |
| 10                   | .39  | 1          | .04  | 4,5        | .18  | 8         | .31  |
|                      |      | 2          | .08  | 3,5        | .14  | 9         | .35  |
|                      |      | 3          | .12  | 2,5        | .10  | 10        | .39  |
| 12                   | .47  | 1          | .04  | 4,5        | .18  | 8         | .31  |
|                      |      | 2          | .08  | 3,5        | .14  | 9         | .35  |
|                      |      | 3          | .12  | 2,5        | .10  | 10        | .39  |
| 14                   | .55  | 0,5        | .02  | 5,5        | .22  | 8,5       | .33  |
|                      |      | 1          | .04  | 5          | .20  | 9         | .35  |
|                      |      | 2          | .08  | 4          | .16  | 10        | .39  |
|                      |      | 3          | .12  | 3          | .12  | 11        | .43  |
| 15                   | .59  | 1          | .04  | 4,5        | .18  | 8         | .31  |
|                      |      | 2          | .08  | 3,5        | .14  | 9         | .35  |
|                      |      | 3          | .12  | 2,5        | .10  | 10        | .39  |
|                      |      | 0          | .00  | 6,5        | .26  | 8,5       | .33  |
| 16                   | .63  | 1          | .04  | 5,5        | .22  | 9,5       | .37  |
|                      |      | 1,5        | .06  | 5          | .20  | 10        | .39  |
|                      |      | 2,5        | .10  | 4          | .16  | 11        | .43  |
|                      |      | 0          | .00  | 5,5        | .22  | 7,5       | .30  |
| 18                   | .71  | 1          | .04  | 4,5        | .18  | 8,5       | .33  |
|                      |      | 1,5        | .06  | 4          | .16  | 9         | .35  |
|                      |      | 1          | .04  | 7          | .28  | 11,5      | .45  |
| 20                   | .79  | 2          | .08  | 6          | .24  | 12,5      | .49  |
|                      |      | 3          | .12  | 5          | .20  | 13,5      | .53  |
|                      |      | 4          | .16  | 4          | .16  | 14,5      | .57  |
|                      |      | 1          | .04  | 5,7        | .22  | 8,5       | .33  |
| 22                   | .87  | 2          | .08  | 4,7        | .19  | 9,5       | .37  |
|                      |      | 3          | .12  | 3,7        | .15  | 10,5      | .41  |
|                      |      | 3,5        | .14  | 3,2        | .13  | 11        | .43  |
|                      |      | 1          | .04  | 7          | .28  | 13        | .51  |
| 25                   | .98  | 1,5        | .06  | 6,5        | .26  | 13,5      | .53  |
|                      |      | 2,5        | .10  | 5,5        | .22  | 14,5      | .57  |
|                      |      | 4          | .16  | 4          | .16  | 16        | .63  |
|                      |      | 1,5        | .06  | 5,7        | .22  | 9         | .35  |
| 28                   | 1.10 | 2,5        | .10  | 4,7        | .19  | 10        | .39  |
|                      |      | 3          | .12  | 4,2        | .17  | 10,5      | .41  |
|                      |      | -0,5       | -.02 | 9          | .35  | 13        | .51  |
| 30                   | 1.18 | 0,5        | .02  | 8          | .31  | 14        | .55  |
|                      |      | 1          | .04  | 7,5        | .30  | 14,5      | .57  |
|                      |      | 3          | .12  | 5,5        | .22  | 16,5      | .65  |
|                      |      | 4,5        | .18  | 4          | .16  | 18        | .71  |
|                      |      | 1,5        | .06  | 6,5        | .26  | 12        | .47  |
| 35                   | 1.38 | 2          | .08  | 6          | .24  | 12,5      | .49  |
|                      |      | 3          | .12  | 5          | .20  | 13,5      | .53  |
|                      |      | 4,5        | .18  | 3,5        | .14  | 15        | .59  |
|                      |      | 0          | .00  | 10         | .39  | 16        | .63  |
|                      |      | 0,5        | .02  | 9,5        | .37  | 16,5      | .65  |
| 38                   | 1.50 | 2          | .08  | 8          | .31  | 18        | .71  |
|                      |      | 4          | .16  | 6          | .24  | 20        | .79  |
|                      |      | 1,5        | .06  | 7          | .28  | 12,5      | .49  |
|                      |      | 3          | .12  | 6,5        | .26  | 14        | .55  |
| 42                   | 1.65 | 4,5        | .18  | 5          | .20  | 15,5      | .61  |

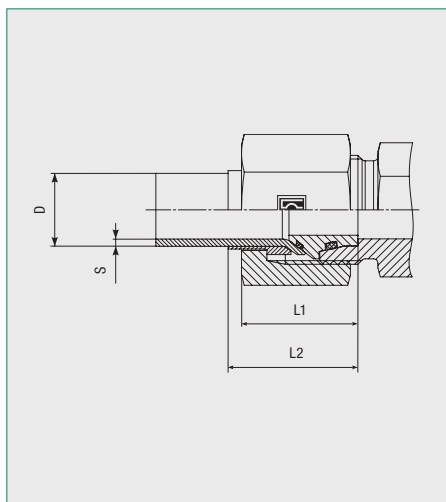




## Assembly Instructions for STAUFF Connect 37° Flared Tube Fittings

### Tube Flaring with a STAUFF Press Machine and Assembly with the Fitting Body

#### Calculation Dimensions

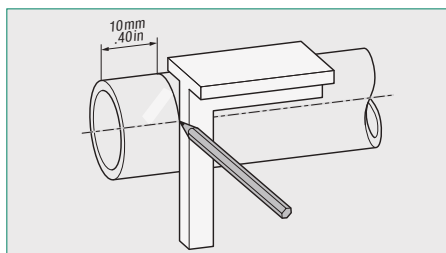


| Series | Tube OD x Wall Thickness<br>(mm/in)<br>D x S | Dimensions<br>(mm/in) |      | Corrected Tube Lengths for Different Wall Thicknesses<br>(mm/in) |      |      |      |     |     |   |     |     |  |
|--------|----------------------------------------------|-----------------------|------|------------------------------------------------------------------|------|------|------|-----|-----|---|-----|-----|--|
|        |                                              | L1                    | L2   | 1                                                                | 1,5  | 2    | 2,5  | 3   | 3,5 | 4 | 5   |     |  |
| L      | 6 x 1                                        | 17,5                  | 20,5 | •                                                                | 1    | 1    |      |     |     |   |     |     |  |
|        | .24 x .04                                    | .69                   | .81  |                                                                  | .04  | .04  |      |     |     |   |     |     |  |
|        | 8 x 1                                        | 18,5                  | 21,5 | •                                                                | 1    | 1,5  |      |     |     |   |     |     |  |
|        | .31 x .04                                    | .73                   | .85  |                                                                  | .04  | .06  |      |     |     |   |     |     |  |
|        | 10 x 1,5                                     | 19,5                  | 24   | -1                                                               | •    | 1    |      |     |     |   |     |     |  |
|        | .39 x .06                                    | .77                   | .94  | -.04                                                             |      | .04  |      |     |     |   |     |     |  |
|        | 12 x 1,5                                     | 20                    | 24,5 | -1                                                               | •    | 1    |      |     |     |   |     |     |  |
|        | .47 x .06                                    | .79                   | .96  | -.04                                                             |      | .04  |      |     |     |   |     |     |  |
|        | 15 x 1,5                                     | 21,5                  | 25,5 |                                                                  | •    | 1    | 2    |     |     |   |     |     |  |
|        | .59 x .06                                    | .85                   | 1.00 |                                                                  |      | .04  | .08  |     |     |   |     |     |  |
|        | 18 x 2                                       | 23                    | 27   |                                                                  | -1   | •    | 1    |     |     |   |     |     |  |
|        | .71 x .08                                    | .91                   | 1.06 |                                                                  | -.04 |      | .04  |     |     |   |     |     |  |
|        | 22 x 2                                       | 24                    | 30,5 |                                                                  | -1   | •    | 1    | 1,5 |     |   |     |     |  |
|        | .87 x .08                                    | .94                   | 1.20 |                                                                  | -.04 |      | .04  | .06 |     |   |     |     |  |
|        | 28 x 3                                       | 26                    | 31,5 |                                                                  |      | -1,5 | -0,5 | •   |     |   |     |     |  |
|        | 1.10 x .12                                   | 1.02                  | 1.24 |                                                                  |      | -.06 | -.02 |     |     |   |     |     |  |
|        | 35 x 3                                       | 30                    | 36   |                                                                  |      | -1,5 | -1   | •   |     |   | 1,5 |     |  |
|        | 1.38 x .12                                   | 1.18                  | 1.42 |                                                                  |      | -.06 | -.04 |     |     |   | .06 |     |  |
|        | 42 x 3                                       | 34                    | 40   |                                                                  |      | -1,5 |      | •   |     |   | 1,5 |     |  |
|        | 1.65 x .12                                   | 1.34                  | 1.57 |                                                                  |      | -.06 |      |     |     |   | .06 |     |  |
| S      | 6 x 1                                        | 17,5                  | 20,5 | •                                                                | 1    | 1    |      |     |     |   |     |     |  |
|        | .24 x .04                                    | .69                   | .81  |                                                                  | .04  | .04  |      |     |     |   |     |     |  |
|        | 8 x 1                                        | 18,5                  | 21,5 | •                                                                | 1    | 1,5  |      |     |     |   |     |     |  |
|        | .31 x .04                                    | .73                   | .85  |                                                                  | .04  | .06  |      |     |     |   |     |     |  |
|        | 10 x 1,5                                     | 20                    | 24,5 | -1                                                               | •    | 1    |      |     |     |   |     |     |  |
|        | .39 x .06                                    | .79                   | .96  | -.04                                                             |      | .04  |      |     |     |   |     |     |  |
|        | 12 x 1,5                                     | 20,5                  | 25   | -1                                                               | •    | 1    |      |     |     |   |     |     |  |
|        | .47 x .06                                    | .81                   | .98  | -.04                                                             |      | .04  |      |     |     |   |     |     |  |
|        | 14 x 2                                       | 23                    | 27,5 |                                                                  | -0,5 | •    | 1    | 2   |     |   |     |     |  |
|        | .55 x .08                                    | .91                   | 1.08 |                                                                  | -.02 |      | .04  | .08 |     |   |     |     |  |
|        | 16 x 2                                       | 25                    | 31   |                                                                  | -1   | •    | 0,5  | 1,5 |     |   |     |     |  |
|        | .63 x .08                                    | .98                   | 1.22 |                                                                  | -.04 |      | .02  | .06 |     |   |     |     |  |
|        | 20 x 2                                       | 27,5                  | 33   |                                                                  |      | •    | 1    | 2   | 3   |   |     |     |  |
|        | .79 x .08                                    | 1.08                  | 1.30 |                                                                  |      |      | .04  | .08 | .12 |   |     |     |  |
|        | 25 x 3                                       | 32                    | 38,5 |                                                                  |      | -1,5 | -1   | •   |     |   | 1,5 |     |  |
|        | .98 x .12                                    | 1.26                  | 1.52 |                                                                  |      | -.06 | -.04 |     |     |   | .06 |     |  |
|        | 30 x 3                                       | 33                    | 41,5 |                                                                  |      | -2   | -1   | •   |     |   | 2   | 3,5 |  |
|        | 1.18 x .12                                   | 1.30                  | 1.63 |                                                                  |      | -.08 | -.04 |     |     |   | .08 | .14 |  |
|        | 38 x 3                                       | 37,5                  | 48   |                                                                  |      |      | -0,5 | •   |     |   | 1,5 | 3,5 |  |
|        | 1.50 x .12                                   | 1.48                  | 1.89 |                                                                  |      |      | -.02 |     |     |   | .06 | .14 |  |

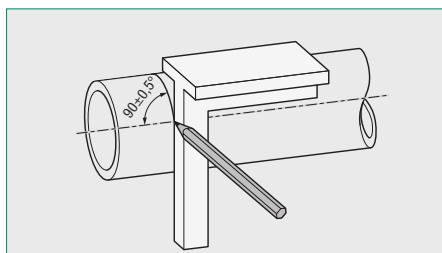


## Assembly Instructions for 24° Weld Cones with O-Ring

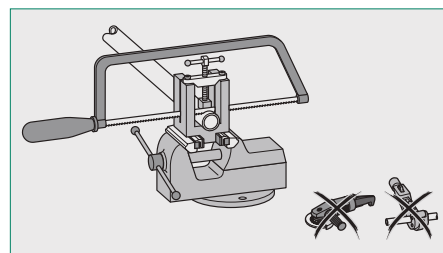
### 1. Tube Preparation



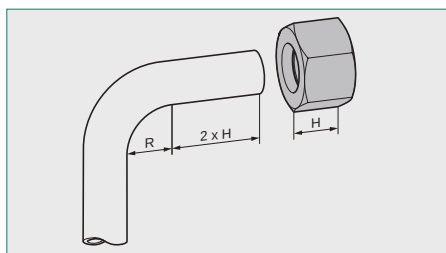
Saw off tube in right angle and at least 10 mm / .40 in from the cut made by the tube manufacturer / supplier in order to avoid failures caused during shipment.



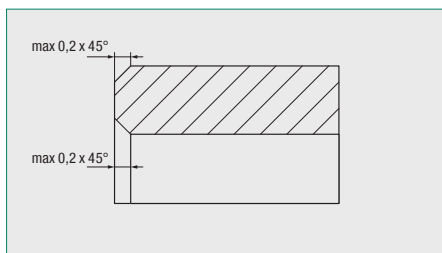
A maximum angular deviation / tolerance of  $\pm 0,5^\circ$  relative to the tube axis is permissible.



Only use proper tube sawing machinery or equipment. Do not use tube cutters or grinders as this may result in unwanted angled cuts and cause severe burring.



For tube bends, the length of the straight section of the tube end to the start of the bending radius has to be twice the height of the union nut.



Slightly deburr inside and outside of the tube end (max 0,2 x 45°). The assembly area of the tube has to be free of contamination, chips and paint.



Please note: Improperly prepared and contaminated tubes will affect the service life of the connection and may result in leakage.

### 2. Assembly Preparation and Welding

Place the union nut on the weld cone.

Remove the o-ring from the front end of the weld cone before welding (usually supplied separately).

Weld the weld cone and the tube end according to any applicable guidelines for welding.

The user is fully responsible for the quality of the welding work.

Descall the welded area and clean the o-ring groove.

Assemble the o-ring and make sure that it is located in the groove of the weld cone without being twisted.

Lubricate the o-ring of the weld cone (e.g. using mineral-oil based hydraulic fluid HLP32). Do not use lubricating grease!

Immediately proceed with the assembly in order to avoid exposure to contamination.

### 3. Assembly with the Fitting Body

Carefully insert the weld cone into the 24° taper of the fitting body.

Tighten the union nut until the noticeable increase in force.

Then finish the assembly with another approximately 1/3 a turn (120°) beyond this point.

A marking line applied on the union nut and the fitting body makes it easier to indicate the sufficient tightening turns.

### 4. Repeated Assembly

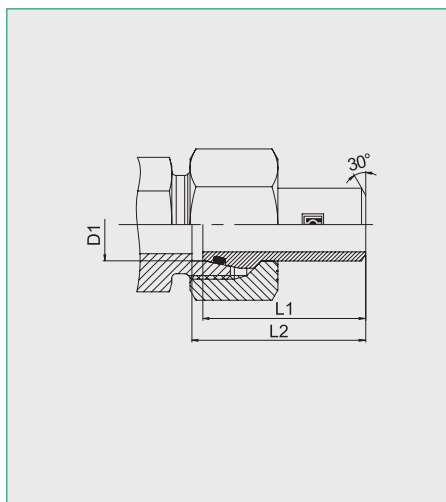
For repeated assembly, the union nut has to be tightened using exactly the same force as for the original assembly.

The o-ring has to be checked for possible damages and, if necessary, replaced prior to the re-assembly.



## Assembly Instructions for 24° Weld Cones with O-Ring

### Calculation Dimensions



| Series   | Tube OD    |      | Dimensions |      | L2   |      |
|----------|------------|------|------------|------|------|------|
|          | D1<br>(mm) | (in) | L1<br>(mm) | (in) | (mm) | (in) |
| <b>L</b> | 6          | .24  | 31         | 1.22 | 32   | 1.26 |
|          | 8          | .31  | 31         | 1.22 | 32   | 1.26 |
|          | 10         | .39  | 32,5       | 1.28 | 33,5 | 1.32 |
|          | 12         | .47  | 32,5       | 1.28 | 33,5 | 1.32 |
|          | 15         | .59  | 35         | 1.38 | 36   | 1.42 |
|          | 18         | .71  | 36         | 1.42 | 37   | 1.46 |
|          | 22         | .87  | 38,5       | 1.52 | 39,5 | 1.56 |
|          | 28         | 1.10 | 41,5       | 1.63 | 42,5 | 1.67 |
|          | 35         | 1.38 | 47         | 1.85 | 49,5 | 1.95 |
|          | 42         | 1.65 | 47         | 1.85 | 50   | 1.97 |
| <b>S</b> | 6          | .24  | 31         | 1.22 | 32   | 1.26 |
|          | 8          | .31  | 31         | 1.22 | 32   | 1.26 |
|          | 10         | .39  | 32,5       | 1.28 | 33,5 | 1.32 |
|          | 12         | .47  | 32,5       | 1.28 | 33,5 | 1.32 |
|          | 14         | .55  | 38,5       | 1.52 | 39,5 | 1.56 |
|          | 16         | .63  | 39         | 1.54 | 41   | 1.61 |
|          | 20         | .79  | 44,5       | 1.75 | 47   | 1.85 |
|          | 25         | .98  | 49,5       | 1.95 | 53,5 | 2.11 |
|          | 30         | 1.18 | 52,5       | 2.07 | 57,5 | 2.26 |
|          | 38         | 1.50 | 56,5       | 2.22 | 64,5 | 2.54 |



## Assembly Instructions for Tube Fittings with 24° Taper and O-Ring

### 1. Assembly Preparation

Make sure that the o-ring is located in the groove of the taper without being twisted.

Lubricate the o-ring of the taper fitting (e.g. using mineral-oil based hydraulic fluid HLP32). Do not use lubricating grease!

Immediately proceed with the assembly in order to avoid exposure to contamination.

### 2. Assembly with the Fitting Body

Keep the taper fitting aligned and carefully insert it into the 24° taper of the fitting body.

Tighten the wire-pin nut until the noticeable increase in force, and then finish the assembly with another approximately 1/3 a turn (120°) beyond this point.

Important: Always use a spanner to hold the fitting body during the assembly procedure.

A marking line applied on the nut and the fitting body makes it easier to indicate the sufficient tightening turns.

## Assembly Instructions for Tube Fittings with Standpipe

### 1. Assembly Preparation

Standpipe fittings are always supplied with factory-assembled cutting rings and union nuts.

### 2. Assembly with the Fitting Body

Keep the fitting with standpipe aligned and carefully insert it into the 24° taper of the fitting body.

Tighten the union nut until the noticeable increase in force, and then finish the assembly with another approximately 1/12 a turn (30°) beyond this point.

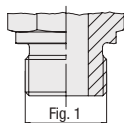
Important: Always use a spanner to hold the fitting body during the assembly procedure.

A marking line applied on the nut and the fitting body makes it easier to indicate the sufficient tightening turns.



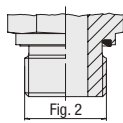
## Assembly Instructions for Tube Fittings with Male Threaded Stud Whitworth Parallel Pipe Thread

### Tightening Torques



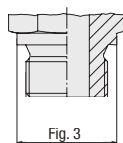
**Metallic Sealing Edge**

Whitworth Parallel Pipe Thread  
DIN 3852-2 (Form B) / ISO 1179-4 (Type B)



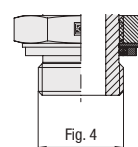
**Profile Sealing Ring**

Whitworth Parallel Pipe Thread  
ISO 1179-2 (Type E)



**Sealing Surface for Gaskets**

Whitworth Parallel Pipe Thread



**O-Ring with Retaining Ring  
(Adjustable)**

Whitworth Parallel Pipe Thread

| Series | Thread  | Male Threaded Studs                                       |                                                          |                                                                 | Check Valves                                             | Adjustable Male Threaded Studs                              | Blanking Screws                                                    |                                                                    |                                                          |
|--------|---------|-----------------------------------------------------------|----------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------|
|        |         | fig. 1<br>Metallic<br>Sealing Edge<br>Torque<br>(N-m) ca. | fig. 2<br>Profile<br>Sealing Ring<br>Torque<br>(N-m) ca. | fig. 3<br>Sealing Surface<br>for Gaskets<br>Torque<br>(N-m) ca. | fig. 2<br>Profile<br>Sealing Ring<br>Torque<br>(N-m) ca. | fig. 4<br>O-Ring with Retaining Ring<br>Torque<br>(N-m) ca. | FI-VSV<br>fig. 2<br>Profile<br>Sealing Ring<br>Torque<br>(N-m) ca. | FI-VS<br>fig. 1<br>Metallic<br>Sealing Edge<br>Torque<br>(N-m) ca. | fig. 2<br>Profile<br>Sealing Ring<br>Torque<br>(N-m) ca. |
| L      | G 1/8   | 25                                                        | 18                                                       | 20                                                              | 18                                                       | 25                                                          | 18                                                                 | 25                                                                 | 15                                                       |
|        |         | 18.5                                                      | 13.32                                                    | 14.8                                                            | 13.3                                                     | 18.5                                                        | 13.3                                                               | 18.5                                                               | 11.1                                                     |
|        | G 1/4   | 55                                                        | 35                                                       | 50                                                              | 35                                                       | 50                                                          | 33                                                                 | 40                                                                 | 25                                                       |
|        |         | 40.5                                                      | 25.8                                                     | 36.9                                                            | 25.9                                                     | 37.0                                                        | 24.4                                                               | 29.6                                                               | 18.5                                                     |
|        | G 3/8   | 95                                                        | 70                                                       | 80                                                              | 70                                                       | 80                                                          | 70                                                                 | 95                                                                 | 50                                                       |
|        |         | 70.1                                                      | 51.8                                                     | 59.0                                                            | 51.8                                                     | 59.2                                                        | 51.8                                                               | 70.3                                                               | 37.0                                                     |
|        | G 1/2   | 185                                                       | 90                                                       | 140                                                             | 90                                                       | 105                                                         | 90                                                                 | 130                                                                | 70                                                       |
|        |         | 136.4                                                     | 66.6                                                     | 103.3                                                           | 66.6                                                     | 77.7                                                        | 66.6                                                               | 96.2                                                               | 51.8                                                     |
|        | G 3/4   | 250                                                       | 180                                                      | 190                                                             | 180                                                      | 220                                                         | 180                                                                | 250                                                                | 120                                                      |
|        |         | 184.4                                                     | 133.2                                                    | 140.1                                                           | 133.2                                                    | 162.8                                                       | 133.2                                                              | 185.0                                                              | 88.8                                                     |
| S      | G 1     | 400                                                       | 310                                                      | 330                                                             | 310                                                      | 370                                                         | 250                                                                | 400                                                                | 200                                                      |
|        |         | 295                                                       | 229.4                                                    | 243.4                                                           | 229.4                                                    | 273.8                                                       | 185.0                                                              | 296.0                                                              | 148.0                                                    |
|        | G 1 1/4 | 670                                                       | 450                                                      | 540                                                             | 450                                                      | 500                                                         | 400                                                                | 600                                                                | 320                                                      |
|        |         | 494.2                                                     | 333                                                      | 398.3                                                           | 333.0                                                    | 370.0                                                       | 296.0                                                              | 444.0                                                              | 236.8                                                    |
|        | G 1 1/2 | 800                                                       | 540                                                      | 630                                                             | 540                                                      | 600                                                         | 500                                                                | 800                                                                | 400                                                      |
|        |         | 590                                                       | 399.6                                                    | 464.7                                                           | 399.6                                                    | 444.0                                                       | 370.0                                                              | 592.0                                                              | 296.0                                                    |
|        | G 1/8   | 30                                                        | 25                                                       |                                                                 |                                                          |                                                             | 18                                                                 | 25                                                                 | 15                                                       |
|        |         | 22.1                                                      | 18.4                                                     |                                                                 |                                                          |                                                             | 13.3                                                               | 18.5                                                               | 11.1                                                     |
|        | G 1/4   | 80                                                        | 55                                                       | 60                                                              | 55                                                       | 50                                                          | 33                                                                 | 40                                                                 | 25                                                       |
|        |         | 59.0                                                      | 40.7                                                     | 44.3                                                            | 40.7                                                     | 37.0                                                        | 24.4                                                               | 29.6                                                               | 18.5                                                     |
| S      | G 3/8   | 130                                                       | 80                                                       | 100                                                             | 80                                                       | 80                                                          | 70                                                                 | 95                                                                 | 50                                                       |
|        |         | 95.9                                                      | 59.0                                                     | 73.8                                                            | 59.2                                                     | 59.2                                                        | 51.8                                                               | 70.3                                                               | 37.0                                                     |
|        | G 1/2   | 220                                                       | 115                                                      | 160                                                             | 115                                                      | 105                                                         | 90                                                                 | 130                                                                | 70                                                       |
|        |         | 162.3                                                     | 84.8                                                     | 118.0                                                           | 85.1                                                     | 77.7                                                        | 66.6                                                               | 96.2                                                               | 51.8                                                     |
|        | G 3/4   | 350                                                       | 180                                                      | 280                                                             | 180                                                      | 220                                                         | 181                                                                | 250                                                                | 120                                                      |
|        |         | 258.1                                                     | 133.2                                                    | 206.5                                                           | 133.2                                                    | 162.8                                                       | 133.2                                                              | 185.0                                                              | 88.8                                                     |
|        | G 1     | 700                                                       | 310                                                      | 440                                                             | 310                                                      | 370                                                         | 250                                                                | 400                                                                | 200                                                      |
|        |         | 516.3                                                     | 229.4                                                    | 324.5                                                           | 229.4                                                    | 273.8                                                       | 185.0                                                              | 296.0                                                              | 148.0                                                    |
|        | G 1 1/4 | 850                                                       | 450                                                      | 580                                                             | 450                                                      | 500                                                         | 400                                                                | 600                                                                | 320                                                      |
|        |         | 627                                                       | 333                                                      | 427.8                                                           | 333.0                                                    | 370.0                                                       | 296.0                                                              | 444.0                                                              | 236.8                                                    |
| S      | G 1 1/2 | 1000                                                      | 540                                                      | 700                                                             | 540                                                      | 600                                                         | 500                                                                | 800                                                                | 400                                                      |
|        |         | 737.6                                                     | 399.6                                                    | 516.3                                                           | 399.6                                                    | 444.0                                                       | 370.0                                                              | 592.0                                                              | 296.0                                                    |
| S      | G 2     | 1200                                                      |                                                          |                                                                 |                                                          |                                                             |                                                                    |                                                                    |                                                          |
|        |         | 885.1                                                     |                                                          |                                                                 |                                                          |                                                             |                                                                    |                                                                    |                                                          |

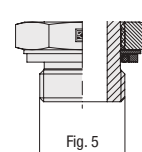
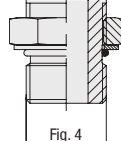
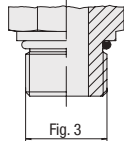
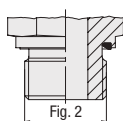
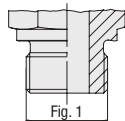
Please note: The tightening torques for male threaded studs listed in this catalogue are approximate values with a tolerance of +10% and always refer to original components of the STAUFF Connect range made of steel with the default Zinc/Nickel coating and a steel mating material.

Please contact STAUFF prior to the assembly for recommended tightening torques for use with any mating materials other than Steel!



## Assembly Instructions for Tube Fittings with Male Threaded Stud Metric Parallel Thread

### Tightening Torques


**Metallic Sealing Edge**
**Profile Sealing Ring**
**O-Ring**
**O-Ring without Retaining Ring  
(Adjustable)**
**O-Ring with Retaining Ring  
(Adjustable)**

Metric Parallel Thread  
DIN 3852-1 (Form B) /  
ISO 9974-3 (Type B)

Metric Parallel Thread  
ISO 9974-2 (Type E)

Metric Parallel Thread  
ISO 6149-2 /-3

Metric Parallel Thread  
ISO 6149-2 /-3

Metric Parallel Thread

| Series | Thread                  | Male Threaded Studs                                       |                                                          |                                         | Check Valves                                             | Adjustable Male Threaded Studs                                 |                                         | Blanking Screws                                          |                                                          |                                         |
|--------|-------------------------|-----------------------------------------------------------|----------------------------------------------------------|-----------------------------------------|----------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------|----------------------------------------------------------|----------------------------------------------------------|-----------------------------------------|
|        |                         | fig. 1<br>Metallic<br>Sealing Edge<br>Torque<br>(N-m) ca. | fig. 2<br>Profile<br>Sealing Ring<br>Torque<br>(N-m) ca. | fig. 3<br>O-Ring<br>Torque<br>(N-m) ca. | fig. 2<br>Profile<br>Sealing Ring<br>Torque<br>(N-m) ca. | fig. 5<br>O-Ring with<br>Retaining Ring<br>Torque<br>(N-m) ca. | fig. 4<br>O-Ring<br>Torque<br>(N-m) ca. | fig. 2<br>Profile<br>Sealing Ring<br>Torque<br>(N-m) ca. | fig. 2<br>Profile<br>Sealing Ring<br>Torque<br>(N-m) ca. | fig. 3<br>O-Ring<br>Torque<br>(N-m) ca. |
| L      | M 8 x 1                 | 14                                                        |                                                          |                                         |                                                          |                                                                |                                         |                                                          | 10                                                       |                                         |
|        |                         | 10.3                                                      |                                                          |                                         |                                                          |                                                                |                                         |                                                          |                                                          |                                         |
|        | M 10 x 1                | 25                                                        | 18                                                       | 15                                      | 18                                                       | 18                                                             | 15                                      | 12                                                       | 12                                                       | 15                                      |
|        |                         | 18.4                                                      | 13.32                                                    | 11.1                                    | 13.3                                                     | 13.3                                                           | 11.1                                    | 8.9                                                      | 8.9                                                      | 11.1                                    |
|        | M 12 x 1,5              | 45                                                        | 25                                                       | 25                                      | 25                                                       | 35                                                             | 25                                      | 25                                                       | 23                                                       | 22                                      |
|        |                         | 33.3                                                      | 18.5                                                     | 18.5                                    | 18.4                                                     | 25.9                                                           | 18.5                                    | 18.5                                                     | 17.0                                                     | 16.3                                    |
|        | M 14 x 1,5              | 70                                                        | 45                                                       | 35                                      | 45                                                       | 55                                                             | 35                                      | 45                                                       | 30                                                       | 45                                      |
|        |                         | 51.6                                                      | 33.3                                                     | 25.9                                    | 33.3                                                     | 40.7                                                           | 25.9                                    | 33.3                                                     | 22.2                                                     | 33.3                                    |
|        | M 16 x 1,5              | 90                                                        | 55                                                       | 40                                      | 55                                                       | 80                                                             | 40                                      | 55                                                       | 50                                                       | 55                                      |
|        |                         | 66.4                                                      | 40.7                                                     | 29.6                                    | 40.7                                                     | 59.2                                                           | 29.6                                    | 40.7                                                     | 37.0                                                     | 40.7                                    |
|        | M 18 x 1,5              | 120                                                       | 70                                                       | 45                                      | 70                                                       | 105                                                            | 45                                      | 70                                                       | 65                                                       | 70                                      |
|        |                         | 88.5                                                      | 51.8                                                     | 33.3                                    | 51.8                                                     | 77.7                                                           | 33.3                                    | 51.8                                                     | 48.1                                                     | 51.8                                    |
|        | M 22 x 1,5              | 170                                                       | 125                                                      | 60                                      | 125                                                      | 125                                                            | 60                                      | 125                                                      | 90                                                       | 100                                     |
|        |                         | 125.4                                                     | 92.5                                                     | 44.4                                    | 92.5                                                     | 92.5                                                           | 44.4                                    | 92.5                                                     | 66.6                                                     | 74.0                                    |
|        | M 26 x 1,5 <sup>2</sup> | 230                                                       | 180                                                      |                                         | 180                                                      |                                                                |                                         | 180                                                      | 100                                                      | 170                                     |
|        |                         | 169.6                                                     | 133.2                                                    |                                         | 132.8                                                    |                                                                |                                         | 133.2                                                    | 74.0                                                     | 125.8                                   |
| S      | M 27 x 2                |                                                           | 180                                                      | 100                                     |                                                          | 200                                                            | 100                                     | 180                                                      | 130                                                      | 180                                     |
|        |                         |                                                           | 132.8                                                    | 74.0                                    |                                                          | 147.5                                                          | 74.0                                    | 132.8                                                    | 96.2                                                     | 132.8                                   |
|        | M 33 x 2                | 400                                                       | 310                                                      | 160                                     | 310                                                      | 370                                                            | 160                                     | 250                                                      | 250                                                      | 215                                     |
|        |                         | 295.0                                                     | 229.4                                                    | 118.4                                   | 229.4                                                    | 273.8                                                          | 118.4                                   | 185.0                                                    | 185.0                                                    | 159.1                                   |
|        | M 42 x 2                | 700                                                       | 450                                                      | 210                                     | 450                                                      | 500                                                            | 210                                     | 400                                                      | 310                                                      | 330                                     |
|        |                         | 516.3                                                     | 333                                                      | 155.4                                   | 333                                                      | 370.0                                                          | 155.4                                   | 296.0                                                    | 229.4                                                    | 244.2                                   |
|        | M 48 x 2                | 900                                                       | 540                                                      | 260                                     | 540                                                      | 600                                                            | 260                                     | 500                                                      | 380                                                      | 420                                     |
|        |                         | 663.8                                                     | 399.6                                                    | 192.4                                   | 399.6                                                    | 44.0                                                           | 192.4                                   | 370.0                                                    | 281.2                                                    | 310.8                                   |
|        | M 12 x 1,5              | 60                                                        | 35                                                       | 35                                      | 35                                                       | 35                                                             | 35                                      | 25                                                       | 23                                                       | 22                                      |
|        |                         | 44.3                                                      | 25.8                                                     | 25.8                                    | 25.9                                                     | 25.9                                                           | 25.9                                    | 18.5                                                     | 17.0                                                     | 16.3                                    |
|        | M 14 x 1,5              | 80                                                        | 55                                                       | 40                                      | 55                                                       | 55                                                             | 45                                      | 45                                                       | 30                                                       | 45                                      |
|        |                         | 59.0                                                      | 40.6                                                     | 29.6                                    | 40.7                                                     | 40.7                                                           | 33.3                                    | 33.3                                                     | 22.2                                                     | 33.3                                    |
|        | M 16 x 1,5              | 130                                                       | 70                                                       | 55                                      | 70                                                       | 80                                                             | 55                                      | 55                                                       | 50                                                       | 55                                      |
|        |                         | 95.9                                                      | 51.6                                                     | 40.7                                    | 51.8                                                     | 59.2                                                           | 40.7                                    | 40.7                                                     | 37.0                                                     | 40.7                                    |
|        | M 18 x 1,5              | 190                                                       | 90                                                       | 70                                      | 90                                                       | 105                                                            | 70                                      | 70                                                       | 65                                                       | 70                                      |
|        |                         | 140.1                                                     | 66.4                                                     | 51.6                                    | 66.4                                                     | 77.7                                                           | 51.8                                    | 51.8                                                     | 48.1                                                     | 51.8                                    |
|        | M 20 x 1,5              | 220                                                       | 125                                                      |                                         | 125                                                      |                                                                |                                         | 80                                                       | 80                                                       |                                         |
|        |                         | 162.3                                                     | 92.2                                                     |                                         | 92.5                                                     |                                                                |                                         | 59.2                                                     | 59.2                                                     |                                         |
|        | M 22 x 1,5              | 300                                                       | 135                                                      | 100                                     | 135                                                      | 125                                                            | 100                                     | 125                                                      | 90                                                       | 100                                     |
|        |                         | 221.3                                                     | 99.6                                                     | 74                                      | 99.6                                                     | 92.5                                                           | 74.0                                    | 92.5                                                     | 66.6                                                     | 74.0                                    |
|        | M 26 x 1,5              |                                                           | 180                                                      |                                         |                                                          |                                                                |                                         | 180                                                      | 100                                                      | 170                                     |
|        |                         |                                                           | 132.8                                                    |                                         |                                                          |                                                                |                                         | 132.8                                                    | 74.0                                                     | 125.8                                   |
|        | M 27 x 2                | 420                                                       | 180                                                      | 170                                     | 180                                                      | 220                                                            | 170                                     | 180                                                      | 130                                                      | 180                                     |
|        |                         | 309.8                                                     | 132.8                                                    | 125.8                                   | 132.8                                                    | 162.8                                                          | 125.8                                   | 132.8                                                    | 96.2                                                     | 132.8                                   |
|        | M 33 x 2                | 600                                                       | 310                                                      | 310                                     | 310                                                      | 370                                                            | 310                                     | 250                                                      | 250                                                      | 215                                     |
|        |                         | 442.5                                                     | 229.4                                                    | 229.4                                   | 229.4                                                    | 273.8                                                          | 229.4                                   | 185.0                                                    | 185.0                                                    | 159.1                                   |
|        | M 42 x 2                | 700                                                       | 450                                                      | 330                                     | 450                                                      | 500                                                            | 330                                     | 400                                                      | 310                                                      | 330                                     |
|        |                         | 516.3                                                     | 333                                                      | 244.2                                   | 333                                                      | 370.0                                                          | 244.2                                   | 296.0                                                    | 229.4                                                    | 244.2                                   |
|        | M 48 x 2                | 950                                                       | 540                                                      | 420                                     | 540                                                      | 600                                                            | 420                                     | 500                                                      | 380                                                      | 420                                     |
|        |                         | 700.1                                                     | 399.6                                                    | 310.8                                   | 399.6                                                    | 444.0                                                          | 310.8                                   | 370.0                                                    | 281.2                                                    | 310.8                                   |

<sup>2</sup>M 27 x 2 according to ISO 6149.

Please note: The tightening torques for male threaded studs listed in this catalogue are approximate values with a tolerance of +10% and always refer to original components of the STAUFF Connect range made of steel with the default Zinc/Nickel coating and a steel mating material.

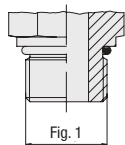
Please contact STAUFF prior to the assembly for recommended tightening torques for use with any mating materials other than Steel!





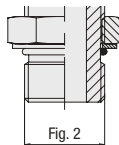
## Assembly Instructions for Tube Fittings with Male Threaded Stud UN/UNF-Thread

### Tightening Torques



**O-Ring without Retaining Ring  
(Non-Adjustable)**

UN/UNF-Thread



**O-Ring without Retaining  
Ring (Adjustable)**

UN/UNF-Thread  
ISO 11926-2/-3

| Series | Thread       | Male Threaded Studs                         | Adjustable Male Threaded Studs              |
|--------|--------------|---------------------------------------------|---------------------------------------------|
|        |              | fig. 1<br>O-Ring<br><br>Torque<br>(N-m) ca. | fig. 2<br>O-Ring<br><br>Torque<br>(N-m) ca. |
| L      | 7/16-20 UNF  | 18                                          | 18                                          |
|        |              | 13.3                                        | 13.3                                        |
|        | 1/2-20 UNF   | 28                                          |                                             |
|        |              | 20.7                                        |                                             |
|        | 9/16-18 UNF  | 30                                          | 34                                          |
|        |              | 22.2                                        | 25.1                                        |
|        | 3/4-16 UNF   | 50                                          | 55                                          |
|        |              | 37.0                                        | 40.7                                        |
|        | 7/8-14 UNF   | 60                                          | 80                                          |
|        |              | 44.2                                        | 59                                          |
|        | 1 1/16-12 UN | 95                                          | 100                                         |
|        |              | 70.3                                        | 73.7                                        |
| S      | 7/16-20 UNF  | 150                                         | 150                                         |
|        |              | 111.0                                       | 111.0                                       |
|        | 1 5/8-12 UN  | 200                                         | 290                                         |
|        |              | 148.0                                       | 213.9                                       |
|        | 1 7/8-12 UN  | 325                                         | 325                                         |
|        |              | 239.7                                       | 239.7                                       |
|        | 7/16-20 UNF  | 20                                          | 20                                          |
|        |              | 14.8                                        | 14.8                                        |
|        | 9/16-18 UNF  | 35                                          | 46                                          |
|        |              | 25.9                                        | 33.9                                        |
|        | 3/4-16 UNF   | 70                                          | 80                                          |
|        |              | 51.8                                        | 59                                          |
|        | 7/8-14 UNF   | 100                                         | 80                                          |
|        |              | 74.0                                        | 59                                          |
|        | 1 1/16-12 UN | 170                                         | 185                                         |
|        |              | 125.8                                       | 136.4                                       |
|        | 1 5/16-12 UN | 270                                         |                                             |
|        |              | 199.1                                       |                                             |
|        | 1 5/8-12 UN  | 285                                         | 340                                         |
|        |              | 210.9                                       | 250.7                                       |
|        | 1 7/8-12 UN  | 415                                         | 415                                         |
|        |              | 306.1                                       | 306.1                                       |

Please note: The tightening torques for male threaded studs listed in this catalogue are approximate values with a tolerance of +10% and always refer to original components of the STAUFF Connect range made of steel with the default Zinc/Nickel coating and a steel mating material.

**Please contact STAUFF prior to the assembly for recommended tightening torques for use with any mating materials other than Steel!**



## Assembly Instructions for Banjo Fittings

### 1. Assembly Preparation

Lubricate the o-ring of the banjo bolt (e.g. using mineral-oil based hydraulic fluid HLP32).  
Do not use lubricating grease!

Immediately proceed with the assembly in order to avoid exposure to contamination.

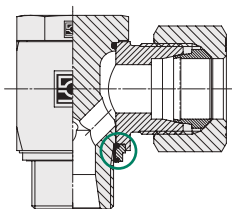
### 2. Assembly with the Fitting Body

Place the external metallic sealing ring or the retaining ring with captive seal on the opposite side of the banjo fitting into the larger bore and center it through the thread for the banjo bolt. Retaining rings with captive seal are additionally centered through the bore in the fitting body – any clearance between the ring and the fitting body is not allowed.

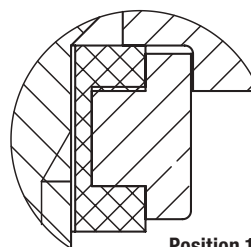
Align the body of the banjo fitting and tighten the banjo bolt with a spanner until the noticeable increase in force (pressure point).

Use a suitable spanner to finish the assembly with either another approximately 1/6 a turn (60°, applicable for retaining rings with captive seal) or 1/4 a turn (90°, applicable for external metallic sealing rings) beyond this point while holding the body of the banjo fitting in position using a second spanner.

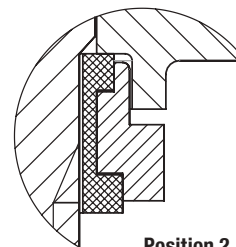
### Positioning and Orientation of Retaining Rings with Captive Seal



Applicable for RSWND / RSW / RST



Position 1



Position 2

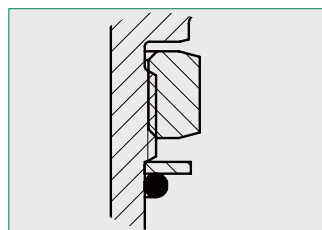
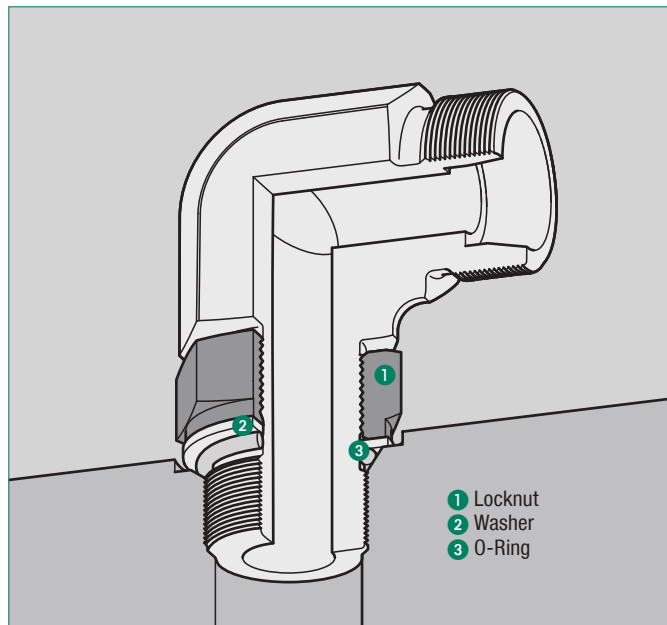
| Series | Tube OD<br>(mm/in) | Thread  | Position |
|--------|--------------------|---------|----------|
| L      | 6                  | G 1/8   | 2        |
|        | .24                |         |          |
|        | 8                  | G 1/4   | 2        |
|        | .31                |         |          |
|        | 10                 | G 1/4   | 2        |
|        | .39                |         |          |
|        | 12                 | G 3/8   | 1        |
|        | .47                |         |          |
|        | 15                 | G 1/2   | 1        |
|        | .59                |         |          |
|        | 18                 | G 1/2   | 1        |
|        | .71                |         |          |
|        | 22                 | G 3/4   | 1        |
|        | .87                |         |          |
|        | 28                 | G 1     | 1        |
|        | 1.10               |         |          |
| S      | 35                 | G 1 1/4 | 1        |
|        | 1.38               |         |          |
|        | 42                 | G 1 1/2 | 1        |
|        | 1.65               |         |          |
|        | 6                  | G 1/4   | 2        |
|        | .24                |         |          |
|        | 8                  | G 1/4   | 2        |
|        | .31                |         |          |
|        | 10                 | G 3/8   | 1        |
|        | .39                |         |          |
|        | 12                 | G 3/8   | 1        |
|        | .47                |         |          |
|        | 14                 | G 1/2   | 1        |
|        | .55                |         |          |
|        | 16                 | G 1/2   | 1        |
|        | .63                |         |          |
|        | 20                 | G 3/4   | 1        |
|        | .79                |         |          |
|        | 25                 | G 1     | 1        |
|        | .98                |         |          |
|        | 30                 | G 1 1/4 | 1        |
|        | 1.18               |         |          |
|        | 38                 | G 1 1/2 | 1        |
|        | 1.50               |         |          |

| Series | Tube OD<br>(mm/in) | Thread   | Position |
|--------|--------------------|----------|----------|
| L      | 6                  | M 10x1   | 2        |
|        | .24                |          |          |
|        | 8                  | M 12x1,5 | 1        |
|        | .31                |          |          |
|        | 10                 | M 14x1,5 | 2        |
|        | .39                |          |          |
|        | 12                 | M 16x1,5 | 1        |
|        | .47                |          |          |
|        | 15                 | M 18x1,5 | 1        |
|        | .59                |          |          |
|        | 18                 | M 22x1,5 | 1        |
|        | .71                |          |          |
|        | 22                 | M 26x1,5 | 1        |
|        | .87                |          |          |
|        | 28                 | M 33x2   | 1        |
|        | 1.10               |          |          |
| S      | 35                 | M 42x2   | 1        |
|        | 1.38               |          |          |
|        | 42                 | M 48x2   | 1        |
|        | 1.65               |          |          |
|        | 6                  | M 12x1,5 | 1        |
|        | .24                |          |          |
|        | 8                  | M 14x1,5 | 2        |
|        | .31                |          |          |
|        | 10                 | M 16x1,5 | 1        |
|        | .39                |          |          |
|        | 12                 | M 18x1,5 | 1        |
|        | .47                |          |          |
|        | 14                 | M 20x1,5 | 1        |
|        | .55                |          |          |
|        | 16                 | M 22x1,5 | 1        |
|        | .63                |          |          |
|        | 20                 | M 27x2   | 1        |
|        | .79                |          |          |
|        | 25                 | M 33x2   | 1        |
|        | .98                |          |          |
|        | 30                 | M 42x2   | 1        |
|        | 1.18               |          |          |
|        | 38                 | M 48x2   | 1        |
|        | 1.50               |          |          |

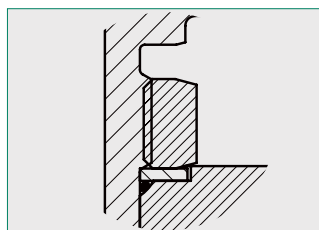


## Assembly Instructions for Adjustable Fitting with Locknut (WEE, VEE, TEE, LEE)

For use in Ports to ISO 6149 and SAE UNO

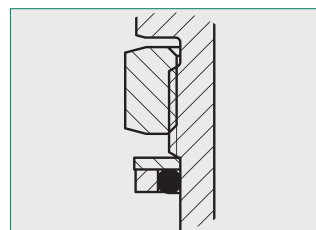
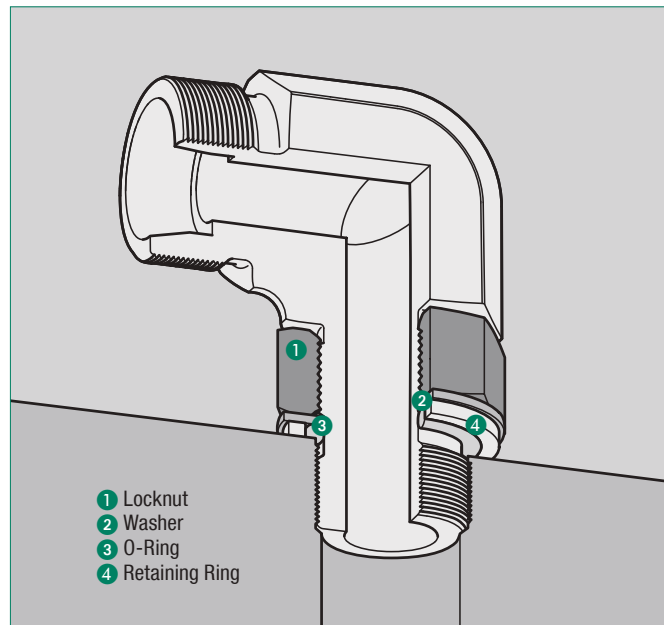


Pre-assembly

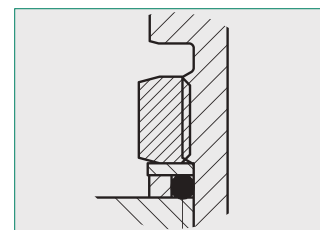


Post-assembly

For use in Ports Form X acc. to DIN 3852-2, ISO 1179-1

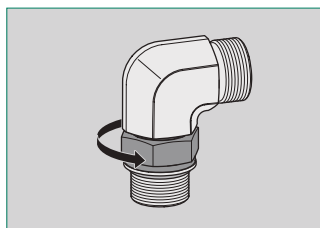


Pre-assembly



Post-assembly

### 1. Assembly Preparation



Lubricate the o-ring (e.g. using mineral-oil based hydraulic fluid HLP32).  
Do not use lubricating grease!

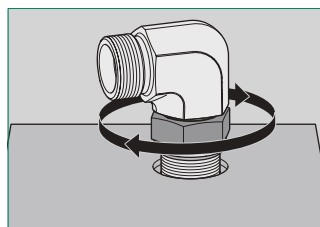
Immediately proceed with the assembly in order to avoid exposure to contamination.

Ensure that the Locknut, O-Ring and Washer are fully raised.

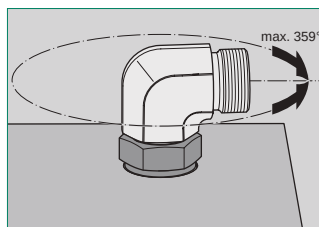


Please Note:  
For use in Ports Form X, ensure that the Retaining Ring is placed.

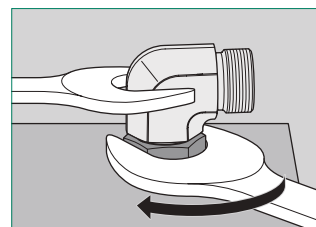
### 2. Assembly



Fully screw in the fitting body.



Adjust the direction.  
Caution: Turn back by no more than one rotation against the direction in which the fitting body was installed!



Tighten the locknut with the defined torque (see p. 171-179) while using a spanner to counter the fitting body in the direction of adjustment.

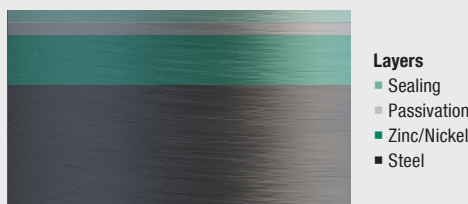




|                                                                               |     |
|-------------------------------------------------------------------------------|-----|
| Tube Fitting Materials and Surface Finishings                                 | 324 |
| Elastomer Seal Materials                                                      | 325 |
| Overview of media resistance                                                  | 325 |
| Pressure and Temperature Ratings                                              | 326 |
| Pressure Reduction Factors                                                    | 327 |
| Calculated Design / Burst Pressures for Tube (bar)                            | 328 |
| Calculated Design / Burst Pressures for Tube (PSI)                            | 330 |
| Port Dimensions for Fittings with Male Threaded Stud                          | 332 |
| Dimensions of the 24° Conical Bore / Union Nut                                | 336 |
| Standard Threads and Widths Across Flats for Fittings with Male Threaded Stud | 337 |
| Certificates and Approvals                                                    | 338 |



## Tube Fitting Materials and Surface Finishings



**STAUFF Zinc/Nickel Coating**

Fitting bodies of the STAUFF Connect range are usually machined from drawn or forged steel in accordance with DIN 3859-1 (Technical Specification for Tube Fittings).

Union nuts are either cold-pressed or hot-pressed.

Unless otherwise stated, all metal parts of the STAUFF Connect range of tube fittings are made of Steel with standard Zinc/Nickel coating (material code: W3), that offers excellent surface protection far beyond the market standard.

One of the few exceptions, weld fittings are made of Steel, phosphated (material code: W2).

Alternative surface coatings are available upon request.

Do not hesitate to contact STAUFF for further information.

### Main Advantages of the STAUFF Zinc/Nickel Coating

- Premium long-life surface protection against corrosion with more than 1200 hours resistance to red rust / base metal corrosion in the salt-spray test according to DIN EN ISO 9227
- Free of hexavalent chrome Cr(VI)
- ELV compliant according to 2000/53/EC (End of Life Vehicles Directive)
- REACH compliant according to 1907/2006/EC (Registration, Evaluation, Authorisation and Restriction of Chemicals)
- RoHS compliant according to 2002/95/EC (Restrictions of the Use of Hazardous Substances)
- Easily surpassing the requirements of the corrosion protection class K5 (360 hours resistance to white rust / 720 hours resistance to red rust) as defined by the VDMA, the German Engineering Association (VDMA Standard Sheet 24576 „Fluid Power - Requirements and designations for corrosion-protection coatings free of hexavalent chrome“)
- Significantly reduced tendency to corrosion by contact with other metals such as Aluminium and Stainless Steel
- High abrasion resistance due to the ductility / plastic deformability of the coating
- Appealing colour scheme with a bright semi-gloss surface finish – comparable to Stainless Steel
- Surface is paintable with good paint adhesion properties (However, a painting test and, if necessary, degreasing of the surfaces to be painted are highly recommended)
- Little to no risk of triggering allergies, as the Zinc/Nickel base layer with a nickel content of 12-15 % is covered by both a passivation and a sealing layer to avoid the release of nickel and any direct physical contact
- Resistant against all commonly used hydraulic media





## Elastomer Seal Materials

Unless otherwise stated, standard elastomer seals are made of NBR (Perbunan®).

Elastomer seals made of NBR (Perbunan® – material code: B) are especially suitable for liquid or gaseous media at operating temperatures that range from **-35 °C to +100 °C / -31 °F to +212 °F**.

Elastomer seals for applications with higher temperatures or aggressive media, such as FKM (Viton® – material code: V – operating temperature range from **-25 °C to +200 °C / -13 °F to +392 °F** and EPDM (material code: E), are available upon request.

Do not hesitate to contact STAUFF for further information.

The performance of elastomer seals during operation can be negatively affected by various influences. Elastomer seals should be inspected for any kind of damage (cracks, deformation, hardening or softening, swelling, reduced elasticity etc.) or contamination prior to the assembly process and when carrying out service and maintenance work, and should be replaced, if necessary.

Spare seals are available as part of the STAUFF Connect range.

### Storage Recommendations

Please observe the following storage recommendations for elastomer seals in accordance with DIN 7716 (Requirements for Storage, Cleaning and Maintenance of Rubber Products):

- Store seals in a dry place, away from draughts, at temperatures not exceeding +25 °C / +77 °F.
- Protect seals from sunlight, ozone and strong artificial lightning during storage.

These recommendations do not only apply for separate elastomer seals, but also for tube fittings with pre-assembled o-rings and seals.

Not following these storage recommendations can cause brittle fracture of elastomer seals and result in leakage!

*Perbunan® is a registered trademark of Lanxess Deutschland GmbH.  
Viton® is a registered trademark of DuPont Performance Elastomers L.L.C.*

## Overview of media resistance

Thanks to their zinc/nickel surface coating, STAUFF Connect Tube Connectors made of steel have a high resistance to all common hydraulics fluids, which also applies to contact with other media and aggressive substances.

However, STAUFF still recommends verifying the suitability of media which are not designated as common hydraulics fluids or to contact STAUFF before use if in doubt.

In addition to the resistance of the STAUFF zinc/nickel surface coatings, compatibility of the elastomers and other hydraulic components also have to be considered.

The following table shows a general overview of this.  
This is only intended for guidance!

| Medium                                                  | STAUFF Connect fitting<br>Steel | Sealing material<br>NBR (Buna-N®) | FKM (Viton®) | EPDM |
|---------------------------------------------------------|---------------------------------|-----------------------------------|--------------|------|
| Acetone                                                 |                                 |                                   |              |      |
| ASTM - oil no. 1                                        |                                 |                                   |              |      |
| ASTM - oil no. 2                                        |                                 |                                   |              |      |
| ASTM - oil no. 3                                        |                                 |                                   |              |      |
| ASTM - oil no. 4                                        |                                 |                                   |              |      |
| Petrol                                                  |                                 |                                   |              |      |
| Benzene                                                 |                                 |                                   |              |      |
| Brake fluid                                             |                                 |                                   |              |      |
| Diesel fuel                                             |                                 |                                   |              |      |
| Compressed air (dry, oil-free)                          |                                 |                                   |              |      |
| Natural gas                                             |                                 |                                   |              |      |
| Oil/petroleum                                           |                                 |                                   |              |      |
| Ethanol (ethyl alcohol)                                 |                                 |                                   |              |      |
| Ether                                                   |                                 |                                   |              |      |
| Liquid gas LPG (propane/butane)                         |                                 |                                   |              |      |
| Gear oil                                                |                                 |                                   |              |      |
| Glycol (ethylene glycol)                                |                                 |                                   |              |      |
| Heating oil                                             |                                 |                                   |              |      |
| Hydraulic fluids, biodegradable HEES (synthetic esters) | *                               | *                                 |              |      |
| Hydraulic fluids, biodegradable HEPG (polyglycol-based) |                                 |                                   | *            |      |
| Hydraulic fluids, flame-resistant HFC (water-glycol)    |                                 |                                   |              |      |
| Hydraulic oils HL/HLP (mineral oil-based)               |                                 |                                   |              |      |
| Carbon dioxide                                          |                                 |                                   |              |      |
| Carbon monoxide                                         |                                 |                                   |              |      |
| Seawater                                                |                                 |                                   |              |      |
| Methane                                                 |                                 |                                   |              |      |
| Methanol (methyl alcohol)                               |                                 |                                   |              |      |
| Mineral oils                                            |                                 |                                   |              |      |
| Natural gas, untreated (sour gas)                       |                                 |                                   |              |      |
| Petroleum                                               |                                 |                                   |              |      |
| Crude oil                                               |                                 |                                   |              |      |
| Soap solution                                           |                                 |                                   |              |      |
| Silicone oils                                           |                                 |                                   |              |      |
| Skydrol 500                                             |                                 |                                   |              |      |
| Skydrol 7000                                            |                                 |                                   |              |      |
| Turpentine                                              |                                 |                                   |              |      |
| Water (up to 70°)                                       |                                 |                                   |              |      |
| Water vapour                                            |                                 |                                   |              |      |

resistant

limited resistance

not resistant

\* temperature-dependent

Note: The media resistance of the material always also depends on the temperature of the medium used.



## Pressure and Temperature Ratings

### General Information

Unless otherwise stated, all pressure ratings in this product catalogue are indicated in bar and PSI. All temperature ratings are indicated in °C (degree Celsius) and °F (degree Fahrenheit).

Pressure ratings are usually rounded to correspond with standardised pressure ratings, which are internationally recognised and assist to identify and match common sizes of components together.

All tube fittings and other components of the STAUFF Connect range meet or exceed common standardised pressure ratings for mobile and industrial fluid power applications up to nominal pressures of 800 bar / 11600 PSI (depending on series, type and size of the component – pressure reduction factors to be considered).

Pressure ratings are divided into nominal pressures (PN) and permissible operating pressures (PB).

### Nominal Pressure (PN)

Nominal pressure (PN) is a term used to describe the pressure that tube fittings and other components are designed to safely withstand, and indicates the maximum operating pressure of tube fittings and other components that should be applied to the component when operating the system under stationary conditions.

During static load tests, burst pressures must be at least 4 times higher than the nominal pressures (safety factor of 4).

### Permissible Operating Pressure (PB)

The permissible operating pressure (PB) of a component (as defined in DIN 2401, part 1) is identical to the maximum internal overpressure at regular operating conditions (operating temperature of +120 °C without dynamic loads / pressure peaks) as calculated based on the material in use and considering the permissible operating temperature (TB).

During static load tests, burst pressures must be at least 2,5 times higher than the permissible operating pressures (safety factor of 2,5).

### Please note:

The pressure ratings and safety factors as specified are only applicable when strictly following the assembly instructions (e.g. tightening torques for male stud fittings) and only refer to original components of the STAUFF Connect range. Avoid mixing with other brands' products!

If components are exposed to vibrations, dynamic loads or pressure peaks, the pressure ratings must be reduced accordingly in order to keep the same level of safety.

### Permissible Operating Temperature (TB)

Unless otherwise stated, the permissible operating temperature (TB) for tube fittings and other components in this product catalogue ranges from -20 °C to +120 °C / -4 °F to +248 °F in accordance with DIN 3859-1 (Technical Specification for Tube Fittings).

Please observe that the permissible operating temperature may differ for tube fittings and other components that use elastomer seals. Deviations for tube fittings made of stainless steel see next page.



## Pressure Reduction Factors

Pressure reduction factors (in percent) have to be considered when intending to use the components at operating temperatures exceeding +120 °C / +248 °F for steel and +50 °C / +122 °F for stainless steel.

### Calculation Example

Component Straight Fitting FI-G-10S-W3-MS made of Steel  
with a nominal pressure (PN) rating of 800 bar / 11600 PSI

Temperature +175 °C / +347 °F

Reduction Factor 15 %

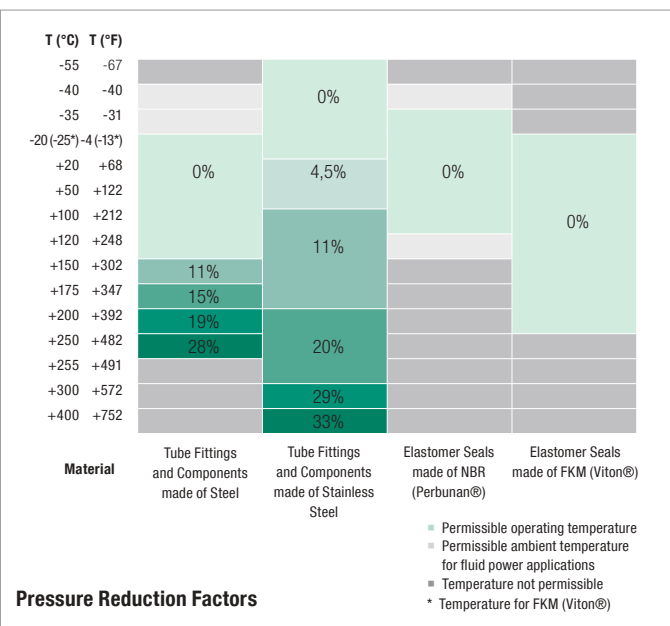
$$PN = \frac{800 \text{ bar}}{100 \%} \times (100 \% - 15 \%) = 680 \text{ bar}$$

Reduced Nominal Pressure

$$PN = \frac{11600 \text{ PSI}}{100 \%} \times (100 \% - 15 \%) = 9860 \text{ PSI}$$

### Please note:

When selecting tubes and other components for your system, any additional potential pressure reduction factors stated by the manufacturers / suppliers have to be considered.



## Selection Criteria for Tube

STAUFF recommends to use seamless, cold-drawn and normalized precision steel tubes as specified in DIN EN 10305-4, material E235+N (material number 1.0308+N, formerly St37.4) or material E355 (material number 1.0580, formerly St52.4).

In order to avoid misdeliveries, the tubes have to be ordered from the supplier by specifying the exact outer and inner diameter.

Tube materials and tolerances differing from these recommendations may lead to system faults or leakages and may even result in total breakdowns.

Unless otherwise stated, the pressure / temperature ratings as well as all other operating conditions indicated in this product catalogue do not refer to the actual tube. Specifications made by the respective tube manufacturers / suppliers have to be considered.



## Calculated Design / Burst Pressures for Tube (bar)

| Tube OD<br>(mm) | Tube ID<br>(mm) | Tube Wall<br>(mm) | STAUFF Nominal pressure<br>(bar) |              | Calculated Design Pressure<br>(bar) in accordance with DIN 2413 -<br>Load Case I<br>(predominantly static loads, up to +120 °C) |                  |                    | Calculated Design Pressure<br>(bar) in accordance with DIN 2413 -<br>Load Case III<br>(dynamic / pulsating loads, up to +120 °C) |                  |                    | Calculated Burst Pressure<br>(bar) in accordance with ISO 10763 |                  |                    |
|-----------------|-----------------|-------------------|----------------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------|-----------------------------------------------------------------|------------------|--------------------|
|                 |                 |                   |                                  |              | Material<br>E235+N                                                                                                              | Material<br>E355 | Material<br>1.4571 | Material<br>E235+N                                                                                                               | Material<br>E355 | Material<br>1.4571 | Material<br>E235+N                                              | Material<br>E355 | Material<br>1.4571 |
| D1              | D2              | S                 | Light Series                     | Heavy Series |                                                                                                                                 |                  |                    |                                                                                                                                  |                  |                    |                                                                 |                  |                    |
| 6               | 4,5             | 0,75              | 500                              | 800          | 338                                                                                                                             | 491              | 368                | 303                                                                                                                              | 310              | 256                | 1116                                                            | 1525             | 1346               |
| 6               | 4               | 1                 | 500                              | 800          | 450                                                                                                                             | 655              | 490                | 391                                                                                                                              | 400              | 330                | 1573                                                            | 2149             | 1898               |
| 6               | 3               | 1,5               | 500                              | 800          | 675                                                                                                                             | 983              | 735                | 551                                                                                                                              | 563              | 465                | 2689                                                            | 3674             | 3244               |
| 6*              | 2               | 2                 | 500                              | 800          | 900                                                                                                                             | 1310             | 980                | 692                                                                                                                              | 708              | 585                | 4263                                                            | 5823             | 5142               |
| 6*              | 1,5             | 2,25              | 500                              | 800          | 1013                                                                                                                            | 1474             | 1103               | 757                                                                                                                              | 774              | 639                | 5379                                                            | 7347             | 6488               |
| 8               | 6               | 1                 | 500                              | 800          | 338                                                                                                                             | 491              | 368                | 303                                                                                                                              | 310              | 256                | 1116                                                            | 1525             | 1346               |
| 8               | 5               | 1,5               | 500                              | 800          | 506                                                                                                                             | 737              | 551                | 433                                                                                                                              | 443              | 366                | 1824                                                            | 2491             | 2200               |
| 8               | 4               | 2                 | 500                              | 800          | 675                                                                                                                             | 983              | 735                | 551                                                                                                                              | 563              | 465                | 2689                                                            | 3674             | 3244               |
| 8*              | 3               | 2,5               | 500                              | 800          | 844                                                                                                                             | 1228             | 919                | 659                                                                                                                              | 673              | 556                | 3806                                                            | 5198             | 4590               |
| 10              | 8               | 1                 | 500                              | 800          | 270                                                                                                                             | 393              | 294                | 248                                                                                                                              | 253              | 209                | 866                                                             | 1183             | 1044               |
| 10              | 7               | 1,5               | 500                              | 800          | 405                                                                                                                             | 590              | 441                | 357                                                                                                                              | 365              | 301                | 1384                                                            | 1890             | 1669               |
| 10              | 6               | 2                 | 500                              | 800          | 540                                                                                                                             | 786              | 588                | 458                                                                                                                              | 468              | 386                | 1982                                                            | 2707             | 2391               |
| 10              | 5               | 2,5               | 500                              | 800          | 675                                                                                                                             | 983              | 735                | 551                                                                                                                              | 563              | 465                | 2689                                                            | 3674             | 3244               |
| 10*             | 4               | 3                 | 500                              | 800          | 810                                                                                                                             | 1179             | 882                | 638                                                                                                                              | 652              | 539                | 3555                                                            | 4856             | 4288               |
| 12              | 10              | 1                 | 400                              | 630          | 225                                                                                                                             | 328              | 245                | 209                                                                                                                              | 214              | 177                | 707                                                             | 966              | 853                |
| 12              | 9               | 1,5               | 400                              | 630          | 338                                                                                                                             | 491              | 368                | 303                                                                                                                              | 310              | 256                | 1116                                                            | 1525             | 1346               |
| 12              | 8               | 2                 | 400                              | 630          | 450                                                                                                                             | 655              | 490                | 391                                                                                                                              | 400              | 330                | 1573                                                            | 2149             | 1898               |
| 12              | 7               | 2,5               | 400                              | 630          | 563                                                                                                                             | 819              | 613                | 474                                                                                                                              | 484              | 400                | 2091                                                            | 2857             | 2523               |
| 12              | 6               | 3                 | 400                              | 630          | 675                                                                                                                             | 983              | 735                | 551                                                                                                                              | 563              | 465                | 2689                                                            | 3674             | 3244               |
| 12*             | 5               | 3,5               | 400                              | 630          | 823                                                                                                                             | 1180             | 858                | 624                                                                                                                              | 638              | 527                | 3397                                                            | 4640             | 4097               |
| 12*             | 4               | 4                 | 400                              | 630          | 940                                                                                                                             | 1348             | 980                | 692                                                                                                                              | 708              | 585                | 4263                                                            | 5823             | 5142               |
| 14              | 12              | 1                 |                                  | 630          | 193                                                                                                                             | 281              | 210                | 181                                                                                                                              | 185              | 153                | 598                                                             | 817              | 721                |
| 14              | 11              | 1,5               |                                  | 630          | 289                                                                                                                             | 421              | 315                | 264                                                                                                                              | 270              | 223                | 936                                                             | 1278             | 1129               |
| 14              | 10              | 2                 |                                  | 630          | 386                                                                                                                             | 561              | 420                | 342                                                                                                                              | 349              | 289                | 1306                                                            | 1783             | 1575               |
| 14              | 9               | 2,5               |                                  | 630          | 482                                                                                                                             | 702              | 525                | 415                                                                                                                              | 425              | 351                | 1714                                                            | 2342             | 2068               |
| 14              | 8               | 3                 |                                  | 630          | 579                                                                                                                             | 842              | 603                | 485                                                                                                                              | 496              | 410                | 2171                                                            | 2966             | 2619               |
| 14              | 7               | 3,5               |                                  | 630          | 705                                                                                                                             | 1011             | 735                | 551                                                                                                                              | 563              | 465                | 2689                                                            | 3674             | 3244               |
| 15              | 13              | 1                 | 400                              |              | 180                                                                                                                             | 262              | 196                | 170                                                                                                                              | 174              | 143                | 555                                                             | 758              | 670                |
| 15              | 12              | 1,5               | 400                              |              | 270                                                                                                                             | 393              | 294                | 248                                                                                                                              | 253              | 209                | 866                                                             | 1183             | 1044               |
| 15              | 11              | 2                 | 400                              |              | 360                                                                                                                             | 524              | 392                | 321                                                                                                                              | 329              | 271                | 1203                                                            | 1644             | 1452               |
| 15              | 10              | 2,5               | 400                              |              | 450                                                                                                                             | 655              | 490                | 391                                                                                                                              | 400              | 330                | 1573                                                            | 2149             | 1898               |
| 15              | 9               | 3                 | 400                              |              | 540                                                                                                                             | 786              | 588                | 458                                                                                                                              | 468              | 386                | 1982                                                            | 2707             | 2391               |
| 16              | 14              | 1                 |                                  | 630          | 169                                                                                                                             | 246              | 184                | 160                                                                                                                              | 163              | 135                | 518                                                             | 708              | 625                |
| 16              | 13              | 1,5               |                                  | 630          | 253                                                                                                                             | 368              | 276                | 233                                                                                                                              | 239              | 197                | 806                                                             | 1100             | 972                |
| 16              | 12              | 2                 |                                  | 630          | 338                                                                                                                             | 491              | 368                | 303                                                                                                                              | 310              | 256                | 1116                                                            | 1525             | 1346               |
| 16              | 11              | 2,5               |                                  | 630          | 422                                                                                                                             | 614              | 459                | 370                                                                                                                              | 378              | 312                | 1454                                                            | 1986             | 1754               |
| 16              | 10              | 3                 |                                  | 630          | 506                                                                                                                             | 737              | 551                | 433                                                                                                                              | 443              | 366                | 1824                                                            | 2491             | 2200               |
| 16              | 8               | 4                 |                                  | 630          | 705                                                                                                                             | 1011             | 735                | 551                                                                                                                              | 563              | 465                | 2689                                                            | 3674             | 3244               |
| 18              | 16              | 1                 | 400                              |              | 150                                                                                                                             | 218              | 163                | 143                                                                                                                              | 146              | 121                | 457                                                             | 624              | 551                |
| 18              | 15              | 1,5               | 400                              |              | 225                                                                                                                             | 328              | 245                | 209                                                                                                                              | 214              | 177                | 707                                                             | 966              | 853                |
| 18              | 14              | 2                 | 400                              |              | 300                                                                                                                             | 437              | 327                | 273                                                                                                                              | 279              | 230                | 975                                                             | 1332             | 1176               |
| 18              | 13              | 2,5               | 400                              |              | 375                                                                                                                             | 546              | 408                | 333                                                                                                                              | 341              | 281                | 1263                                                            | 1725             | 1523               |
| 18              | 12              | 3                 | 400                              |              | 450                                                                                                                             | 655              | 490                | 391                                                                                                                              | 400              | 330                | 1573                                                            | 2149             | 1898               |
| 18              | 10              | 4                 | 400                              |              | 627                                                                                                                             | 899              | 653                | 500                                                                                                                              | 511              | 422                | 2281                                                            | 3115             | 2751               |
| 20              | 17              | 1,5               |                                  | 420          | 203                                                                                                                             | 295              | 221                | 190                                                                                                                              | 194              | 160                | 631                                                             | 861              | 761                |
| 20              | 16              | 2                 |                                  | 420          | 270                                                                                                                             | 393              | 294                | 248                                                                                                                              | 253              | 209                | 866                                                             | 1183             | 1044               |
| 20              | 15              | 2,5               |                                  | 420          | 338                                                                                                                             | 491              | 368                | 303                                                                                                                              | 310              | 256                | 1116                                                            | 1525             | 1346               |
| 20              | 14              | 3                 |                                  | 420          | 405                                                                                                                             | 590              | 441                | 357                                                                                                                              | 365              | 301                | 1384                                                            | 1890             | 1669               |
| 20              | 13              | 3,5               |                                  | 420          | 494                                                                                                                             | 708              | 515                | 408                                                                                                                              | 417              | 345                | 1671                                                            | 2283             | 2016               |
| 20              | 12              | 4                 |                                  | 420          | 564                                                                                                                             | 809              | 588                | 458                                                                                                                              | 468              | 386                | 1982                                                            | 2707             | 2391               |
| 20              | 10              | 5                 |                                  | 420          | 705                                                                                                                             | 1011             | 735                | 551                                                                                                                              | 563              | 465                | 2689                                                            | 3674             | 3244               |

Load case I according to DIN 2413 describes predominantly static loads at temperatures not exceeding +120 °C.  
Load case III according to DIN 2413 describes dynamic / pulsating loads at temperatures not exceeding +120 °C.

For some sizes of thin-walled steel tube, support sleeves are highly recommended and in some case generally required.  
Please see page G11 for selection charts and detailed assembly instructions.



## Calculated Design / Burst Pressures for Tube (bar)

| Tube OD | Tube ID | Tube Wall | STAUFF Nominal pressure |              | Calculated Design Pressure                                                                        |                  |                    | Calculated Design Pressure                                                                         |                  |                    | Calculated Burst Pressure          |                  |                    |
|---------|---------|-----------|-------------------------|--------------|---------------------------------------------------------------------------------------------------|------------------|--------------------|----------------------------------------------------------------------------------------------------|------------------|--------------------|------------------------------------|------------------|--------------------|
| (mm)    | (mm)    | (mm)      | (bar)                   |              | (bar) in accordance with DIN 2413 -<br>Load Case I<br>(predominantly static loads, up to +120 °C) |                  |                    | (bar) in accordance with DIN 2413 -<br>Load Case III<br>(dynamic / pulsating loads, up to +120 °C) |                  |                    | (bar) in accordance with ISO 10763 |                  |                    |
| D1      | D2      | S         | Light Series            | Heavy Series | Material<br>E235+N                                                                                | Material<br>E355 | Material<br>1.4571 | Material<br>E235+N                                                                                 | Material<br>E355 | Material<br>1.4571 | Material<br>E235+N                 | Material<br>E355 | Material<br>1.4571 |
| 22      | 20      | 1         | 250                     |              | 123                                                                                               | 179              | 134                | 118                                                                                                | 121              | 100                | 370                                | 505              | 446                |
| 22      | 19      | 1,5       | 250                     |              | 184                                                                                               | 268              | 200                | 173                                                                                                | 177              | 146                | 569                                | 777              | 686                |
| 22      | 18      | 2         | 250                     |              | 245                                                                                               | 357              | 267                | 227                                                                                                | 232              | 192                | 779                                | 1064             | 939                |
| 22      | 17      | 2,5       | 250                     |              | 307                                                                                               | 447              | 334                | 278                                                                                                | 285              | 235                | 1000                               | 1366             | 1207               |
| 22      | 16      | 3         | 250                     |              | 368                                                                                               | 536              | 401                | 328                                                                                                | 335              | 277                | 1236                               | 1688             | 1490               |
| 22      | 15      | 3,5       | 250                     |              | 449                                                                                               | 643              | 468                | 376                                                                                                | 384              | 317                | 1486                               | 2030             | 1792               |
| 22      | 14      | 4         | 250                     |              | 513                                                                                               | 735              | 535                | 422                                                                                                | 431              | 356                | 1754                               | 2396             | 2115               |
| 25      | 22      | 1,5       |                         | 420          | 162                                                                                               | 236              | 176                | 154                                                                                                | 157              | 130                | 496                                | 678              | 598                |
| 25      | 21      | 2         |                         | 420          | 216                                                                                               | 314              | 235                | 201                                                                                                | 206              | 170                | 676                                | 924              | 816                |
| 25      | 20      | 2,5       |                         | 420          | 270                                                                                               | 393              | 294                | 248                                                                                                | 253              | 209                | 866                                | 1183             | 1044               |
| 25      | 19      | 3         |                         | 420          | 324                                                                                               | 472              | 353                | 292                                                                                                | 299              | 247                | 1065                               | 1455             | 1284               |
| 25      | 18      | 3,5       |                         | 420          | 395                                                                                               | 566              | 412                | 336                                                                                                | 343              | 283                | 1275                               | 1741             | 1537               |
| 25      | 17      | 4         |                         | 420          | 451                                                                                               | 647              | 470                | 378                                                                                                | 386              | 319                | 1496                               | 2044             | 1805               |
| 25      | 16      | 4,5       |                         | 420          | 508                                                                                               | 728              | 529                | 418                                                                                                | 428              | 353                | 1732                               | 2365             | 2089               |
| 25      | 15      | 5         |                         | 420          | 564                                                                                               | 809              | 588                | 458                                                                                                | 468              | 386                | 1982                               | 2707             | 2391               |
| 28      | 25      | 1,5       | 250                     |              | 145                                                                                               | 211              | 158                | 138                                                                                                | 141              | 117                | 440                                | 601              | 530                |
| 28      | 24      | 2         | 250                     |              | 193                                                                                               | 281              | 210                | 181                                                                                                | 185              | 153                | 598                                | 817              | 721                |
| 28      | 23      | 2,5       | 250                     |              | 241                                                                                               | 351              | 263                | 223                                                                                                | 228              | 188                | 763                                | 1043             | 921                |
| 28      | 22      | 3         | 250                     |              | 289                                                                                               | 421              | 315                | 264                                                                                                | 270              | 223                | 936                                | 1278             | 1129               |
| 28      | 21      | 3,5       | 250                     |              | 353                                                                                               | 506              | 368                | 303                                                                                                | 310              | 256                | 1116                               | 1525             | 1346               |
| 28      | 20      | 4         | 250                     |              | 403                                                                                               | 578              | 420                | 342                                                                                                | 349              | 289                | 1306                               | 1783             | 1575               |
| 30      | 26      | 2         |                         | 420          | 180                                                                                               | 262              | 196                | 170                                                                                                | 174              | 143                | 555                                | 758              | 670                |
| 30      | 25      | 2,5       |                         | 420          | 225                                                                                               | 328              | 245                | 209                                                                                                | 214              | 177                | 707                                | 966              | 853                |
| 30      | 24      | 3         |                         | 420          | 270                                                                                               | 393              | 294                | 248                                                                                                | 253              | 209                | 866                                | 1183             | 1044               |
| 30      | 23      | 3,5       |                         | 420          | 329                                                                                               | 472              | 343                | 285                                                                                                | 291              | 241                | 1031                               | 1408             | 1243               |
| 30      | 22      | 4         |                         | 420          | 376                                                                                               | 539              | 392                | 321                                                                                                | 329              | 271                | 1203                               | 1644             | 1452               |
| 30      | 20      | 5         |                         | 420          | 470                                                                                               | 674              | 490                | 391                                                                                                | 400              | 330                | 1573                               | 2149             | 1898               |
| 30      | 18      | 6         |                         | 420          | 564                                                                                               | 809              | 588                | 458                                                                                                | 468              | 386                | 1982                               | 2707             | 2391               |
| 35      | 32      | 1,5       | 250                     |              | 121                                                                                               | 173              | 126                | 111                                                                                                | 114              | 94                 | 348                                | 475              | 419                |
| 35      | 31      | 2         | 250                     |              | 161                                                                                               | 231              | 168                | 147                                                                                                | 150              | 124                | 471                                | 643              | 568                |
| 35      | 30      | 2,5       | 250                     |              | 201                                                                                               | 289              | 210                | 181                                                                                                | 185              | 153                | 598                                | 817              | 721                |
| 35      | 29      | 3         | 250                     |              | 242                                                                                               | 347              | 252                | 215                                                                                                | 220              | 181                | 730                                | 997              | 880                |
| 35      | 27      | 4         | 250                     |              | 322                                                                                               | 462              | 336                | 280                                                                                                | 286              | 236                | 1007                               | 1375             | 1215               |
| 35      | 25      | 5         | 250                     |              | 403                                                                                               | 578              | 420                | 342                                                                                                | 349              | 289                | 1306                               | 1783             | 1575               |
| 38      | 34      | 2         |                         | 420          | 148                                                                                               | 213              | 155                | 136                                                                                                | 139              | 115                | 432                                | 589              | 521                |
| 38      | 33      | 2,5       |                         | 420          | 186                                                                                               | 266              | 193                | 168                                                                                                | 171              | 142                | 547                                | 748              | 660                |
| 38      | 32      | 3         |                         | 420          | 223                                                                                               | 319              | 232                | 199                                                                                                | 203              | 168                | 667                                | 911              | 804                |
| 38      | 30      | 4         |                         | 420          | 297                                                                                               | 426              | 309                | 260                                                                                                | 265              | 219                | 917                                | 1253             | 1106               |
| 38      | 28      | 5         |                         | 420          | 371                                                                                               | 532              | 387                | 318                                                                                                | 325              | 268                | 1185                               | 1619             | 1429               |
| 38      | 26      | 6         |                         | 420          | 445                                                                                               | 639              | 464                | 373                                                                                                | 382              | 315                | 1472                               | 2011             | 1776               |
| 38      | 24      | 7         |                         | 420          | 519                                                                                               | 745              | 542                | 427                                                                                                | 436              | 360                | 1783                               | 2436             | 2151               |
| 38      | 22      | 8         |                         | 420          | 594                                                                                               | 851              | 619                | 478                                                                                                | 488              | 404                | 2121                               | 2897             | 2558               |
| 42      | 39      | 1,5       | 250                     |              | 101                                                                                               | 144              | 105                | 93                                                                                                 | 96               | 79                 | 288                                | 393              | 347                |
| 42      | 38      | 2         | 250                     |              | 134                                                                                               | 193              | 140                | 123                                                                                                | 126              | 104                | 388                                | 530              | 468                |
| 42      | 37      | 2,5       | 250                     |              | 168                                                                                               | 241              | 175                | 153                                                                                                | 156              | 129                | 492                                | 672              | 593                |
| 42      | 36      | 3         | 250                     |              | 201                                                                                               | 289              | 210                | 181                                                                                                | 185              | 153                | 598                                | 817              | 721                |
| 42      | 34      | 4         | 250                     |              | 269                                                                                               | 385              | 280                | 237                                                                                                | 242              | 200                | 820                                | 1120             | 989                |
| 42      | 32      | 5         | 250                     |              | 336                                                                                               | 481              | 350                | 290                                                                                                | 297              | 245                |                                    | 1441             | 1273               |

All figures are based on calculations carried out in accordance with DIN 2413 and ISO 10763.

They are intended to assist the user in the pre-selection of the correct tube only, and do not discharge the obligation to carry out own calculations in consideration of the actual conditions of use.

DIN 2413 does not apply to tube sizes marked by \* (where D1/D2 > 2).

T



## Calculated Design / Burst Pressures for Tube (PSI)

| Tube OD | Tube ID | Tube Wall | STAUFF Nominal pressure | Calculated Design Pressure |                                                                                             |                  |                    | Calculated Design Pressure                                                             |                  |                    | Calculated Burst Pressure          |                  |                    |
|---------|---------|-----------|-------------------------|----------------------------|---------------------------------------------------------------------------------------------|------------------|--------------------|----------------------------------------------------------------------------------------|------------------|--------------------|------------------------------------|------------------|--------------------|
| (in)    | (in)    | (in)      | (bar)                   |                            | (PSI) in accordance with DIN 2413 -<br>Load Case I<br>(primary static loads, up to +248 °F) |                  |                    | (PSI) in accordance with DIN 2413 -<br>Load Case III<br>(dynamic loads, up to +248 °F) |                  |                    | (PSI) in accordance with ISO 10763 |                  |                    |
| D1      | D2      | S         | Light Series            | Heavy Series               | Material<br>E235+N                                                                          | Material<br>E355 | Material<br>1.4571 | Material<br>E235+N                                                                     | Material<br>E355 | Material<br>1.4571 | Material<br>E235+N                 | Material<br>E355 | Material<br>1.4571 |
| .24     | .18     | .03       | 7252                    | 11603                      | 4901                                                                                        | 7120             | 5337               | 4394                                                                                   | 4495             | 3713               | 16182                              | 22113            | 19522              |
| .24     | .16     | .04       | 7252                    | 11603                      | 6525                                                                                        | 9498             | 7107               | 5670                                                                                   | 5800             | 4786               | 22809                              | 31161            | 27529              |
| .24     | .12     | .06       | 7252                    | 11603                      | 9788                                                                                        | 14254            | 10660              | 7990                                                                                   | 8164             | 6744               | 38991                              | 53273            | 47051              |
| .24*    | .08     | .08       | 7252                    | 11603                      | 13050                                                                                       | 18995            | 14214              | 10034                                                                                  | 10266            | 8485               | 61814                              | 84434            | 74580              |
| .24*    | .06     | .09       | 7252                    | 11603                      | 14689                                                                                       | 21373            | 15998              | 10977                                                                                  | 11223            | 9268               | 77996                              | 106532           | 94102              |
| .31     | .24     | .04       | 7252                    | 11603                      | 4901                                                                                        | 7120             | 5337               | 4394                                                                                   | 4495             | 3713               | 16182                              | 22113            | 19522              |
| .31     | .20     | .06       | 7252                    | 11603                      | 7337                                                                                        | 10687            | 7992               | 6279                                                                                   | 6424             | 5308               | 26448                              | 36120            | 31909              |
| .31     | .16     | .08       | 7252                    | 11603                      | 9788                                                                                        | 14254            | 10660              | 7990                                                                                   | 8164             | 6744               | 38991                              | 53273            | 47051              |
| .31*    | .12     | .10       | 7252                    | 11603                      | 12238                                                                                       | 17806            | 13329              | 9556                                                                                   | 9759             | 8064               | 55187                              | 75371            | 66573              |
| .39     | .31     | .04       | 7252                    | 11603                      | 3915                                                                                        | 5699             | 4264               | 3596                                                                                   | 3669             | 3031               | 12557                              | 17154            | 15142              |
| .39     | .28     | .06       | 7252                    | 11603                      | 5873                                                                                        | 8555             | 6396               | 5177                                                                                   | 5293             | 4366               | 20068                              | 27405            | 24207              |
| .39     | .24     | .08       | 7252                    | 11603                      | 7830                                                                                        | 11397            | 8528               | 6641                                                                                   | 6786             | 5599               | 28739                              | 39252            | 34679              |
| .39     | .20     | .10       | 7252                    | 11603                      | 9788                                                                                        | 14254            | 10660              | 7990                                                                                   | 8164             | 6744               | 38991                              | 53273            | 47051              |
| .39*    | .16     | .12       | 7252                    | 11603                      | 11745                                                                                       | 17096            | 12793              | 9251                                                                                   | 9454             | 7818               | 51548                              | 70412            | 62193              |
| .47     | .39     | .04       | 5802                    | 9138                       | 3263                                                                                        | 4756             | 3553               | 3031                                                                                   | 3103             | 2567               | 10252                              | 14007            | 12372              |
| .47     | .35     | .06       | 5802                    | 9138                       | 4901                                                                                        | 7120             | 5337               | 4394                                                                                   | 4495             | 3713               | 16182                              | 22113            | 19522              |
| .47     | .31     | .08       | 5802                    | 9138                       | 6525                                                                                        | 9498             | 7107               | 5670                                                                                   | 5800             | 4786               | 22809                              | 31161            | 27529              |
| .47     | .28     | .10       | 5802                    | 9138                       | 8164                                                                                        | 11876            | 8891               | 6873                                                                                   | 7018             | 5802               | 30320                              | 41427            | 36594              |
| .47     | .24     | .12       | 5802                    | 9138                       | 9788                                                                                        | 14254            | 10660              | 7990                                                                                   | 8164             | 6744               | 38991                              | 53273            | 47051              |
| .47*    | .20     | .14       | 5802                    | 9138                       | 11934                                                                                       | 17110            | 12444              | 9048                                                                                   | 9251             | 7644               | 49257                              | 67280            | 59423              |
| .47*    | .16     | .16       | 5802                    | 9138                       | 13630                                                                                       | 19546            | 14214              | 10034                                                                                  | 10266            | 8485               | 61814                              | 84434            | 74580              |
| .55     | .47     | .04       |                         | 9138                       | 2799                                                                                        | 4075             | 3046               | 2625                                                                                   | 2683             | 2219               | 8671                               | 11847            | 10457              |
| .55     | .43     | .06       |                         | 9138                       | 4191                                                                                        | 6105             | 4569               | 3828                                                                                   | 3915             | 3234               | 13572                              | 18531            | 16375              |
| .55     | .39     | .08       |                         | 9138                       | 5597                                                                                        | 8135             | 6092               | 4959                                                                                   | 5061             | 4192               | 18937                              | 25854            | 22844              |
| .55     | .35     | .10       |                         | 9138                       | 6989                                                                                        | 10179            | 7615               | 6018                                                                                   | 6163             | 5091               | 24853                              | 33959            | 29994              |
| .55     | .31     | .12       |                         | 9138                       | 8396                                                                                        | 12209            | 435                | 7033                                                                                   | 7192             | 5947               | 31480                              | 43007            | 37986              |
| .55     | .28     | .14       |                         | 9138                       | 10223                                                                                       | 14660            | 10660              | 7990                                                                                   | 8164             | 6744               | 38991                              | 53273            | 47051              |
| .59     | .51     | .04       | 5802                    |                            | 2610                                                                                        | 3799             | 2843               | 2465                                                                                   | 2523             | 2074               | 8048                               | 10991            | 9718               |
| .59     | .47     | .06       | 5802                    |                            | 3915                                                                                        | 5699             | 4264               | 3596                                                                                   | 3669             | 3031               | 12557                              | 17154            | 15142              |
| .59     | .43     | .08       | 5802                    |                            | 5220                                                                                        | 7598             | 5686               | 4655                                                                                   | 4771             | 3931               | 17444                              | 23838            | 21060              |
| .59     | .39     | .10       | 5802                    |                            | 6525                                                                                        | 9498             | 7107               | 5670                                                                                   | 5800             | 4786               | 22809                              | 31161            | 27529              |
| .59     | .35     | .12       | 5802                    |                            | 7830                                                                                        | 11397            | 8528               | 6641                                                                                   | 6786             | 5599               | 28739                              | 39252            | 34679              |
| .63     | .55     | .04       |                         | 9138                       | 2451                                                                                        | 3567             | 2669               | 2320                                                                                   | 2364             | 1958               | 7511                               | 10266            | 9065               |
| .63     | .51     | .06       |                         | 9138                       | 3669                                                                                        | 5336             | 4003               | 3379                                                                                   | 3466             | 2857               | 11687                              | 15950            | 14098              |
| .63     | .47     | .08       |                         | 9138                       | 4901                                                                                        | 7120             | 5337               | 4394                                                                                   | 4495             | 3713               | 16182                              | 22113            | 19522              |
| .63     | .43     | .10       |                         | 9138                       | 6119                                                                                        | 8903             | 6657               | 5365                                                                                   | 5481             | 4525               | 21083                              | 28797            | 25440              |
| .63     | .39     | .12       |                         | 9138                       | 7337                                                                                        | 10687            | 7992               | 6279                                                                                   | 6424             | 5308               | 26448                              | 36120            | 31909              |
| .63     | .31     | .16       |                         | 9138                       | 10223                                                                                       | 14660            | 10660              | 7990                                                                                   | 8164             | 6744               | 38991                              | 53273            | 47051              |
| .71     | .63     | .04       | 5802                    |                            | 2175                                                                                        | 3161             | 2364               | 2074                                                                                   | 2117             | 1755               | 6627                               | 9048             | 7992               |
| .71     | .59     | .06       | 5802                    |                            | 3263                                                                                        | 4756             | 3553               | 3031                                                                                   | 3103             | 2567               | 10252                              | 14007            | 12372              |
| .71     | .55     | .08       | 5802                    |                            | 4350                                                                                        | 6337             | 4743               | 3959                                                                                   | 4046             | 3336               | 14138                              | 19314            | 17057              |
| .71     | .51     | .10       | 5802                    |                            | 5438                                                                                        | 7917             | 5918               | 4829                                                                                   | 4945             | 4076               | 18314                              | 25013            | 22090              |
| .71     | .47     | .12       | 5802                    |                            | 6525                                                                                        | 9498             | 7107               | 5670                                                                                   | 5800             | 4786               | 22809                              | 31161            | 27529              |
| .71     | .39     | .16       | 5802                    |                            | 9092                                                                                        | 13036            | 9471               | 7250                                                                                   | 7410             | 6121               | 33075                              | 45168            | 39901              |
| .79     | .67     | .06       |                         | 6092                       | 2944                                                                                        | 4278             | 3205               | 2755                                                                                   | 2813             | 2321               | 9150                               | 12485            | 11038              |
| .79     | .63     | .08       |                         | 6092                       | 3915                                                                                        | 5699             | 4264               | 3596                                                                                   | 3669             | 3031               | 12557                              | 17154            | 15142              |
| .79     | .59     | .10       |                         | 6092                       | 4901                                                                                        | 7120             | 5337               | 4394                                                                                   | 4495             | 3713               | 16182                              | 22113            | 19522              |
| .79     | .55     | .12       |                         | 6092                       | 5873                                                                                        | 8555             | 6396               | 5177                                                                                   | 5293             | 4366               | 20068                              | 27405            | 24207              |
| .79     | .51     | .14       |                         | 6092                       | 7163                                                                                        | 10266            | 7470               | 5916                                                                                   | 6047             | 5004               | 24230                              | 33104            | 29240              |
| .79     | .47     | .16       |                         | 6092                       | 8178                                                                                        | 11731            | 8528               | 6641                                                                                   | 6786             | 5599               | 28739                              | 39252            | 34679              |
| .79     | .39     | .20       |                         | 6092                       | 10223                                                                                       | 14660            | 10660              | 7990                                                                                   | 8164             | 6744               | 38991                              | 53273            | 47051              |

Load case I according to DIN 2413 describes predominantly static loads at temperatures not exceeding +248 °F.  
Load case III according to DIN 2413 describes dynamic / pulsating loads at temperatures not exceeding +248 °F.

For some sizes of thin-walled steel tube, support sleeves are highly recommended and in some case generally required.  
Please see page G11 for selection charts and detailed assembly instructions.





## Calculated Design / Burst Pressures for Tube (PSI)

| Tube OD | Tube ID | Tube Wall | STAUFF Nominal pressure |              | Calculated Design Pressure                                                                  |                  |                    | Calculated Design Pressure                                                             |                  |                    | Calculated Burst Pressure          |                  |                    |
|---------|---------|-----------|-------------------------|--------------|---------------------------------------------------------------------------------------------|------------------|--------------------|----------------------------------------------------------------------------------------|------------------|--------------------|------------------------------------|------------------|--------------------|
| (in)    | (in)    | (in)      | (bar)                   |              | (PSI) in accordance with DIN 2413 -<br>Load Case I<br>(primary static loads, up to +248 °F) |                  |                    | (PSI) in accordance with DIN 2413 -<br>Load Case III<br>(dynamic loads, up to +248 °F) |                  |                    | (PSI) in accordance with ISO 10763 |                  |                    |
| D1      | D2      | S         | Light Series            | Heavy Series | Material<br>E235+N                                                                          | Material<br>E355 | Material<br>1.4571 | Material<br>E235+N                                                                     | Material<br>E355 | Material<br>1.4571 | Material<br>E235+N                 | Material<br>E355 | Material<br>1.4571 |
| .87     | .79     | .04       | 3626                    |              | 1784                                                                                        | 2596             | 1944               | 1711                                                                                   | 1755             | 1450               | 5365                               | 7323             | 6469               |
| .87     | .75     | .06       | 3626                    |              | 2668                                                                                        | 3886             | 2901               | 2509                                                                                   | 2567             | 2118               | 8251                               | 11267            | 9950               |
| .87     | .71     | .08       | 3626                    |              | 3553                                                                                        | 5177             | 3873               | 3292                                                                                   | 3364             | 2785               | 11296                              | 15428            | 13619              |
| .87     | .67     | .10       | 3626                    |              | 4452                                                                                        | 6482             | 4844               | 4031                                                                                   | 4133             | 3408               | 14500                              | 19807            | 17506              |
| .87     | .63     | .12       | 3626                    |              | 5336                                                                                        | 7772             | 5816               | 4756                                                                                   | 4858             | 4018               | 17922                              | 24476            | 21611              |
| .87     | .59     | .14       | 3626                    |              | 6511                                                                                        | 9324             | 6788               | 5452                                                                                   | 5568             | 4598               | 21547                              | 29435            | 25991              |
| .87     | .55     | .16       | 3626                    |              | 7439                                                                                        | 10658            | 7760               | 6119                                                                                   | 6250             | 5163               | 25433                              | 34742            | 30676              |
| .98     | .87     | .06       |                         | 6092         | 2349                                                                                        | 3422             | 2553               | 2233                                                                                   | 2277             | 1886               | 7192                               | 9831             | 8673               |
| .98     | .83     | .08       |                         | 6092         | 3132                                                                                        | 4553             | 3408               | 2915                                                                                   | 2987             | 2466               | 9802                               | 13398            | 11835              |
| .98     | .79     | .10       |                         | 6092         | 3915                                                                                        | 5699             | 4264               | 3596                                                                                   | 3669             | 3031               | 12557                              | 17154            | 15142              |
| .98     | .75     | .12       |                         | 6092         | 4698                                                                                        | 6844             | 5120               | 4234                                                                                   | 4336             | 3582               | 15443                              | 21098            | 18623              |
| .98     | .71     | .14       |                         | 6092         | 5728                                                                                        | 8207             | 5976               | 4872                                                                                   | 4974             | 4105               | 18488                              | 25245            | 22293              |
| .98     | .67     | .16       |                         | 6092         | 6540                                                                                        | 9382             | 6817               | 5481                                                                                   | 5597             | 4627               | 21692                              | 29638            | 26180              |
| .98     | .63     | .18       |                         | 6092         | 7366                                                                                        | 10556            | 7673               | 6061                                                                                   | 6206             | 5120               | 25114                              | 34293            | 30299              |
| .98     | .59     | .20       |                         | 6092         | 8178                                                                                        | 11731            | 8528               | 6641                                                                                   | 6786             | 5599               | 28739                              | 39252            | 34679              |
| 1.10    | .98     | .06       | 3626                    |              | 2103                                                                                        | 3060             | 2292               | 2001                                                                                   | 2045             | 1697               | 6380                               | 8715             | 7687               |
| 1.10    | .94     | .08       | 3626                    |              | 2799                                                                                        | 4075             | 3046               | 2625                                                                                   | 2683             | 2219               | 8671                               | 11847            | 10457              |
| 1.10    | .91     | .10       | 3626                    |              | 3495                                                                                        | 5090             | 3815               | 3234                                                                                   | 3306             | 2727               | 11064                              | 15124            | 13358              |
| 1.10    | .87     | .12       | 3626                    |              | 4191                                                                                        | 6105             | 4569               | 3828                                                                                   | 3915             | 3234               | 13572                              | 18531            | 16375              |
| 1.10    | .83     | .14       | 3626                    |              | 5119                                                                                        | 7337             | 5337               | 4394                                                                                   | 4495             | 3713               | 16182                              | 22113            | 19522              |
| 1.10    | .79     | .16       | 3626                    |              | 5844                                                                                        | 8381             | 6092               | 4959                                                                                   | 5061             | 4192               | 18937                              | 25854            | 22844              |
| 1.18    | 1.02    | .08       |                         | 6092         | 2610                                                                                        | 3799             | 2843               | 2465                                                                                   | 2523             | 2074               | 8048                               | 10991            | 9718               |
| 1.18    | .98     | .10       |                         | 6092         | 3263                                                                                        | 4756             | 3553               | 3031                                                                                   | 3103             | 2567               | 10252                              | 14007            | 12372              |
| 1.18    | .94     | .12       |                         | 6092         | 3915                                                                                        | 5699             | 4264               | 3596                                                                                   | 3669             | 3031               | 12557                              | 17154            | 15142              |
| 1.18    | .91     | .14       |                         | 6092         | 4771                                                                                        | 6844             | 4975               | 4133                                                                                   | 4220             | 3495               | 14950                              | 20416            | 18028              |
| 1.18    | .87     | .16       |                         | 6092         | 5452                                                                                        | 7816             | 5686               | 4655                                                                                   | 4771             | 3931               | 17444                              | 23838            | 21060              |
| 1.18    | .79     | .20       |                         | 6092         | 6815                                                                                        | 9773             | 7107               | 5670                                                                                   | 5800             | 4786               | 22809                              | 31161            | 27529              |
| 1.18    | .71     | .24       |                         | 6092         | 8178                                                                                        | 11731            | 8528               | 6641                                                                                   | 6786             | 5599               | 28739                              | 39252            | 34679              |
| 1.38    | 1.26    | .06       | 3626                    |              | 1755                                                                                        | 2509             | 1828               | 1610                                                                                   | 1653             | 1363               | 5046                               | 6888             | 6077               |
| 1.38    | 1.22    | .08       | 3626                    |              | 2335                                                                                        | 3350             | 2437               | 2132                                                                                   | 2175             | 1798               | 6830                               | 9324             | 8238               |
| 1.38    | 1.18    | .10       | 3626                    |              | 2915                                                                                        | 4191             | 3046               | 2625                                                                                   | 2683             | 2219               | 8671                               | 11847            | 10457              |
| 1.38    | 1.14    | .12       | 3626                    |              | 3509                                                                                        | 5032             | 3655               | 3118                                                                                   | 3190             | 2625               | 10585                              | 14457            | 12764              |
| 1.38    | 1.06    | .16       | 3626                    |              | 4669                                                                                        | 6699             | 4873               | 4060                                                                                   | 4147             | 3423               | 14602                              | 19938            | 17622              |
| 1.38    | .98     | .20       | 3626                    |              | 5844                                                                                        | 8381             | 6092               | 4959                                                                                   | 5061             | 4192               | 18937                              | 25854            | 22844              |
| 1.50    | 1.34    | .08       |                         | 6092         | 2146                                                                                        | 3089             | 2248               | 1972                                                                                   | 2016             | 1668               | 6264                               | 8541             | 7557               |
| 1.50    | 1.30    | .10       |                         | 6092         | 2697                                                                                        | 3857             | 2799               | 2436                                                                                   | 2480             | 2060               | 7932                               | 10846            | 9573               |
| 1.50    | 1.26    | .12       |                         | 6092         | 3234                                                                                        | 4626             | 3365               | 2886                                                                                   | 2944             | 2437               | 9672                               | 13210            | 11661              |
| 1.50    | 1.18    | .16       |                         | 6092         | 4307                                                                                        | 6177             | 4482               | 3770                                                                                   | 3843             | 3176               | 13297                              | 18169            | 16041              |
| 1.50    | 1.10    | .20       |                         | 6092         | 5380                                                                                        | 7714             | 5613               | 4611                                                                                   | 4713             | 3887               | 17183                              | 23476            | 20726              |
| 1.50    | 1.02    | .24       |                         | 6092         | 6453                                                                                        | 9266             | 6730               | 5409                                                                                   | 5539             | 4569               | 21344                              | 29160            | 25759              |
| 1.50    | .94     | .28       |                         | 6092         | 7526                                                                                        | 10803            | 7861               | 6192                                                                                   | 6322             | 5221               | 25854                              | 35322            | 31198              |
| 1.50    | .87     | .31       |                         | 6092         | 8613                                                                                        | 12340            | 8978               | 6931                                                                                   | 7076             | 5860               | 30755                              | 42007            | 37101              |
| 1.65    | 1.54    | .06       | 3626                    |              | 1465                                                                                        | 2088             | 1523               | 1349                                                                                   | 1392             | 1146               | 4176                               | 5699             | 5033               |
| 1.65    | 1.50    | .08       | 3626                    |              | 1943                                                                                        | 2799             | 2031               | 1784                                                                                   | 1827             | 1508               | 5626                               | 7685             | 6788               |
| 1.65    | 1.46    | .10       | 3626                    |              | 2436                                                                                        | 3495             | 2538               | 2219                                                                                   | 2262             | 1871               | 7134                               | 9744             | 8601               |
| 1.65    | 1.42    | .12       | 3626                    |              | 2915                                                                                        | 4191             | 3046               | 2625                                                                                   | 2683             | 2219               | 8671                               | 11847            | 10457              |
| 1.65    | 1.34    | .16       | 3626                    |              | 3901                                                                                        | 5583             | 4061               | 3437                                                                                   | 3509             | 2901               | 11890                              | 16240            | 14344              |
| 1.65    | 1.26    | .20       | 3626                    |              | 4872                                                                                        | 6975             | 5076               | 4205                                                                                   | 4307             | 3553               |                                    | 20895            | 18464              |

All figures are based on calculations carried out in accordance with DIN 2413 and ISO 10763.

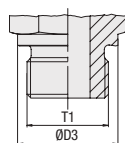
They are intended to assist the user in the pre-selection of the correct tube only, and do not discharge the obligation to carry out own calculations in consideration of the actual conditions of use.

DIN 2413 does not apply to tube sizes marked by \* (where D1/D2 > 2).

T

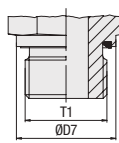


## Port Dimensions for Fittings with Male Threaded Stud



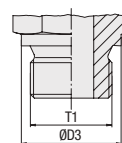
**Metallic Sealing Edge**

Metric Parallel Thread  
DIN 3852-1 (Form B) / ISO 9974-3 (Type B)  
Whitworth Parallel Pipe Thread  
DIN 3852-2 (Form B) / ISO 1179-4 (Type B)



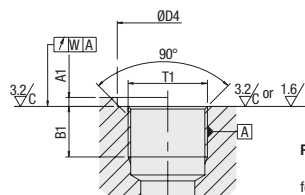
**Profile Sealing Ring**

Metric Parallel Thread  
ISO 9974-2 (Type E)  
Whitworth Parallel Pipe Thread  
ISO 1179-2 (Type E)



**Sealing Surface for Gasket (DIN 7603)**

Metric Parallel Thread  
DIN 3852-1 (Form A)  
Whitworth Parallel Pipe Thread  
DIN 3852-2 (Form A)



**Port (Parallel Thread)**

for Male Studs with Metric Parallel Thread  
DIN 3852-1 (Form X) / ISO 9974-1  
for Male Studs with Whitworth Parallel Pipe Thread  
DIN 3852-2 (Form X) / ISO 1179-1

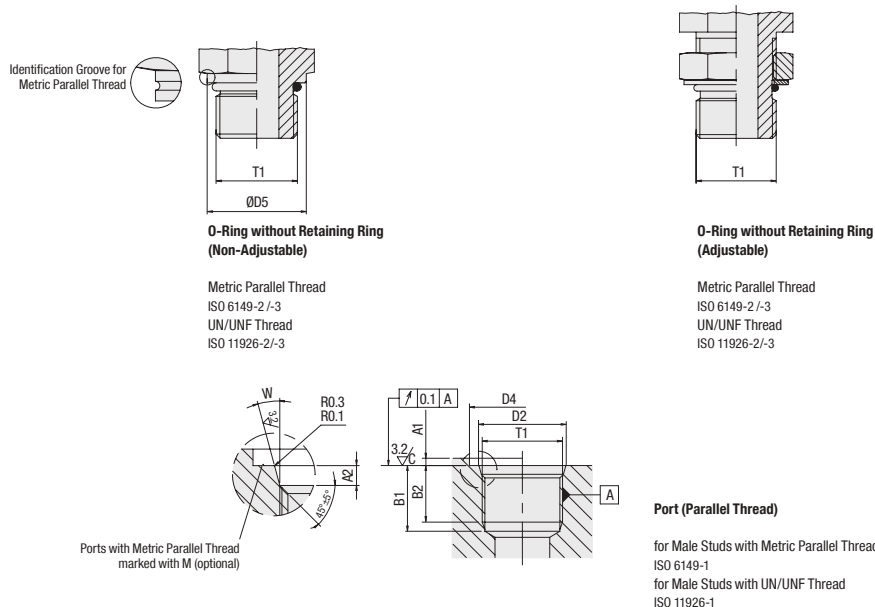
### Dimensions

| (mm/in)                |            |                    |                         |                        |                   |                   |              |
|------------------------|------------|--------------------|-------------------------|------------------------|-------------------|-------------------|--------------|
| Thread T1 <sup>1</sup> | D3         | D7 <sub>-0.2</sub> | D4 small <sub>min</sub> | D4 wide <sub>min</sub> | A1 <sub>max</sub> | B1 <sub>min</sub> | W            |
| M 8 x 1                | 12<br>.47  |                    | 13<br>.51               | 17<br>.67              | 1<br>.04          | 8<br>.31          | 0,1<br>.0039 |
| M 10 x 1               | 14<br>.55  | 13,9<br>.55        | 15<br>.59               | 20<br>.79              | 1<br>.04          | 8<br>.31          | 0,1<br>.0039 |
| M 12 x 1,5             | 17<br>.67  | 16,9<br>.67        | 18<br>.71               | 25<br>.98              | 1,5<br>.06        | 12<br>.47         | 0,1<br>.0039 |
| M 14 x 1,5             | 19<br>.75  | 18,9<br>.74        | 20<br>.79               | 25<br>.98              | 1,5<br>.06        | 12<br>.47         | 0,1<br>.0039 |
| M 16 x 1,5             | 21<br>.83  | 21,9<br>.86        | 23<br>.91               | 28<br>1.10             | 1,5<br>.06        | 12<br>.47         | 0,1<br>.0039 |
| M 18 x 1,5             | 23<br>.91  | 23,9<br>.94        | 25<br>.98               | 30<br>1.18             | 2<br>.08          | 12<br>.47         | 0,1<br>.0039 |
| M 20 x 1,5             | 24<br>.94  | 25,9<br>1.02       | 27<br>1.06              | 34<br>1.34             | 2<br>.08          | 14<br>.55         | 0,1<br>.0039 |
| M 22 x 1,5             | 27<br>1.06 | 26,9<br>1.06       | 28<br>1.10              | 34<br>1.34             | 2,5<br>.10        | 14<br>.55         | 0,1<br>.0039 |
| M 26 x 1,5             | 31<br>1.22 | 31,9<br>1.26       | 33<br>1.30              | 42<br>1.65             | 2,5<br>.10        | 16<br>.63         | 0,2<br>.0079 |
| M 27 x 2               | 32<br>1.26 | 31,9<br>1.26       | 33<br>1.30              | 42<br>1.65             | 2,5<br>.10        | 16<br>.63         | 0,2<br>.0079 |
| M 33 x 2               | 39<br>1.54 | 39,9<br>1.57       | 41<br>1.61              | 47<br>1.85             | 2,5<br>.10        | 18<br>.71         | 0,2<br>.0079 |
| M 42 x 2               | 49<br>1.93 | 49,9<br>1.96       | 51<br>2.01              | 58<br>2.28             | 2,5<br>.10        | 20<br>.79         | 0,2<br>.0079 |
| M 48 x 2               | 55<br>2.17 | 54,9<br>2.16       | 56<br>2.20              | 65<br>2.56             | 2,5<br>.10        | 22<br>.87         | 0,2<br>.0079 |
| G 1/8 A                | 14<br>.55  | 13,9<br>.55        | 15<br>.59               | 19<br>.75              | 1<br>.04          | 8,5<br>.33        | 0,1<br>.0039 |
| G 1/4 A                | 18<br>.71  | 18,9<br>.74        | 20<br>.79               | 25<br>.98              | 1,5<br>.06        | 12,5<br>.49       | 0,1<br>.0039 |
| G 3/8 A                | 22<br>.87  | 21,9<br>.86        | 23<br>.91               | 28<br>1.10             | 2<br>.08          | 12,5<br>.49       | 0,1<br>.0039 |
| G 1/2 A                | 26<br>1.02 | 26,9<br>1.06       | 28<br>1.10              | 34<br>1.34             | 2,5<br>.10        | 15<br>.59         | 0,1<br>.0039 |
| G 3/4 A                | 32<br>1.26 | 31,9<br>1.26       | 33<br>1.30              | 42<br>1.65             | 2,5<br>.10        | 16,5<br>.65       | 0,2<br>.0079 |
| G 1 A                  | 39<br>1.54 | 39,9<br>1.57       | 41<br>1.61              | 47<br>1.85             | 2,5<br>.10        | 19<br>.75         | 0,2<br>.0079 |
| G 1 1/4 A              | 49<br>1.93 | 49,9<br>1.96       | 51<br>2.01              | 58<br>2.28             | 2,5<br>.10        | 21,1<br>.83       | 0,2<br>.0079 |
| G 1 1/2 A              | 55<br>2.17 | 54,9<br>2.16       | 56<br>2.20              | 65<br>2.56             | 2,5<br>.10        | 22,5<br>.89       | 0,2<br>.0079 |

<sup>1</sup> Appendix A in the thread description does not apply to (female) threaded ports.



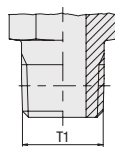
# Port Dimensions for Fittings with Male Threaded Stud



| Dimensions<br>(mm/in)  |              |                         |                        |                                    |                   |                    |                   |                   |                  |
|------------------------|--------------|-------------------------|------------------------|------------------------------------|-------------------|--------------------|-------------------|-------------------|------------------|
| Thread T1 <sup>1</sup> | D5           | D4 small <sub>min</sub> | D4 wide <sub>min</sub> | D2 <sub>+0.1 (UN/UNF: ±0.05)</sub> | A1 <sub>max</sub> | A2 <sub>+0.4</sub> | B1 <sub>min</sub> | B2 <sub>min</sub> | W <sub>±1*</sub> |
| M 8 x 1                | 11,8<br>.46  | 14<br>.55               | 17<br>.67              | 9,1<br>.36                         | 1<br>.04          | 1,6<br>.06         | 11,5<br>.45       | 10<br>.39         | 12<br>.47        |
| M 10 x 1               | 13,8<br>.54  | 16<br>.63               | 20<br>.79              | 11,1<br>.44                        | 1<br>.04          | 1,6<br>.06         | 11,5<br>.45       | 10<br>.39         | 12<br>.47        |
| M 12 x 1,5             | 16,8<br>.66  | 19<br>.75               | 23<br>.91              | 13,8<br>.54                        | 1,5<br>.06        | 2,4<br>.09         | 14<br>.55         | 11,5<br>.45       | 15<br>.59        |
| M 14 x 1,5             | 18,8<br>.74  | 21<br>.83               | 25<br>.98              | 15,8<br>.62                        | 1,5<br>.06        | 2,4<br>.09         | 14<br>.55         | 11,5<br>.45       | 15<br>.59        |
| M 16 x 1,5             | 21,8<br>.86  | 24<br>.94               | 28<br>1.10             | 17,8<br>.70                        | 1,5<br>.06        | 2,4<br>.09         | 15,5<br>.61       | 13<br>.51         | 15<br>.59        |
| M 18 x 1,5             | 23,8<br>.94  | 26<br>1.02              | 30<br>1.18             | 19,8<br>.78                        | 2<br>.08          | 2,4<br>.09         | 17<br>.67         | 14,5<br>.57       | 15<br>.59        |
| M 22 x 1,5             | 26,8<br>1.06 | 29<br>1.14              | 33<br>1.30             | 23,8<br>.94                        | 2<br>.08          | 2,4<br>.09         | 18<br>.71         | 15,5<br>.61       | 15<br>.59        |
| M 27 x 2               | 31,8<br>1.25 | 34<br>1.34              | 40<br>1.57             | 29,4<br>1.16                       | 2<br>.08          | 3,1<br>.12         | 22<br>.87         | 19<br>.75         | 15<br>.59        |
| M 33 x 2               | 40,8<br>1.61 | 43<br>1.69              | 49<br>1.93             | 35,4<br>1.39                       | 2,5<br>.10        | 3,1<br>.12         | 22<br>.87         | 19<br>.75         | 15<br>.59        |
| M 42 x 2               | 49,8<br>1.96 | 52<br>2.05              | 58<br>2.28             | 44,4<br>1.75                       | 2,5<br>.10        | 3,1<br>.12         | 22,5<br>.89       | 19,5<br>.77       | 15<br>.59        |
| M 48 x 2               | 54,8<br>2.16 | 57<br>2.24              | 63<br>2.48             | 50,4<br>1.98                       | 2,5<br>.10        | 3,1<br>.12         | 25<br>.98         | 22<br>.87         | 15<br>.59        |
| 7/16-20 UNF-2A         | 14,4<br>.57  | 21<br>.83               |                        | 12,45<br>.49                       | 1,6<br>.06        | 2,4<br>.09         | 14<br>.55         | 11,5<br>.45       | 12<br>.47        |
| 1/2-20 UNF-2A          | 16<br>.63    | 23<br>.91               |                        | 14,05<br>.55                       | 1,6<br>.06        | 2,4<br>.09         | 14<br>.55         | 11,5<br>.45       | 12<br>.47        |
| 9/16-18 UNF-2A         | 17,6<br>.69  | 25<br>.98               |                        | 15,7<br>.62                        | 1,6<br>.06        | 2,5<br>.10         | 15,5<br>.61       | 12,7<br>.50       | 12<br>.47        |
| 3/4-16 UNF-2A          | 21,8<br>.86  | 30<br>1.18              |                        | 20,65<br>.81                       | 2,4<br>.09        | 2,5<br>.10         | 17,5<br>.69       | 14,3<br>.56       | 15<br>.59        |
| 7/8-14 UNF-2A          | 25,5<br>1.00 | 34<br>1.34              |                        | 24<br>.94                          | 2,4<br>.09        | 2,5<br>.10         | 20<br>.79         | 16,7<br>.66       | 15<br>.59        |
| 1 1/16-12 UN-2A        | 31,9<br>1.26 | 41<br>1.61              |                        | 29,2<br>1.15                       | 2,4<br>.09        | 3,3<br>.13         | 23<br>.91         | 19<br>.75         | 15<br>.59        |
| 1 5/16-12 UN-2A        | 38,2<br>1.50 | 49<br>1.93              |                        | 35,55<br>1.40                      | 3,2<br>.13        | 3,3<br>.13         | 23<br>.91         | 19<br>.75         | 15<br>.59        |
| 1 5/8-12 UN-2A         | 47,7<br>1.88 | 58<br>2.28              |                        | 43,55<br>1.71                      | 3,2<br>.13        | 3,3<br>.13         | 23<br>.91         | 19<br>.75         | 15<br>.59        |
| 1 7/8-12 UN-2A         | 54,8<br>2.16 | 65<br>2.56              |                        | 49,9<br>1.96                       | 3,2<br>.13        | 3,3<br>.13         | 23<br>.91         | 19<br>.75         | 15<br>.59        |

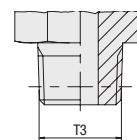
<sup>1</sup> Appendix -2B instead of -2A applies for (female) threaded ports.


## Port Dimensions for Fittings with Male Threaded Stud



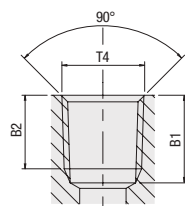
**Taper Thread**

National Pipe Thread (NPT)  
ANSI/ASME B1.20.1-1983



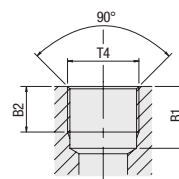
**Taper Thread**

Metric Taper Thread  
DIN 3852-1 (Form C)  
Whitworth Taper Pipe Thread  
DIN 3852-2 (Form C)



**Port (Taper Thread)**

for Male Studs with National Pipe NPT Thread  
ANSI/ASME B1.20.1-1983



**Port (Parallel Thread)**

for Male Studs with Metric Taper Thread  
DIN 3852-1 (Form Z)  
for Male Studs with Whitworth Taper Pipe Thread  
DIN 3852-2 (Form Z)

### Dimensions

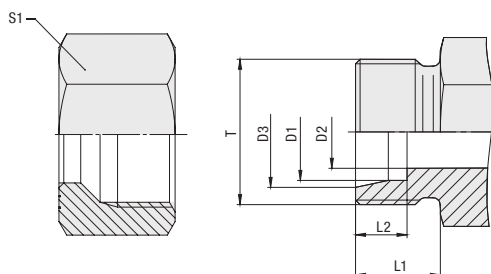
(mm/in)

| Thread T1      | Thread T3       | Thread T4      | B1 <sub>min</sub> | B2 <sub>min</sub> |
|----------------|-----------------|----------------|-------------------|-------------------|
| 1/8-27 NPT     |                 | 1/8-27 NPT     |                   | 6,9<br>.27        |
| 1/4-18 NPT     |                 | 1/4-18 NPT     |                   | 10<br>.39         |
| 3/8-18 NPT     |                 | 3/8-18 NPT     |                   | 10,3<br>.41       |
| 1/2-14 NPT     |                 | 1/2-14 NPT     |                   | 13,6<br>.54       |
| 3/4-14 NPT     |                 | 3/4-14 NPT     |                   | 14,1<br>.56       |
| 1-11.5 NPT     |                 | 1-11.5 NPT     |                   | 16,8<br>.66       |
| 1 1/4-11.5 NPT |                 | 1 1/4-11.5 NPT |                   | 17,3<br>.68       |
| 1 1/2-11.5 NPT |                 | 1 1/2-11.5 NPT |                   | 17,3<br>.68       |
|                | M 8 x 1 keg.    | M 8 x 1        | 10<br>.39         | 5,5<br>.22        |
|                | M 10 x 1 keg.   | M 10 x 1       | 10<br>.39         | 5,5<br>.22        |
|                | M 12 x 1,5 keg. | M 12 x 1,5     | 13,5<br>.53       | 8,5<br>.33        |
|                | M 14 x 1,5 keg. | M 14 x 1,5     | 13,5<br>.53       | 8,5<br>.33        |
|                | M 16 x 1,5 keg. | M 16 x 1,5     | 13,5<br>.53       | 8,5<br>.33        |
|                | M 18 x 1,5 keg. | M 18 x 1,5     | 13,5<br>.53       | 8,5<br>.33        |
|                | M 20 x 1,5 keg. | M 20 x 1,5     | 15,5<br>.61       | 10,5<br>.41       |
|                | M 22 x 1,5 keg. | M 22 x 1,5     | 15,5<br>.61       | 10,5<br>.41       |
|                | R 1/8 keg.      | Rp 1/8         | 8,5<br>.33        | 5,5<br>.22        |
|                | R 1/4 keg.      | Rp 1/4         | 12,5<br>.49       | 8,5<br>.33        |
|                | R 3/8 keg.      | Rp 3/8         | 12,5<br>.49       | 8,5<br>.33        |
|                | R 1/2 keg.      | Rp 1/2         | 16,5<br>.65       | 10,5<br>.41       |

Suitable liquid / plastic sealant required to achieve leak-tightness.



# Dimensions of the 24° Conical Bore / Union Nut



| Series | Tube OD<br>(mm/in)<br>D1 | Dimensions<br>(mm/in)<br>Thread T | D2   | D3   | L1  | L2   | S1   |
|--------|--------------------------|-----------------------------------|------|------|-----|------|------|
| LL     | 4                        | M 8 x 1                           | 3    | 5    | 8   | 4    | 10   |
|        | .16                      |                                   | .12  | .20  | .31 | .16  | .39  |
|        | 6                        | M 10 x 1                          | 4,5  | 7,5  | 8   | 5,5  | 12   |
|        | .24                      |                                   | .18  | .30  | .31 | .22  | .47  |
|        | 8                        | M 12 x 1                          | 6    | 9,5  | 9   | 5,5  | 14   |
|        | .31                      |                                   | .24  | .37  | .35 | .22  | .55  |
| L      | 6                        | M 12 x 1,5                        | 4    | 8,1  | 10  | 7    | 14   |
|        | .24                      |                                   | .16  | .32  | .39 | .28  | .55  |
|        | 8                        | M 14 x 1,5                        | 6    | 10,1 | 10  | 7    | 17   |
|        | .31                      |                                   | .24  | .40  | .39 | .28  | .67  |
|        | 10                       | M 16 x 1,5                        | 8    | 12,3 | 11  | 7    | 19   |
|        | .39                      |                                   | .31  | .48  | .43 | .28  | .75  |
|        | 12                       | M 18 x 1,5                        | 10   | 14,3 | 11  | 7    | 22   |
|        | .47                      |                                   | .39  | .56  | .43 | .28  | .87  |
|        | 15                       | M 22 x 1,5                        | 12   | 17,3 | 12  | 7    | 27   |
|        | .59                      |                                   | .47  | .68  | .47 | .28  | 1.06 |
|        | 18                       | M 26 x 1,5                        | 15   | 20,3 | 12  | 7,5  | 32   |
|        | .71                      |                                   | .59  | .80  | .47 | .30  | 1.26 |
|        | 22                       | M 30 x 2                          | 19   | 24,3 | 14  | 7,5  | 36   |
|        | .87                      |                                   | .75  | .96  | .55 | .30  | 1.42 |
|        | 28                       | M 36 x 2                          | 24   | 30,3 | 14  | 7,5  | 41   |
|        | 1.10                     |                                   | .94  | 1.19 | .55 | .30  | 1.61 |
| S      | 35                       | M 45 x 2                          | 30   | 38   | 16  | 10,5 | 50   |
|        | 1.38                     |                                   | 1.18 | 1.50 | .63 | .41  | 1.97 |
|        | 42                       | M 52 x 2                          | 36   | 45   | 16  | 11   | 60   |
|        | 1.65                     |                                   | 1.42 | 1.77 | .63 | .43  | 2.36 |
|        | 6                        | M 14 x 1,5                        | 4    | 8,1  | 12  | 7    | 17   |
|        | .24                      |                                   | .16  | .32  | .47 | .28  | .67  |
|        | 8                        | M 16 x 1,5                        | 5    | 10,1 | 12  | 7    | 19   |
|        | .31                      |                                   | .20  | .40  | .47 | .28  | .75  |
|        | 10                       | M 18 x 1,5                        | 7    | 12,3 | 12  | 7,5  | 22   |
|        | .39                      |                                   | .28  | .48  | .47 | .30  | .87  |
|        | 12                       | M 20 x 1,5                        | 8    | 14,3 | 12  | 7,5  | 24   |
|        | .47                      |                                   | .31  | .56  | .47 | .30  | .94  |
|        | 14 <sup>1</sup>          | M 22 x 1,5                        | 10   | 16,3 | 14  | 8    | 27   |
|        | .55 <sup>1</sup>         |                                   | .39  | .64  | .55 | .31  | 1.06 |
|        | 16                       | M 24 x 1,5                        | 12   | 18,3 | 14  | 8,5  | 30   |
|        | .63                      |                                   | .47  | .72  | .55 | .33  | 1.18 |
|        | 20                       | M 30 x 2                          | 16   | 22,9 | 16  | 10,5 | 36   |
|        | .79                      |                                   | .63  | .90  | .63 | .41  | 1.42 |
|        | 25                       | M 36 x 2                          | 20   | 27,9 | 18  | 12   | 46   |
|        | .98                      |                                   | .79  | 1.10 | .71 | .47  | 1.81 |
|        | 30                       | M 42 x 2                          | 25   | 33   | 20  | 13,5 | 50   |
|        | 1.18                     |                                   | .98  | 1.30 | .79 | .53  | 1.97 |
|        | 38                       | M 52 x 2                          | 32   | 41   | 22  | 16   | 60   |
|        | 1.50                     |                                   | 1.26 | 1.61 | .87 | .63  | 2.36 |

<sup>1</sup> Tube size is no longer covered by the applicable standard.


## Standard Threads and Widths Across Flats for Fittings with Male Threaded Stud

| Series | Tube OD<br>(mm)<br>D1 | Male Stud                             |                    | Male Stud                                     |                    | Union Nut                             |                    |
|--------|-----------------------|---------------------------------------|--------------------|-----------------------------------------------|--------------------|---------------------------------------|--------------------|
|        |                       | Metric Parallel Thread<br>Thread Size | Width Across Flats | Whitworth Parallel Pipe Thread<br>Thread Size | Width Across Flats | Metric Parallel Thread<br>Thread Size | Width Across Flats |
| L      | 6                     | M 10 x 1                              | 14                 | G 1/8                                         | 14                 | M 12 x 1,5                            | 14                 |
|        | .24                   |                                       | .55                |                                               | .55                |                                       | .55                |
|        | 8                     | M 12 x 1,5                            | 17                 | G 1/4                                         | 19                 | M 14 x 1,5                            | 17                 |
|        | .31                   |                                       | .67                |                                               | .75                |                                       | .67                |
|        | 10                    | M 14 x 1,5                            | 19                 | G 1/4                                         | 19                 | M 16 x 1,5                            | 19                 |
|        | .39                   |                                       | .75                |                                               | .75                |                                       | .75                |
|        | 12                    | M 16 x 1,5                            | 22                 | G 3/8                                         | 22                 | M 18 x 1,5                            | 22                 |
|        | .47                   |                                       | .87                |                                               | .87                |                                       | .87                |
|        | 15                    | M 18 x 1,5                            | 24                 | G 1/2                                         | 27                 | M 22 x 1,5                            | 27                 |
|        | .59                   |                                       | .94                |                                               | 1.06               |                                       | 1.06               |
|        | 18                    | M 22 x 1,5                            | 27                 | G 1/2                                         | 27                 | M 26 x 1,5                            | 32                 |
|        | .71                   |                                       | 1.06               |                                               | 1.06               |                                       | 1.26               |
|        | 22                    | M 26 x 1,5 <sup>2</sup>               | 32                 | G 3/4                                         | 32                 | M 30 x 2                              | 36                 |
|        | .87                   |                                       | 1.26               |                                               | 1.26               |                                       | 1.42               |
|        | 28                    | M 33 x 2                              | 41                 | G 1                                           | 41                 | M 36 x 2                              | 41                 |
|        | 1.10                  |                                       | 1.61               |                                               | 1.61               |                                       | 1.61               |
|        | 35                    | M 42 x 2                              | 50                 | G 1 1/4                                       | 50                 | M 45 x 2                              | 50                 |
|        | 1.38                  |                                       | 1.97               |                                               | 1.97               |                                       | 1.97               |
|        | 42                    | M 48 x 2                              | 55                 | G 1 1/2                                       | 55                 | M 52 x 2                              | 60                 |
|        | 1.65                  |                                       | 2.17               |                                               | 2.17               |                                       | 2.36               |
| S      | 6                     | M 12 x 1,5                            | 17                 | G 1/4                                         | 19                 | M 14 x 1,5                            | 17                 |
|        | .24                   |                                       | .67                |                                               | .75                |                                       | .67                |
|        | 8                     | M 14 x 1,5                            | 19                 | G 1/4                                         | 19                 | M 16 x 1,5                            | 19                 |
|        | .31                   |                                       | .75                |                                               | .75                |                                       | .75                |
|        | 10                    | M 16 x 1,5                            | 22                 | G 3/8                                         | 22                 | M 18 x 1,5                            | 22                 |
|        | .39                   |                                       | .87                |                                               | .87                |                                       | .87                |
|        | 12                    | M 18 x 1,5                            | 24                 | G 3/8                                         | 22                 | M 20 x 1,5                            | 24                 |
|        | .47                   |                                       | .94                |                                               | .87                |                                       | .94                |
|        | 14 <sup>1</sup>       | M 20 x 1,5                            | 27                 | G 1/2                                         | 27                 | M 22 x 1,5                            | 27                 |
|        | .55 <sup>1</sup>      |                                       | 1.06               |                                               | 1.06               |                                       | 1.06               |
|        | 16                    | M 22 x 1,5                            | 27                 | G 1/2                                         | 27                 | M 24 x 1,5                            | 30                 |
|        | .63                   |                                       | 1.06               |                                               | 1.06               |                                       | 1.18               |
|        | 20                    | M 27 x 2                              | 32                 | G 3/4                                         | 32                 | M 30 x 2                              | 36                 |
|        | .79                   |                                       | 1.26               |                                               | 1.26               |                                       | 1.42               |
|        | 25                    | M 33 x 2                              | 41                 | G 1                                           | 41                 | M 36 x 2                              | 46                 |
|        | .98                   |                                       | 1.61               |                                               | 1.61               |                                       | 1.81               |
|        | 30                    | M 42 x 2                              | 50                 | G 1 1/4                                       | 50                 | M 42 x 2                              | 50                 |
|        | 1.18                  |                                       | 1.97               |                                               | 1.97               |                                       | 1.97               |
|        | 38                    | M 48 x 2                              | 55                 | G 1 1/2                                       | 55                 | M 52 x 2                              | 60                 |
|        | 1.50                  |                                       | 2.17               |                                               | 2.17               |                                       | 2.36               |

<sup>1</sup> Tube size is no longer covered by the applicable standard.

<sup>2</sup> M 27 x 2 according to ISO 6149.





## Certificates and Approvals

Our in-house laboratories carry out constant checks and tests in line with international standards on all STAUFF products. Certified in accordance with ISO 9001, ISO 14001, OHSAS 18001 and ISO 50001, the STAUFF quality assurance system continually strives for perfection.

The QA system encompasses both product quality, which is driven by customer requirements, and all related services. The QA focuses on the expectations of all partners involved. Quality management at STAUFF is a dynamic process that is checked on a daily basis to ensure that continuous improvements are made.

### Please note:

All named approvals and certificates refer to certain products and designs, as well as to the application.

STAUFF is tuned in to the needs of the global market and this, together with the benefit of an experienced and highly motivated team of employees and the use of innovative technology, enables the company to offer a sophisticated product range which will satisfy the requirements of each and every customer worldwide.

The most common STAUFF Connect Tube Fittings have received certifications and approvals from various international institutes, organisations and authorities who have independently confirmed the quality and performance of the products:

- Bureau Veritas
- DNV - GL
- DVGW
- Lloyd's Register

Please contact STAUFF for further approvals.

The validity of the approvals will be continuously extended at the approval offices after expiry. Details, such as the period of validity, can be found in the respective certificates.

Please find a current version of the approvals and certificates at: **[www.stauff.com/certificates](http://www.stauff.com/certificates)**



## Product-Specific Abbreviations

| Abbreviation            | Product Category                       | Product Description                                               | Page |
|-------------------------|----------------------------------------|-------------------------------------------------------------------|------|
| FI-AB                   | Connecting Parts                       | 37° Flared Tube Fitting Set                                       | 37   |
| FI-AS                   | Weld Fittings                          | Straight Weld Fitting                                             | 114  |
| FI-ASV                  | Weld Fittings                          | Straight Weld Fitting for Tubes                                   | 120  |
| FI-BA                   | Connecting Parts                       | 24°/37° Flared Cone Adaptor with O-Rings                          | 34   |
| FI-BH                   | Connecting Parts                       | Support Sleeve for 37° Flared Tube Fittings                       | 35   |
| FI-BM                   | Connecting Parts                       | Union Nut for 37° Flared Tube Fittings                            | 36   |
| FI-Box-... (FI-KOL-...) | Measuring and Test Equipment           | Cone Gauge Kit                                                    | 277  |
| FI-BUZ                  | Spare Parts / Accessories              | Blanking Plug with Sealing Edge                                   | 235  |
| FI-DGWE-...-M-WD        | Swivel Fittings                        | Swivel Elbow                                                      | 197  |
| FI-DGWE-...-R-WD        | Swivel Fittings                        | Swivel Elbow                                                      | 196  |
| FI-DIR                  | Spare Parts / Accessories              | Retaining Ring with Captive Seal for Male Studs of Banjo Fittings | 245  |
| FI-DKI                  | Spare Parts / Accessories              | Internal Metallic Sealing Ring for Female Studs of Gauge Fittings | 246  |
| FI-DKR                  | Spare Parts / Accessories              | External Metallic Sealing Ring for Male Studs of Banjo Fittings   | 244  |
| FI-DS                   | Connecting Parts                       | Double-Edge Cutting Ring                                          | 28   |
| FI-EGE-...-M            | Standpipe Fittings                     | Straight Male Stud Standpipe Fitting                              | 157  |
| FI-EGE-...-M-WD         | Standpipe Fittings                     | Straight Male Stud Standpipe Fitting                              | 160  |
| FI-EGE-...-N            | Standpipe Fittings                     | Straight Male Stud Standpipe Fitting                              | 161  |
| FI-EGE-...-R            | Standpipe Fittings                     | Straight Male Stud Standpipe Fitting                              | 156  |
| FI-EGE-...-R-WD         | Standpipe Fittings                     | Straight Male Stud Standpipe Fitting                              | 158  |
| FI-EGED-...-M-WD        | Fittings with 24° Taper / O-Ring (DKO) | Straight Male Stud Fitting with 24° Taper / O-Ring                | 136  |
| FI-EGED-...-N           | Fittings with 24° Taper / O-Ring (DKO) | Straight Male Stud Fitting with 24° Taper / O-Ring                | 137  |
| FI-EGED-...-R-WD        | Fittings with 24° Taper / O-Ring (DKO) | Straight Male Stud Fitting with 24° Taper / O-Ring                | 134  |
| FI-EL                   | Standpipe Fittings                     | Adjustable Standpipe Barrel Tee                                   | 168  |
| FI-ELD                  | Fittings with 24° Taper / O-Ring (DKO) | Adjustable Barrel Tee with 24° Taper / O-Ring (DKO)               | 153  |
| FI-EMA-...-R            | Female Stud / Gauge Fittings           | Gauge Standpipe Fitting                                           | 131  |
| FI-EMAD-...-R           | Female Stud / Gauge Fittings           | Gauge Fitting with 24° Taper / O-Ring                             | 130  |
| FI-ES                   | Bulkhead Fittings                      | Straight Bulkhead Weld Fitting                                    | 110  |
| FI-ET                   | Standpipe Fittings                     | Adjustable Standpipe Branch Tee                                   | 167  |
| FI-ETD                  | Fittings with 24° Taper / O-Ring (DKO) | Adjustable Branch Tee with 24° Taper / O-Ring (DKO)               | 152  |
| FI-EVD                  | Fittings with 24° Taper / O-Ring (DKO) | Adjustable Elbow (45°) with 24° Taper / O-Ring                    | 151  |
| FI-EW                   | Standpipe Fittings                     | Adjustable Standpipe Elbow                                        | 166  |
| FI-EWD                  | Fittings with 24° Taper / O-Ring (DKO) | Adjustable Elbow (90°) with 24° Taper / O-Ring                    | 150  |
| FI-FB                   | Assembly Tools / Devices               | Clamping Jaws                                                     | 271  |
| FI-FD                   | Connecting Parts                       | STAUFF Form EVO Sealing Ring                                      | 32   |
| FI-FK                   | Assembly Tools / Devices               | Final Assembly Stud for the Manual Cutting Ring Assembly          | 250  |
| FI-FST                  | Assembly Tools / Devices               | Tube Shapers                                                      | 270  |
| FI-G                    | Tube Fittings / Unions                 | Straight Union                                                    | 96   |
| FI-G                    | Tube Fittings / Unions                 | Straight Reducer                                                  | 97   |
| FI-GA-...-M             | Female Stud / Gauge Fittings           | Straight Female Stud Fitting                                      | 126  |
| FI-GA-...-N             | Female Stud / Gauge Fittings           | Straight Female Stud Fitting                                      | 127  |
| FI-GA-...-R             | Female Stud / Gauge Fittings           | Straight Female Stud Fitting                                      | 124  |
| FI-GE-...-M             | Male Stud Fittings                     | Straight Male Stud Fitting                                        | 44   |
| FI-GE-...-Mk            | Male Stud Fittings                     | Straight Male Stud Fitting                                        | 64   |
| FI-GE-...-M-OR          | Male Stud Fittings                     | Straight Male Stud Fitting                                        | 57   |
| FI-GE-...-M-WD          | Male Stud Fittings                     | Straight Male Stud Fitting                                        | 52   |
| FI-GE-...-N             | Male Stud Fittings                     | Straight Male Stud Fitting                                        | 65   |
| FI-GE-...-R             | Male Stud Fittings                     | Straight Male Stud Fitting                                        | 40   |
| FI-GE-...-R-DF          | Male Stud Fittings                     | Straight Male Stud Fitting                                        | 55   |
| FI-GE-...-Rk            | Male Stud Fittings                     | Straight Male Stud Fitting                                        | 60   |
| FI-GE-...-R-WD          | Male Stud Fittings                     | Straight Male Stud Fitting                                        | 48   |
| FI-GE-...-U             | Male Stud Fittings                     | Straight Male Stud Fitting                                        | 70   |
| FI-GP                   | Assembly Tools / Devices               | Support Plate for Machine-Assisted Assembly                       | 255  |
| FI-GP-PRC               | Assembly Tools / Devices               | Support Plate for Machine-Assisted Cutting Ring Assembly          | 262  |
| FI-GS                   | Bulkhead Fittings                      | Straight Bulkhead Fitting                                         | 108  |
| FI-ID                   | Assembly Tools / Devices               | Internal Tube Supports                                            | 270  |
| FI-K                    | Tube Fittings / Unions                 | Equal Cross                                                       | 104  |
| FI-KB                   | Assembly Tools / Devices               | Clamping Jaws for 37° Tube Flaring                                | 263  |
| FI-KR                   | Spare Parts / Accessories              | Retaining Ring (Small) for Male Studs of Fittings with Lock Nut   | 247  |
| FI-LE-...-M             | Male Stud Fittings                     | Male Stud Barrel Tee                                              | 89   |
| FI-LE-...-Mk            | Male Stud Fittings                     | Male Stud Barrel Tee                                              | 91   |
| FI-LE-...-N             | Male Stud Fittings                     | Male Stud Barrel Tee                                              | 92   |
| FI-LE-...-R             | Male Stud Fittings                     | Male Stud Barrel Tee                                              | 88   |
| FI-LE-...-Rk            | Male Stud Fittings                     | Male Stud Barrel Tee                                              | 90   |
| FI-LEE-...-M-OK         | Fittings with Lock Nut                 | Adjustable Male Stud Barrel Tee with Lock Nut                     | 175  |
| FI-LEE-...-M-OR         | Fittings with Lock Nut                 | Adjustable Male Stud Barrel Tee with Lock Nut                     | 177  |
| FI-LEE-...-R-OK         | Fittings with Lock Nut                 | Adjustable Male Stud Barrel Tee with Lock Nut                     | 173  |
| FI-LEE-...-U            | Fittings with Lock Nut                 | Adjustable Male Stud Barrel Tee with Lock Nut                     | 179  |
| FI-M                    | Connecting Parts                       | Union Nut                                                         | 33   |
| FI-MA-...-R             | Female Stud / Gauge Fittings           | Gauge Fitting                                                     | 129  |
| FI-MFK                  | Assembly Tools / Devices               | Cutting Ring Assembly Stud for Machine-Assisted Assembly          | 254  |
| FI-MFK                  | Assembly Tools / Devices               | Cutting Ring Assembly Stud for Machine-Assisted Assembly          | 261  |
| FI-MVK-PRC-H-M          | Assembly Tools / Devices               | Cutting Ring Assembly Stud for Machine-Assisted Assembly          | 266  |
| FI-RED-...-R            | Spare Parts / Accessories              | Thread Reducer                                                    | 226  |
| FI-RED-...-R-WD         | Spare Parts / Accessories              | Thread Reducer                                                    | 224  |
| FI-REDS                 | Standpipe Fittings                     | Straight Standpipe Reducer                                        | 162  |
| FI-RST-...-M-DK         | Banjo Fittings                         | Banjo Tee (High-Pressure Version)                                 | 191  |
| FI-RST-...-M-WD         | Banjo Fittings                         | Banjo Tee (High-Pressure Version)                                 | 193  |
| FI-RST-...-R-DK         | Banjo Fittings                         | Banjo Tee (High-Pressure Version)                                 | 190  |
| FI-RSW-...-M-WD         | Banjo Fittings                         | Banjo Elbow (High-Pressure Version)                               | 189  |



## Product-Specific Abbreviations

| Abbreviation       | Product Category                       | Product Description                                                       | Page    |
|--------------------|----------------------------------------|---------------------------------------------------------------------------|---------|
| FI-RST-...-R-WD    | Banjo Fittings                         | Banjo Tee (High-Pressure Version)                                         | 192     |
| FI-RSW-...-M-DK    | Banjo Fittings                         | Banjo Elbow (High-Pressure Version)                                       | 187     |
| FI-RSW-...-R-DK    | Banjo Fittings                         | Banjo Elbow (High-Pressure Version)                                       | 186     |
| FI-RSW-...-R-WD    | Banjo Fittings                         | Banjo Elbow (High-Pressure Version)                                       | 188     |
| FI-RSWND-...-M-DK  | Banjo Fittings                         | Banjo Elbow (Medium-Pressure Version)                                     | 183     |
| FI-RSWND-...-M-WD  | Banjo Fittings                         | Banjo Elbow (Medium-Pressure Version)                                     | 185     |
| FI-RSWND-...-R-DK  | Banjo Fittings                         | Banjo Elbow (Medium-Pressure Version)                                     | 183     |
| FI-RSWND-...-R-WD  | Banjo Fittings                         | Banjo Elbow (Medium-Pressure Version)                                     | 184     |
| FI-RV              | Hydraulic Valves                       | Check Valve                                                               | 200     |
| FI-RVA             | Hydraulic Valves                       | Check Valve                                                               | 201     |
| FI-RVI-...-R       | Hydraulic Valves                       | Female Stud Check Valve                                                   | 210     |
| FI-RVIA-...-R      | Hydraulic Valves                       | Female Stud Check Valve                                                   | 211     |
| FI-RVV-...-M-WD    | Hydraulic Valves                       | Male Stud Check Valve                                                     | 203     |
| FI-RVV-...-R-WD    | Hydraulic Valves                       | Male Stud Check Valve                                                     | 202     |
| FI-RVVA-...-M-WD   | Hydraulic Valves                       | Male Stud Check Valve                                                     | 205     |
| FI-RVVA-...-R-WD   | Hydraulic Valves                       | Male Stud Check Valve                                                     | 204     |
| FI-RVZ-...-M-WD    | Hydraulic Valves                       | Male Stud Check Valve                                                     | 207     |
| FI-RVZ-...-R-WD    | Hydraulic Valves                       | Male Stud Check Valve                                                     | 206     |
| FI-RVZA-...-M-WD   | Hydraulic Valves                       | Male Stud Check Valve                                                     | 209     |
| FI-RVZA-...-R-WD   | Hydraulic Valves                       | Male Stud Check Valve                                                     | 208     |
| FI-S               | Connecting Parts                       | Single-Edge Cutting Ring                                                  | 28      |
| FI-SKM             | Spare Parts / Accessories              | Hexagon Lock Nut                                                          | 237     |
| FI-SN              | Weld Fittings                          | 24° Weld Cone with O-Ring                                                 | 116     |
| FI-SNR             | Weld Fittings                          | 24° Weld Cone Reducer with O-Ring                                         | 118     |
| FI-SNV             | Fittings with 24° Taper / O-Ring (DKO) | Straight Male Stud Fitting with 24° Taper / O-Ring                        | 138     |
| FI-SNV             | Fittings with 24° Taper / O-Ring (DKO) | Straight Reducer with 24° Taper / O-Ring                                  | 140     |
| FI-T               | Tube Fittings / Unions                 | Equal Tee                                                                 | 100     |
| FI-T               | Tube Fittings / Unions                 | Tee Reducer                                                               | 101     |
| FI-TE-...-M        | Male Stud Fittings                     | Male Stud Branch Tee                                                      | 83      |
| FI-TE-...-Mk       | Male Stud Fittings                     | Male Stud Branch Tee                                                      | 85      |
| FI-TE-...-N        | Male Stud Fittings                     | Male Stud Branch Tee                                                      | 86      |
| FI-TE-...-R        | Male Stud Fittings                     | Male Stud Branch Tee                                                      | 82      |
| FI-TE-...-Rk       | Male Stud Fittings                     | Male Stud Branch Tee                                                      | 84      |
| FI-TEE-...-M-OK    | Fittings with Lock Nut                 | Adjustable Male Stud Branch Tee with Lock Nut                             | 175     |
| FI-TEE-...-M-OR    | Fittings with Lock Nut                 | Adjustable Male Stud Branch Tee with Lock Nut                             | 177     |
| FI-TEE-...-R-OK    | Fittings with Lock Nut                 | Adjustable Male Stud Branch Tee with Lock Nut                             | 173     |
| FI-TEE-...-U       | Fittings with Lock Nut                 | Adjustable Male Stud Branch Tee with Lock Nut                             | 179     |
| FI-TIB             | Measuring and Test Equipment           | Thread Identification Board                                               | 276     |
| FI-VD              | Spare Parts / Accessories              | Blanking Plug with 24° Taper / O-Ring (DKO)                               | 234     |
| FI-VEE-...-M-OK    | Fittings with Lock Nut                 | Adjustable Male Stud Elbow (45°) with Lock Nut                            | 175     |
| FI-VEE-...-M-OR    | Fittings with Lock Nut                 | Adjustable Male Stud Elbow (45°) with Lock Nut                            | 177     |
| FI-VEE-...-R-OK    | Fittings with Lock Nut                 | Adjustable Male Stud Elbow (45°) with Lock Nut                            | 173     |
| FI-VEE-...-U       | Fittings with Lock Nut                 | Adjustable Male Stud Elbow (45°) with Lock Nut                            | 179     |
| FI-VES             | Hydraulic Valves                       | Check Valve Installation Kit                                              | 212     |
| FI-VH              | Connecting Parts                       | Support Sleeve                                                            | 31      |
| FI-VK              | Assembly Tools / Devices               | Pre-Assembly Stud for the Manual Cutting Ring Assembly                    | 251     |
| FI-VS-...-M-OR     | Spare Parts / Accessories              | Blanking Screw for Ports                                                  | 233     |
| FI-VS-...-M-WD     | Spare Parts / Accessories              | Blanking Screw for Ports                                                  | 231     |
| FI-VS-...-R        | Spare Parts / Accessories              | Blanking Screw for Ports                                                  | 232     |
| FI-VS-...-R-WD     | Spare Parts / Accessories              | Blanking Screw for Ports                                                  | 230     |
| FI-VSK             | Spare Parts / Accessories              | Blanking Plug for Tube Ends                                               | 236     |
| FI-VSV-...-M-WD    | Spare Parts / Accessories              | Blanking Screw for Ports (Heavy Duty)                                     | 229     |
| FI-VSV-...-R-WD    | Spare Parts / Accessories              | Blanking Screw for Ports (Heavy Duty)                                     | 228     |
| FI-W               | Tube Fittings / Unions                 | Straight Reducer                                                          | 99      |
| FI-WAS             | Weld Fittings                          | Elbow Weld Fitting                                                        | 115     |
| FI-WDDS            | Connecting Parts                       | Soft-Sealing Cutting Ring                                                 | 29      |
| FI-WDDS-W5         | Connecting Parts                       | Soft-Sealing Cutting Ring (Stainless Steel)                               | 30      |
| FI-WE-...-M        | Male Stud Fittings                     | Male Stud Elbow                                                           | 75      |
| FI-WE-...-Mk       | Male Stud Fittings                     | Male Stud Elbow                                                           | 78      |
| FI-WE-...-N        | Male Stud Fittings                     | Male Stud Elbow                                                           | 80      |
| FI-WE-...-R        | Male Stud Fittings                     | Male Stud Elbow                                                           | 74      |
| FI-WE-...-Rk       | Male Stud Fittings                     | Male Stud Elbow                                                           | 76      |
| FI-WEE-...-M-OK    | Fittings with Lock Nut                 | Adjustable Male Stud Elbow (90°) with Lock Nut                            | 174     |
| FI-WEE-...-M-OR    | Fittings with Lock Nut                 | Adjustable Male Stud Elbow (90°) with Lock Nut                            | 176     |
| FI-WEE-...-R-OK    | Fittings with Lock Nut                 | Adjustable Male Stud Elbow (90°) with Lock Nut                            | 172     |
| FI-WEE-...-U       | Fittings with Lock Nut                 | Adjustable Male Stud Elbow (90°) with Lock Nut                            | 178     |
| FI-WS              | Bulkhead Fittings                      | Elbow Bulkhead Fittings                                                   | 109     |
| FI-WV              | Hydraulic Valves                       | Alternating Valve                                                         | 213     |
| Oel-Stauff-Form-1L | Assembly Tools / Devices               | STAUFF Form EVO Oel                                                       | 272     |
| O-RING             | Spare Parts / Accessories              | O-Ring for Male Studs                                                     | 239     |
| O-RING             | Spare Parts / Accessories              | O-Ring for 24°/37° Flared Cone Adaptors                                   | 240     |
| O-RING             | Spare Parts / Accessories              | O-Ring for for DKO Taper Fittings / 24° Weld Cones                        | 242     |
| O-RING             | Spare Parts / Accessories              | O-Ring for Banjo Bolts of Banjo Fittings                                  | 243     |
| SFO/PRC-POC-FS     | Assembly Tools / Devices               | External Foot Control Switch                                              | 254/272 |
| SFO-F-A-A          | Assembly Tools / Devices               | Tube Forming Machine                                                      | 268     |
| SFO-F-IOT          | Assembly Tools / Devices               | Optional Cloud connection for Tube Forming Machine                        | 268     |
| SPR-PRC-FS         | Assembly Tools / Devices               | External Foot Control Switch                                              | 260     |
| SPR-PRC-H-SET      | Assembly Tools / Devices               | Portable Cutting Ring Assembly Machine with Manual Pressure Setting (Set) | 264     |
| SPR-PRC-MA-D-A     | Assembly Tools / Devices               | Combined Cutting Ring Assembly and 37° Tube Flaring Machine               | 258     |



## Product-Specific Abbreviations

| Abbreviation        | Product Category                       | Product Description                                                    | Page |
|---------------------|----------------------------------------|------------------------------------------------------------------------|------|
| FI-REDS             | Fittings with 24° Taper / O-Ring (DKO) | Straight Reducer for Tube Ends with 24° Taper / O-Ring                 | 144  |
| FI-REDS             | Fittings with 24° Taper / O-Ring (DKO) | Distance Adaptors with 24° Taper / O-Ring                              | 148  |
| SPR-PRC-POC-A-A     | Assembly Tools / Devices               | Cutting Ring Final Assembly Machine                                    | 252  |
| SPR-PRC-POC-A-A-IOT | Assembly Tools / Devices               | Optional Cloud connection for Cutting Ring Final Assembly Machine      | 256  |
| SPR-PRC-POC-RTH     | Assembly Tools / Devices               | Optional tool holder for tubes with small bending radii                | 256  |
| SPR-PRC-TH-C-M      | Assembly Tools / Devices               | Tooling Head for Cutting Ring Assembly (based on manual settings)      | 260  |
| SPR-PRC-TH-C-MA     | Assembly Tools / Devices               | Tooling Head for Cutting Ring Assembly (based on pre-defined settings) | 260  |
| SPR-PRC-TH-F-M      | Assembly Tools / Devices               | Tooling Head for 37° Tube Flaring (based on manual settings)           | 260  |
| SPR-TM              | Assembly Tools / Devices               | Assembly Tool Magazine                                                 | 260  |
| STAUFF CLEAN        | Tube Manipulation                      | Pipe, Tube and Hose Cleaning System                                    | 280  |
| TUB-MA              | Tube Manipulation                      | Manual Tube Bender                                                     | 282  |
| TUBSD-MA            | Tube Manipulation                      | Tube Bending and Saw Device                                            | 283  |
| TUD-MA              | Tube Manipulation                      | Tube Reamer                                                            | 285  |
| TUSD-MA             | Tube Manipulation                      | Tube Saw Device                                                        | 284  |
| WDG                 | Spare Parts / Accessories              | Profile Sealing Ring for Male Studs                                    | 238  |

