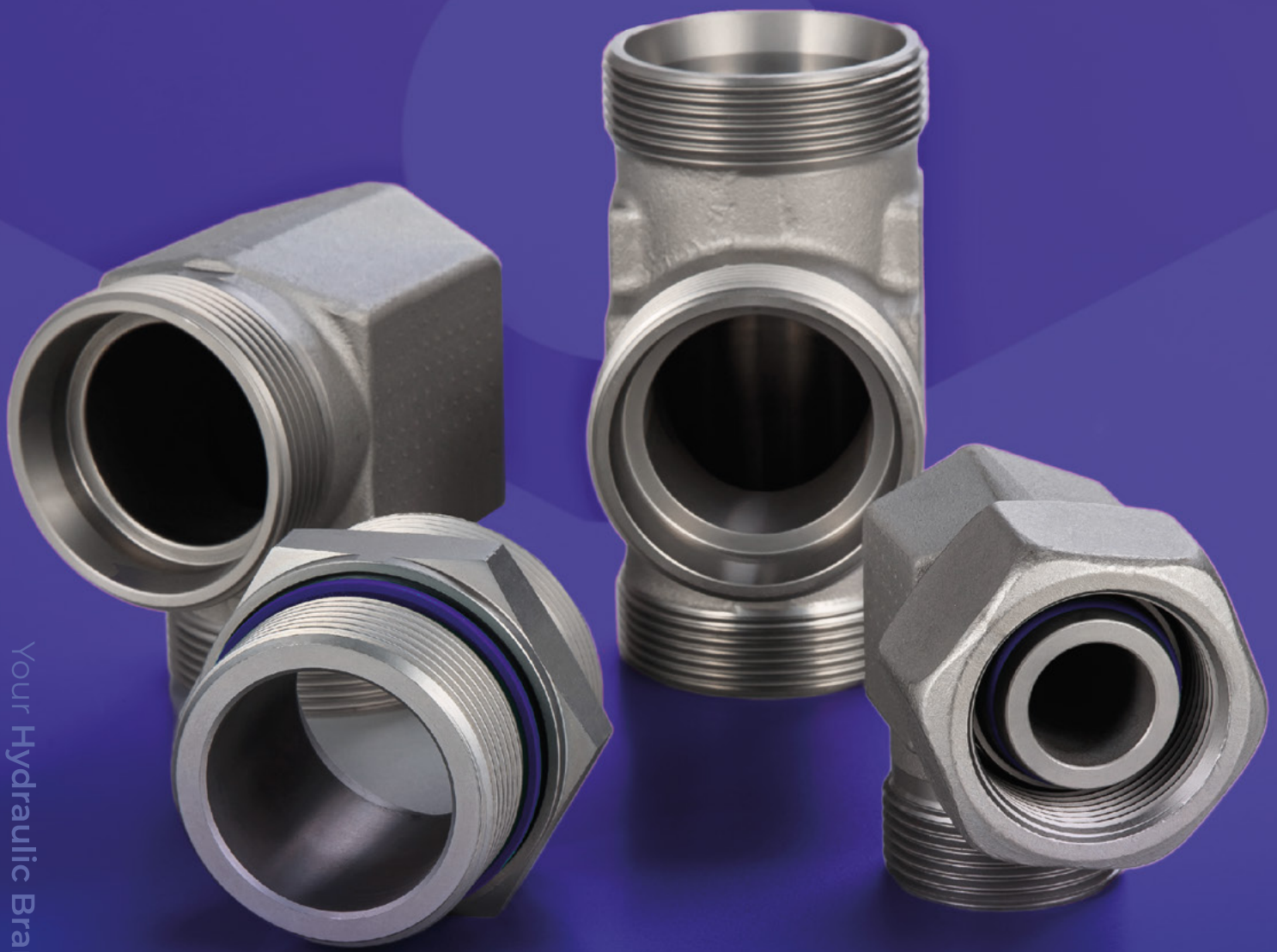


# 24° TUBE FITTINGS

DIN2353 & ISO 8434-1

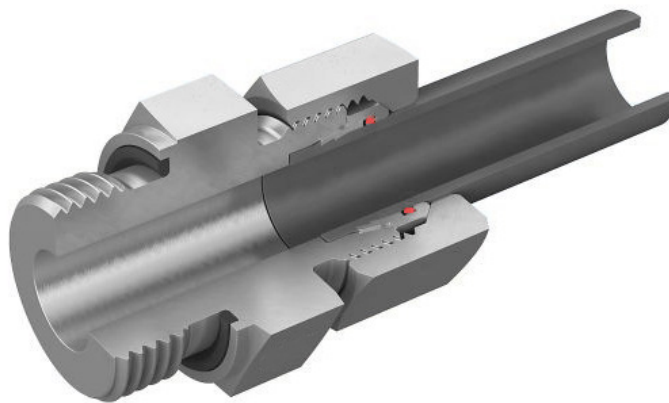


Your Hydraulic Brand

VINCKE

## Introduction

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**Vincke** has many years of experience in the manufacture of precision products which is in conjunction with stringent quality control forms the starting material up to the finished components the quality of Vincke fittings.

Double cutting ring R and DIN fittings assure perfect tightness and easy assembling and disassembling. During the clamping cutting ring driven by fitting 24°-conical shape is distorted and cutting the tube generates two incisions that assure perfect tightness.

Metric O.D. sizes range from 4mm to 42mm in three materials: brass, carbon steel, and stainless steel. Numerous body configurations and threaded connections allow DIN 2353 fittings to meet many connection challenges.

### DIN Fitting Applications

DIN connections are used in tube fittings, alternating valves, banjo fittings, and check & non-return valves. Vincie DIN fittings are designated for the use of commercial hydraulic oils.

### Features

- Pressure range up to 800 bar at 120 °C
- Constructive design of the cutting geometry.
- Force increase is perceptible.
- Less effort.
- Secure holding-function is guaranteed.
- Materials are SS AISI 316L and Carbon steel.

### Fitting materials:

#### Materials:

Steel

Stainless Steel

#### Temperature:

-40°C up to +120°C (DIN 3859)

-60°C up to +400°C (DIN 17440)

### Pressure Range:

#### Pressure Designation: Working pressure:

Medium (L)

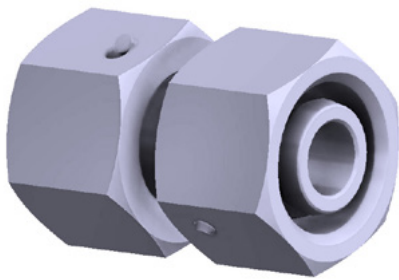
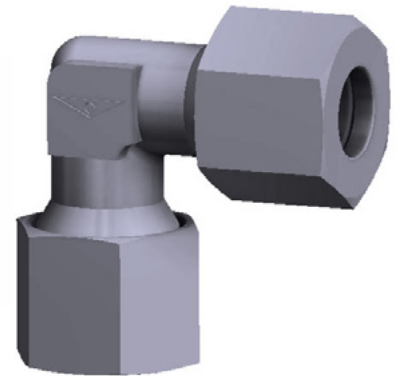
Up to 500 bar

High (S)

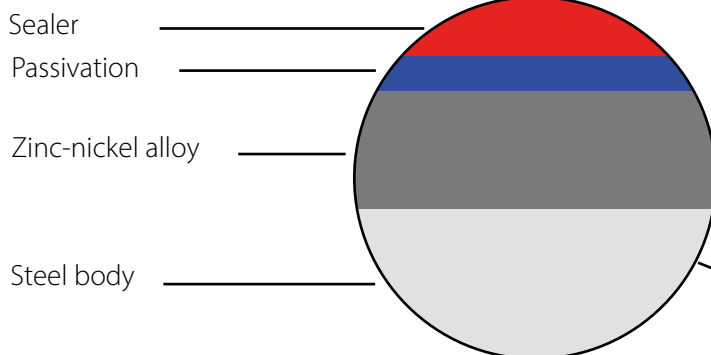
Up to 800 bar

Zn-Ni coat resists 720 hours without white rust, and 1500 hours without red rust (Salt spray test).

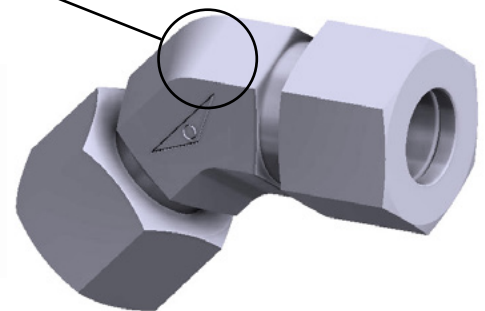
Zinc-nickel coating and sealing layer with uniform thickness, stable friction coefficient and wear resistance of the coating.



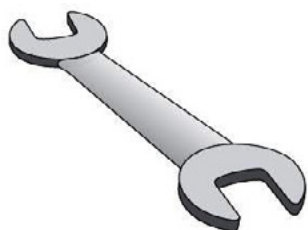
We focus on the applications and product promotion of zinc-nickel alloy coat treatment technology. The high corrosion resistance and application reliability of zinc-nickel surface products better meet the complex technical requirements of customers, and at the same time comply with the environmental protection regulations of the customers market.



The subsequent passivation and sealing phase have made it possible to achieve technical performance and resistance to red corrosion that are significantly higher than normal standards, in fact according to UNI ISO 9227 **we have largely exceeded 3,000h.**



## Assembly instructions



### Direct assembly

- Simple procedure for single assemblies of small dimensions
- Not economic for series assemblies
- Tubes  $\varnothing$  30, 35, 38 and 42 must be pre-assembled in vice

1



- Threads on stainless steel fittings must be lubricated

2



- Press tube-end firmly into the assembly cone  
Push back nut for easy tube insertion

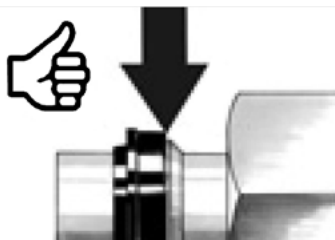


3



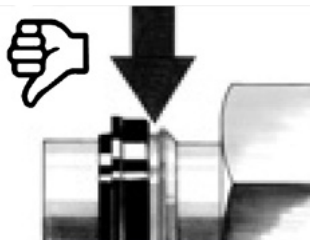
- Tighten until sharp increase of resistance
- Recommended to use spanner extensions for sizes over 20 mm

4



- Gap between sealing ring and retaining ring must be closed  
A little relaxation is allowed

5



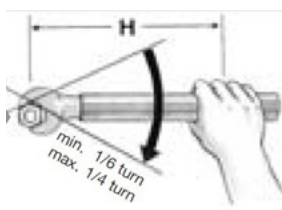
- **Gap not closed:** Check all components including tube

6



- Assemble fitting until wrench-tight

7



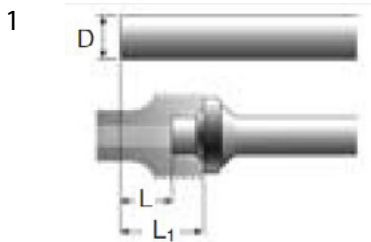
- Then tighten fitting firmly
- Recommended to use spanner extension for sizes over 20 mm

## Assembly instructions

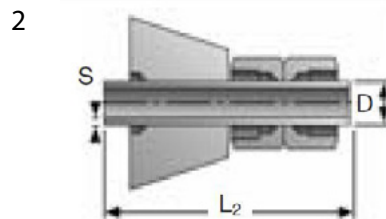


### Tube preparation

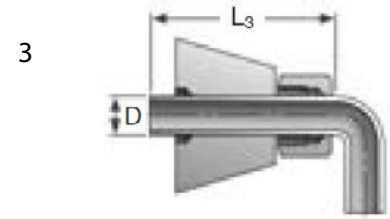
- Cut and deburr thoroughly
- Cut and bend tubes exactly



- Take extra length into account



- Minimum lengths L2 of straight tubes



- Minimum lengths L3 of straight tube-ends before bend



- Cut tube squarely
- max  $\pm 1^\circ$  deviation
- Do not use pipe cutters



- Remove internal and external burrs  
max. chamfer 0.3mm x 45°

## Weld fitting



### Weld fitting assembly

- PFZ weld nipple and weld fitting
- Use weldable material
- Depending on application or project specification, special requirements may apply for: Tube preparation, welding process, operator qualification, inspection of welding connection and surface finish

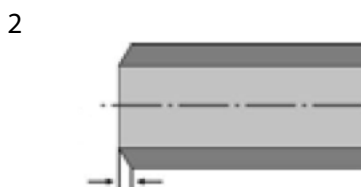


### Tube preparation

- Cut and burr thoroughly
- Do not assemble under tension
- Clamp onto rigid fixtures

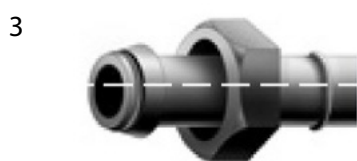


- Cut tube squarely
- max  $\pm 1^\circ$  deviation
- Do not use pipe cutters



- Bevel tube-end similar to weld nipple bevel

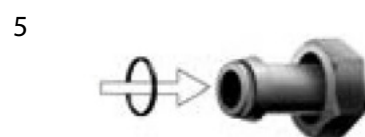
## Assembly



- Slide nut onto tube-end
- Weld fitting onto tube-end
- Fitting and tube must be aligned
- Remove all elastomeric seals before welding



- Clean weld
- Calibrate inner diameter
- Check welding quality
- Surface protection if necessary



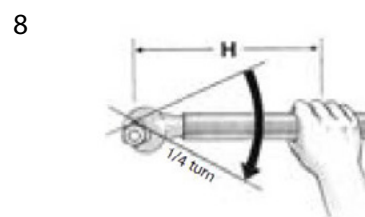
- Assemble O-ring
- Lubricate O-ring for easy assembly
- Avoid damage or twisting of O-ring



- Threads of stainless steel fittings must be lubricated



- Assemble fitting until wrench-tight



- Then tighten fitting firmly by 1/4 turn (1 1/2 flats)

## Port connections



### Assembly of metric straight port connections

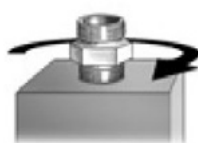
- Metric Thread  
DIN ISO 6149-23  
ISO9974-2/3  
DIN 3859-T2

1



- Threads of stainless steel fittings must be lubricated

2



- Screw in until handtight

3



- Then tighten according to chart

| Product | Tube O.D | Straight male stud fitting with port tapping |                           |                        | Non-return valves              | PFZ Banjo fittings |
|---------|----------|----------------------------------------------|---------------------------|------------------------|--------------------------------|--------------------|
|         |          | Thread size T                                | Form A for sealing washer | Form E with ED sealing | CHV/CHZ Form E with ED sealing | W5                 |
| Series  |          | mm                                           | Nm                        | Nm                     | Nm                             | Nm                 |
| L       | 6        | M 10x1.0                                     | 9                         | 18                     | 18                             | 18                 |
|         | 8        | M 12x1.5                                     | 20                        | 25                     | 25                             | 45                 |
|         | 10       | M 14x1.5                                     | 35                        | 45                     | 35                             | 55                 |
|         | 12       | M 16x1.5                                     | 45                        | 55                     | 50                             | 80                 |
|         | 15       | M 18x1.5                                     | 55                        | 70                     | 70                             | 100                |
|         | 18       | M 22x1.5                                     | 65                        | 125                    | 125                            | 140                |
|         | 22       | M 26x1.5                                     | 90                        | 180                    | 145                            | 320                |
|         | 28       | M 33x2.0                                     | 150                       | 310                    | 210                            | 360                |
|         | 35       | M 42x2.0                                     | 240                       | 450                    | 160                            | 540                |
|         | 42       | M 48x2.0                                     | 290                       | 540                    | 540                            | 700                |
| S       | 6        | M 12x1.5                                     | 20                        | 40                     | 35                             | 45                 |
|         | 8        | M 14x1.5                                     | 35                        | 40                     | 45                             | 55                 |
|         | 10       | M 16x1.5                                     | 45                        | 70                     | 55                             | 80                 |
|         | 12       | M 18x1.5                                     | 55                        | 90                     | 70                             | 100                |
|         | 14       | M 20x1.5                                     | 55                        | 125                    | 100                            | 125                |
|         | 16       | M 22x1.5                                     | 65                        | 135                    | 125                            | 135                |
|         | 20       | M 27x2.0                                     | 90                        | 180                    | 135                            | 320                |
|         | 25       | M 33x2.0                                     | 150                       | 310                    | 210                            | 360                |
|         | 30       | M 42x2.0                                     | 240                       | 450                    | 360                            | 540                |
|         | 38       | M 48x2.0                                     | 290                       | 540                    | 540                            | 700                |

## Assembly of BSPP straight port connections



### Assembly of metric straight port connections

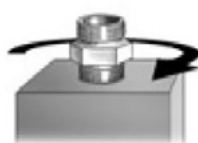
- BSPP Thread G  
ISO 1179-I  
DIN 3859-T2

1



- Threads of stainless steel fittings must be lubricated

2



- Screw in until handtight

3



- Then tighten according to chart

| Product | Tube O.D | Straight male stud fitting with port tapping |                           |                        | Non-return valves              | PFZ Banjo fittings |
|---------|----------|----------------------------------------------|---------------------------|------------------------|--------------------------------|--------------------|
|         |          | Thread size T                                | Form A for sealing washer | Form E with ED sealing | CHV/CHZ Form E with ED sealing | W5                 |
| Series  |          | Inch                                         | Nm                        | Nm                     | Nm                             | Nm                 |
| L       | 6        | G 1/8 A                                      | 9                         | 18                     | 18                             | 18                 |
|         | 8        | G 1/4 A                                      | 35                        | 35                     | 35                             | 45                 |
|         | 10       | G 1/4 A                                      | 35                        | 35                     | 35                             | 45                 |
|         | 12       | G 3/8 A                                      | 45                        | 70                     | 50                             | 70                 |
|         | 15       | G 1/2 A                                      | 65                        | 90                     | 85                             | 120                |
|         | 18       | G 1/2 A                                      | 65                        | 90                     | 65                             | 120                |
|         | 22       | G 3/4 A                                      | 90                        | 180                    | 140                            | 230                |
|         | 28       | G 1 A                                        | 150                       | 310                    | 190                            | 320                |
|         | 35       | G 1 1/4 A                                    | 240                       | 450                    | 360                            | 540                |
|         | 42       | G 1 1/2 A                                    | 290                       | 540                    | 540                            | 700                |
| S       | 6        | G 1/4 A                                      | 35                        | 40                     | 45                             | 45                 |
|         | 8        | G 1/4 A                                      | 35                        | 40                     | 45                             | 45                 |
|         | 10       | G 3/8 A                                      | 45                        | 80                     | 60                             | 70                 |
|         | 12       | G 3/8 A                                      | 45                        | 80                     | 60                             | 70                 |
|         | 14       | G 1/2 A                                      | 65                        | 115                    | 145                            | 120                |
|         | 16       | G 1/2 A                                      | 65                        | 115                    | 100                            | 120                |
|         | 20       | G 3/4 A                                      | 90                        | 180                    | 145                            | 230                |
|         | 25       | G 1 A                                        | 150                       | 310                    | 260                            | 320                |
|         | 30       | G 1 1/4 A                                    | 240                       | 450                    | 360                            | 540                |
|         | 38       | G 1 1/2 A                                    | 290                       | 540                    | 540                            | 700                |

## Assembly of tapered thread port connections

### Assembly of tapered thread port connections

- NPT / NPTF thread  
ANSI / ASME B 1.20.1 - 1983

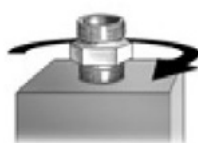


1



- Threads of stainless steel fittings must be lubricated

2



- Apply teflon tape to the taper stud end and screw in handtight

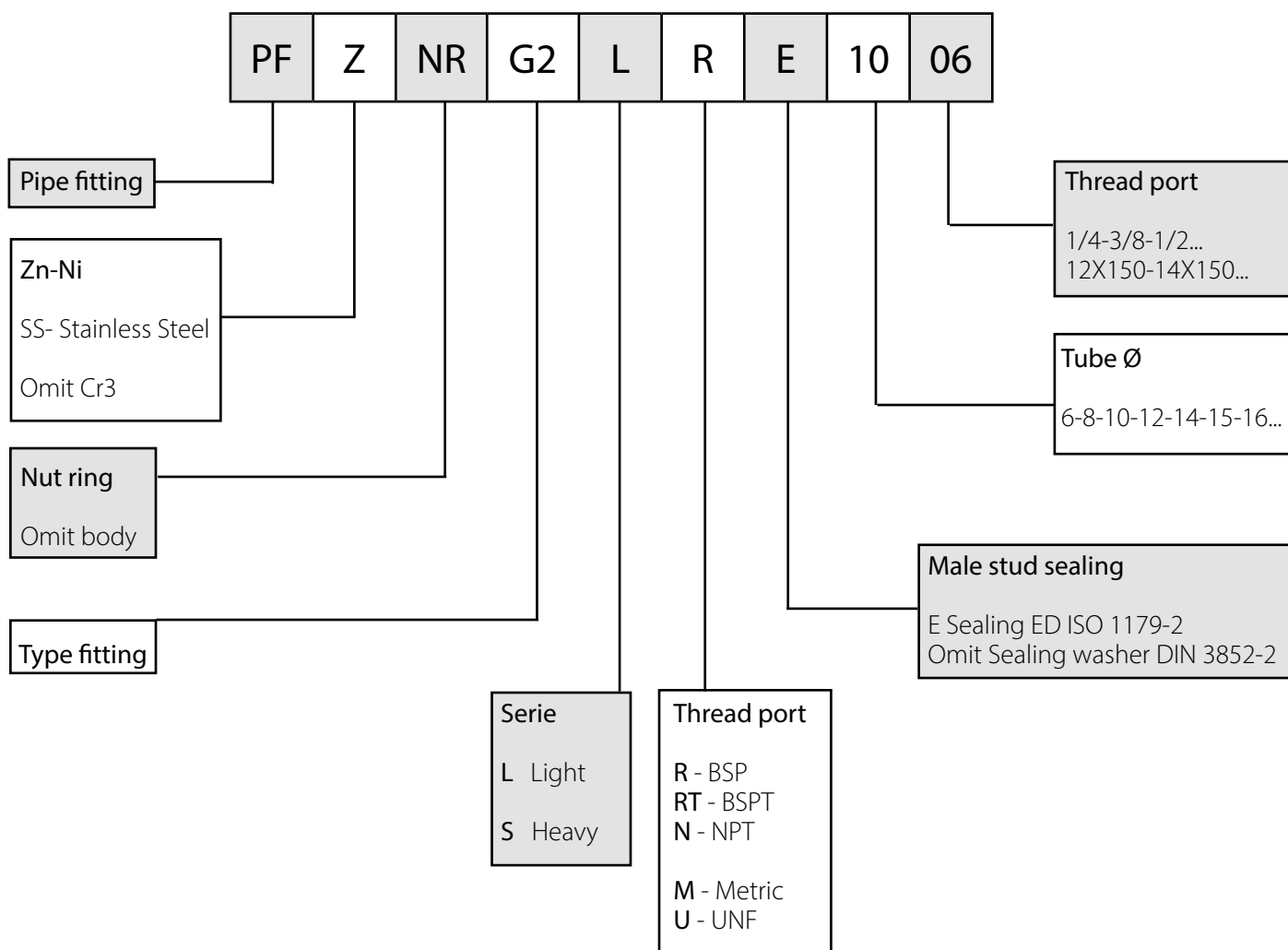
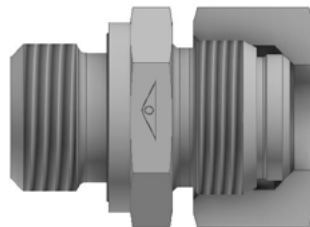
3



- Then tighten according to chart

| Size | Thread<br>T<br>NPT/F | Assembly<br>TFFT<br>Turns |
|------|----------------------|---------------------------|
| 4    | 1/8-27 NPT/F         | 2.0 - 3.0                 |
| 6    | 1/4-18 NPT/F         | 2.0 - 3.0                 |
| 8    | 3/8-18 NPT/F         | 2.0 - 3.0                 |
| 10   | 1/2-14 NPT/F         | 2.0 - 3.0                 |
| 12   | 3/4-14 NPT/F         | 2.0 - 3.0                 |
| 16   | 1-11.5 NPT/F         | 1.5 - 2.5                 |
| 20   | 1 1/4-11.5 NPT/F     | 1.5 - 2.5                 |
| 24   | 1 1/2-11.5 NPT/F     | 1.5 - 2.5                 |

## How to Order



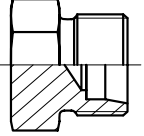
## VISUAL INDEX

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| Fitting components | <b>N</b><br>p.15  | <b>R</b><br>p.16   |                   |                   |
| Tube to tube       | <b>G1</b><br>p.17 | <b>G1R</b><br>p.18 | <b>W1</b><br>p.20 | <b>T1</b><br>p.21 |
|                    | <b>C1</b><br>p.22 | <b>B1</b><br>p.23  | <b>B2</b><br>p.24 |                   |
| Tube to swivel     | <b>W2</b><br>p.25 | <b>W3</b><br>p.26  | <b>T2</b><br>p.27 | <b>T4</b><br>p.28 |
|                    | <b>K0</b><br>p.29 |                    |                   |                   |
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|                     | <b>G2-NPT</b><br>p.40  | <b>G2-U</b><br>p.42    | <b>E6-R-ED</b><br>p.44 | <b>E6-M-ED</b><br>p.45 |
| Locknut adjustable  | <b>W6R</b><br>p.46     | <b>W6M</b><br>p.47     | <b>W7R</b><br>p.48     | <b>W7M</b><br>p.49     |
|                     | <b>W8R</b><br>p.50     | <b>W8M</b><br>p.51     | <b>W9R</b><br>p.52     | <b>W9M</b><br>p.53     |
| Banjo fittings      | <b>W5-R-ED</b><br>p.54 | <b>W5-M-ED</b><br>p.55 |                        |                        |
| Non adjustable      | <b>W4-RT</b><br>p.56   | <b>W4-NPT</b><br>p.57  |                        |                        |

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|                        | <b>VST-M-ED</b><br>p.64 |                                                                                                          |                         |
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| Weld fittings          | <b>B3</b><br>p.68       | <b>WR</b><br>p.69                                                                                        | <b>WS</b><br>p.70       |

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Components

**B5**  
p.71

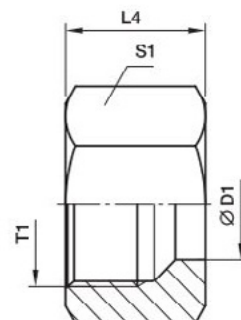
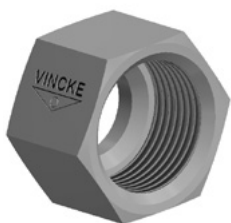
**MV**  
p.72

**ED**  
p.73

**OR**  
p.74

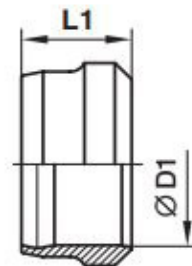
**OR-UNF**  
p.75

## N Nut - Cone end



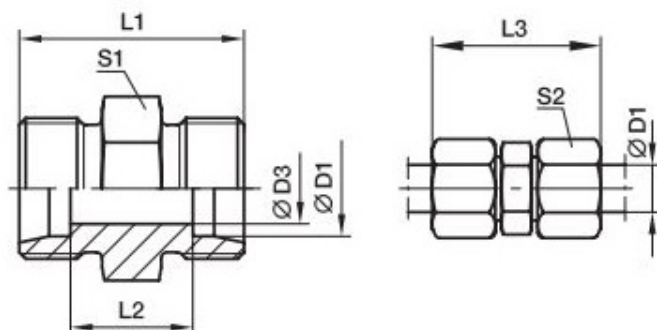
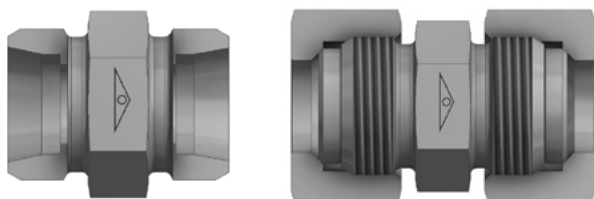
| Series | Order code | D1 | T1       | L4   | S1 | Weight (g) | PN (bar) |     |
|--------|------------|----|----------|------|----|------------|----------|-----|
|        |            |    |          |      |    |            | Z        | SS  |
| L      | N-6L       | 06 | M 12x1.5 | 14.5 | 14 | 10         | 500      | 315 |
|        | N-8L       | 08 | M 14x1.5 | 14.5 | 17 | 15         | 500      | 315 |
|        | N-10L      | 10 | M 16x1.5 | 15.5 | 19 | 18         | 500      | 315 |
|        | N-12L      | 12 | M 18x1.5 | 15.5 | 22 | 25         | 400      | 315 |
|        | N-15L      | 15 | M 22x1.5 | 17.0 | 27 | 42         | 400      | 315 |
|        | N-18L      | 18 | M 26x1.5 | 18.0 | 32 | 62         | 400      | 315 |
|        | N-22L      | 22 | M 30x2   | 20.0 | 36 | 82         | 250      | 160 |
|        | N-28L      | 28 | M 36x2   | 21.0 | 41 | 89         | 250      | 160 |
|        | N-35L      | 35 | M 45x2   | 24.0 | 50 | 137        | 250      | 160 |
|        | N-42L      | 42 | M 52x2   | 24.0 | 60 | 216        | 250      | 160 |
| S      | N-6S       | 06 | M 14x1.5 | 16.5 | 17 | 17         | 800      | 630 |
|        | N-8S       | 08 | M 16x1.5 | 16.5 | 19 | 20         | 800      | 630 |
|        | N-10S      | 10 | M 18x1.5 | 17.5 | 22 | 31         | 800      | 630 |
|        | N-12S      | 12 | M 20x1.5 | 17.5 | 24 | 34         | 630      | 630 |
|        | N-14S      | 14 | M 22x1.5 | 20.5 | 27 | 53         | 630      | 630 |
|        | N-16S      | 16 | M 24x1.5 | 20.5 | 30 | 66         | 630      | 400 |
|        | N-20S      | 20 | M 30x2   | 24.0 | 36 | 102        | 420      | 400 |
|        | N-25S      | 25 | M 36x2   | 27.0 | 46 | 202        | 420      | 400 |
|        | N-30S      | 30 | M 42x2   | 29.0 | 50 | 219        | 420      | 400 |
|        | N-38S      | 38 | M 52x2   | 32.5 | 60 | 339        | 420      | 315 |

## Cutting ring R



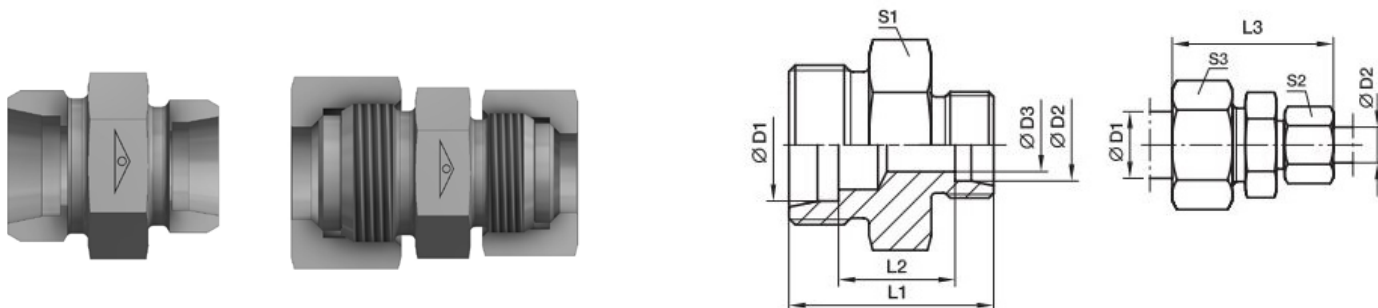
| Series | Order code | D1 | L1   | Weight (g) | PN (bar) |
|--------|------------|----|------|------------|----------|
| LS     | R-6LS      | 06 | 9.5  | 1.7        | 400      |
|        | R-8LS      | 08 | 9.0  | 2.2        | 400      |
|        | R-10LS     | 10 | 10.0 | 3.1        | 400      |
|        | R-12LS     | 12 | 10.0 | 3.5        | 400      |
| L      | R-15L      | 15 | 10.0 | 4.5        | 200      |
|        | R-18L      | 18 | 10.0 | 5.5        | 200      |
|        | R-22L      | 22 | 10.5 | 7.3        | 100      |
|        | R-28L      | 28 | 10.5 | 9.4        | 100      |
|        | R-35L      | 35 | 13.0 | 20.0       | 100      |
|        | R-42L      | 42 | 13.5 | 23.0       | 100      |
| S      | R-14S      | 14 | 10.0 | 3.9        | 400      |
|        | R-16S      | 16 | 10.5 | 5.6        | 250      |
|        | R-20S      | 20 | 12.5 | 11.4       | 250      |
|        | R-25S      | 25 | 12.5 | 13.3       | 250      |
|        | R-30S      | 30 | 13.0 | 19.3       | 250      |
|        | R-38S      | 38 | 13.5 | 22.5       | 200      |

## G1 Union



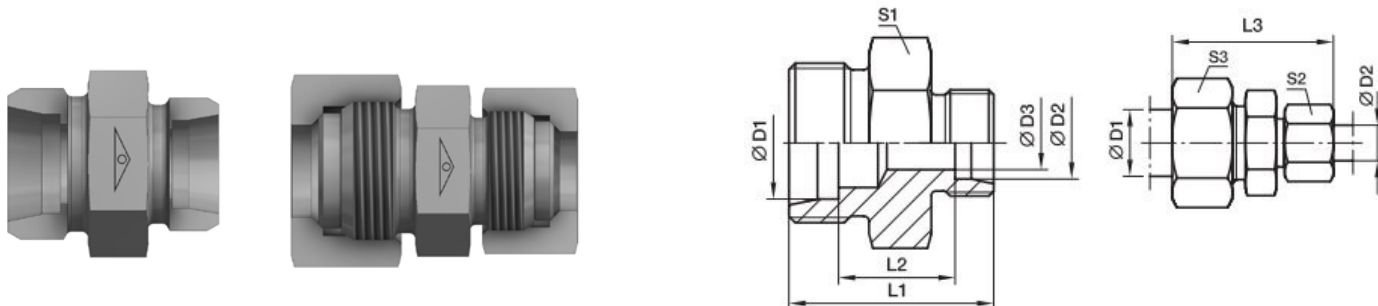
| Series | Order code | D1 | D3   | L1 | L2 | L3 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|------------|----|------|----|----|----|----|----|------------|----------|-----|
|        |            |    |      |    |    |    |    |    |            | Z        | SS  |
| L      | G1-6L      | 06 | 4.0  | 24 | 10 | 39 | 12 | 14 | 12         | 500      | 315 |
|        | G1-8L      | 08 | 6.0  | 25 | 11 | 40 | 14 | 17 | 16         | 500      | 315 |
|        | G1-10L     | 10 | 8.0  | 27 | 13 | 42 | 17 | 19 | 23         | 500      | 315 |
|        | G1-12L     | 12 | 10.0 | 28 | 14 | 43 | 19 | 22 | 28         | 400      | 315 |
|        | G1-15L     | 15 | 12.0 | 30 | 16 | 46 | 24 | 27 | 51         | 400      | 315 |
|        | G1-18L     | 18 | 15.0 | 31 | 16 | 48 | 27 | 32 | 69         | 400      | 315 |
|        | G1-22L     | 22 | 19.0 | 35 | 20 | 52 | 32 | 36 | 90         | 250      | 160 |
|        | G1-28L     | 28 | 24.0 | 36 | 21 | 53 | 41 | 41 | 137        | 250      | 160 |
|        | G1-35L     | 35 | 30.0 | 41 | 20 | 63 | 46 | 50 | 214        | 250      | 160 |
|        | G1-42L     | 42 | 36.0 | 43 | 21 | 66 | 55 | 60 | 296        | 250      | 160 |
| S      | G1-6S      | 06 | 4.0  | 30 | 16 | 45 | 14 | 17 | 26         | 800      | 630 |
|        | G1-8S      | 08 | 5.0  | 32 | 18 | 47 | 17 | 19 | 37         | 800      | 630 |
|        | G1-10S     | 10 | 7.0  | 32 | 17 | 49 | 19 | 22 | 44         | 800      | 630 |
|        | G1-12S     | 12 | 8.0  | 34 | 19 | 51 | 22 | 24 | 60         | 630      | 630 |
|        | G1-14S     | 14 | 10.0 | 38 | 22 | 57 | 14 | 27 | 77         | 630      | 630 |
|        | G1-16S     | 16 | 12.0 | 38 | 21 | 57 | 17 | 30 | 90         | 630      | 400 |
|        | G1-20S     | 20 | 16.0 | 44 | 23 | 66 | 32 | 36 | 143        | 420      | 400 |
|        | G1-25S     | 25 | 20.0 | 50 | 26 | 74 | 41 | 46 | 251        | 420      | 400 |
|        | G1-30S     | 30 | 25.0 | 54 | 27 | 80 | 46 | 50 | 330        | 420      | 400 |
|        | G1-38S     | 38 | 32.0 | 61 | 29 | 90 | 55 | 60 | 545        | 420      | 315 |

## Straight reducer G1R (L Series)



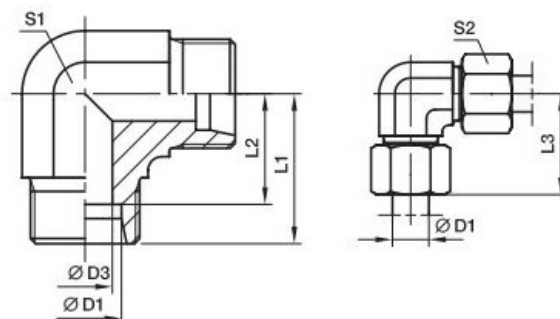
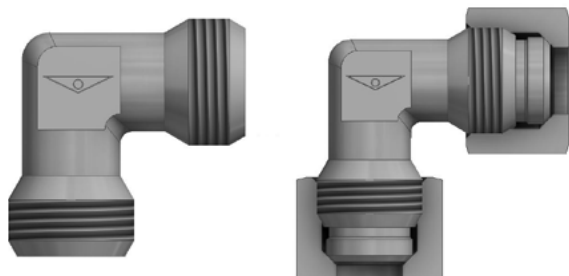
| Series | Order code | D1 | D2 | D3   | L1 | L2   | L3 | S1 | S2 | S3 | Weight (g) | PN (bar) |     |
|--------|------------|----|----|------|----|------|----|----|----|----|------------|----------|-----|
|        |            |    |    |      |    |      |    |    |    |    |            | Z        | SS  |
| L      | G1R-8/6L   | 08 | 06 | 4.0  | 25 | 11.0 | 40 | 14 | 14 | 17 | 16         | 500      | 315 |
|        | G1R-10/6L  | 10 | 06 | 4.0  | 26 | 12.0 | 41 | 17 | 14 | 19 | 21         | 500      | 315 |
|        | G1R-10/8L  | 10 | 08 | 6.0  | 26 | 12.0 | 41 | 17 | 17 | 19 | 21         | 500      | 315 |
|        | G1R-12/6L  | 12 | 06 | 4.0  | 27 | 13.0 | 42 | 19 | 14 | 22 | 26         | 400      | 315 |
|        | G1R-12/8L  | 12 | 08 | 6.0  | 27 | 13.0 | 42 | 19 | 17 | 22 | 26         | 400      | 315 |
|        | G1R-12/10L | 12 | 10 | 8.0  | 28 | 14.0 | 43 | 19 | 19 | 22 | 29         | 400      | 315 |
|        | G1R-15/10L | 15 | 10 | 8.0  | 29 | 15.0 | 45 | 24 | 19 | 27 | 46         | 400      | 315 |
|        | G1R-15/12L | 15 | 12 | 10.0 | 29 | 15.0 | 45 | 24 | 22 | 27 | 45         | 400      | 315 |
|        | G1R-18/10L | 18 | 10 | 8.0  | 30 | 15.5 | 46 | 27 | 19 | 32 | 65         | 400      | 315 |
|        | G1R-18/12L | 18 | 12 | 10.0 | 30 | 15.5 | 46 | 27 | 22 | 32 | 64         | 400      | 315 |
|        | G1R-18/15L | 18 | 15 | 12.0 | 31 | 16.5 | 48 | 27 | 27 | 32 | 65         | 400      | 315 |
|        | G1R-22/12L | 22 | 12 | 10.0 | 32 | 17.5 | 48 | 31 | 22 | 36 | 80         | 250      | 160 |
|        | G1R-22/15L | 22 | 15 | 12.0 | 33 | 18.5 | 50 | 31 | 27 | 36 | 89         | 250      | 160 |
|        | G1R-22/18L | 22 | 18 | 15.0 | 33 | 18.0 | 50 | 31 | 32 | 36 | 89         | 250      | 160 |
|        | G1R-28/18L | 28 | 18 | 15.0 | 34 | 19.0 | 52 | 41 | 32 | 41 | 142        | 250      | 160 |
|        | G1R-28/22L | 28 | 22 | 19.0 | 36 | 21.0 | 54 | 41 | 36 | 41 | 139        | 250      | 160 |
|        | G1R-35/22L | 35 | 22 | 19.0 | 39 | 21.0 | 59 | 46 | 36 | 50 | 202        | 250      | 160 |
|        | G1R-35/28L | 35 | 28 | 24.0 | 39 | 21.0 | 59 | 46 | 41 | 50 | 206        | 250      | 160 |

## Straight reducer G1R (S Series)



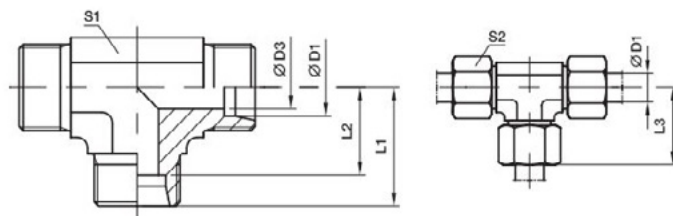
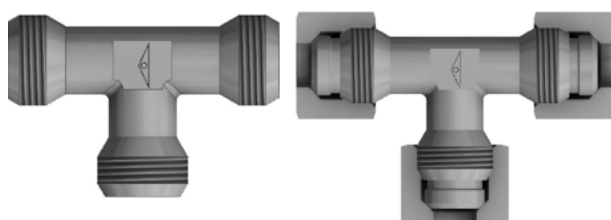
| Series | Order code | D1 | D2 | D3   | L1 | L2   | L3   | S1 | S2 | S3 | Weight (g) | PN (bar) |     |
|--------|------------|----|----|------|----|------|------|----|----|----|------------|----------|-----|
|        |            |    |    |      |    |      |      |    |    |    |            | Z        | SS  |
| S      | G1R-8/6S   | 08 | 06 | 4.0  | 32 | 18.0 | 47   | 17 | 17 | 19 | 35         | 800      | 630 |
|        | G1R-10/6S  | 10 | 06 | 4.0  | 32 | 17.5 | 48   | 19 | 17 | 22 | 41         | 800      | 630 |
|        | G1R-10/8S  | 10 | 08 | 5.0  | 32 | 17.5 | 48   | 19 | 19 | 22 | 42         | 800      | 630 |
|        | G1R-12/6S  | 12 | 06 | 4.0  | 34 | 19.5 | 50   | 22 | 17 | 24 | 56         | 630      | 630 |
|        | G1R-12/8S  | 12 | 08 | 5.0  | 34 | 19.5 | 50   | 22 | 19 | 24 | 57         | 630      | 630 |
|        | G1R-12/10S | 12 | 10 | 7.0  | 34 | 19.0 | 51   | 22 | 22 | 24 | 59         | 630      | 630 |
|        | G1R-14/10S | 14 | 10 | 7.0  | 36 | 20.5 | 54   | 24 | 22 | 27 | 70         | 630      | 630 |
|        | G1R-14/12S | 14 | 12 | 8.0  | 36 | 20.5 | 54   | 24 | 24 | 27 | 72         | 630      | 630 |
|        | G1R-16/12S | 16 | 12 | 8.0  | 36 | 20.0 | 54   | 27 | 24 | 30 | 87         | 630      | 400 |
|        | G1R-16/14S | 16 | 14 | 10.0 | 36 | 21.5 | 57   | 27 | 27 | 30 | 79         | 630      | 400 |
|        | G1R-20/10S | 20 | 10 | 7.0  | 40 | 22.0 | 60   | 32 | 22 | 36 | 129        | 420      | 400 |
|        | G1R-20/12S | 20 | 12 | 8.0  | 40 | 22.0 | 60   | 32 | 24 | 36 | 131        | 420      | 400 |
|        | G1R-20/14S | 20 | 14 | 10.0 | 42 | 24.0 | 61.5 | 32 | 36 | 27 | 132        | 420      | 400 |
|        | G1R-20/16S | 20 | 16 | 12.0 | 42 | 23.0 | 63   | 32 | 30 | 36 | 134        | 420      | 400 |
|        | G1R-25/16S | 25 | 16 | 12.0 | 46 | 25.5 | 68   | 41 | 30 | 46 | 236        | 420      | 400 |
|        | G1R-25/20S | 25 | 20 | 16.0 | 48 | 25.5 | 71   | 41 | 36 | 46 | 235        | 420      | 400 |
|        | G1R-30/20S | 30 | 20 | 16.0 | 50 | 26.0 | 74   | 46 | 36 | 50 | 299        | 420      | 400 |
|        | G1R-30/25S | 30 | 25 | 20.0 | 52 | 26.5 | 77   | 46 | 46 | 50 | 317        | 420      | 400 |
|        | G1R-38/25S | 38 | 25 | 20.0 | 57 | 30.0 | 80   | 55 | 46 | 60 | 480        | 420      | 315 |
|        | G1R-38/30S | 38 | 30 | 25.0 | 59 | 29.5 | 87   | 55 | 50 | 60 | 522        | 420      | 315 |

## Union W1



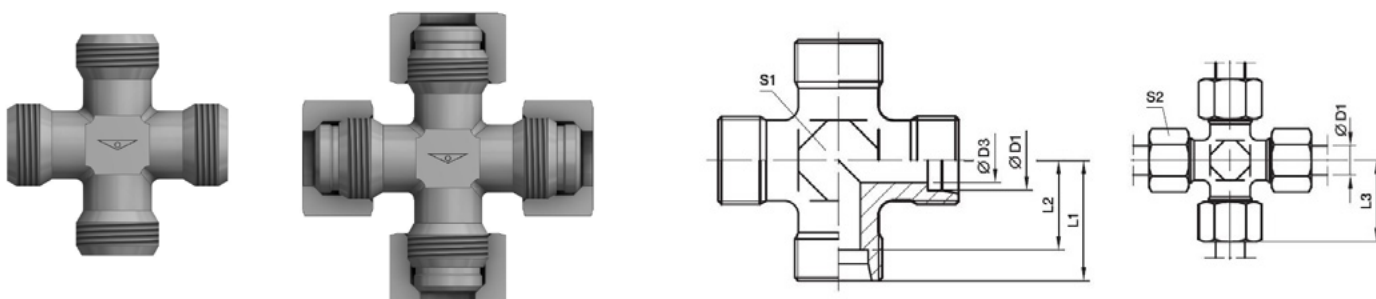
| Series | Order code | D1 | D3   | L1 | L2   | L3 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|------------|----|------|----|------|----|----|----|------------|----------|-----|
|        |            |    |      |    |      |    |    |    |            | Z        | SS  |
| L      | W1-6L      | 06 | 4.0  | 19 | 12.0 | 27 | 12 | 14 | 29         | 500      | 315 |
|        | W1-8L      | 08 | 6.0  | 21 | 14.0 | 29 | 12 | 17 | 43         | 500      | 315 |
|        | W1-10L     | 10 | 8.0  | 22 | 15.0 | 30 | 14 | 19 | 54         | 500      | 315 |
|        | W1-12L     | 12 | 10.0 | 24 | 17.0 | 32 | 17 | 22 | 80         | 400      | 315 |
|        | W1-15L     | 15 | 12.0 | 28 | 21.0 | 36 | 19 | 27 | 81         | 400      | 315 |
|        | W1-18L     | 18 | 15.0 | 31 | 23.5 | 40 | 24 | 32 | 140        | 400      | 315 |
|        | W1-22L     | 22 | 19.0 | 35 | 27.5 | 44 | 27 | 36 | 178        | 250      | 160 |
|        | W1-28L     | 28 | 24.0 | 38 | 30.5 | 47 | 36 | 41 | 340        | 250      | 160 |
|        | W1-35L     | 35 | 30.0 | 45 | 34.5 | 56 | 41 | 50 | 458        | 250      | 160 |
|        | W1-42L     | 42 | 36.0 | 51 | 40.0 | 61 | 50 | 60 | 776        | 250      | 160 |
| S      | W1-6S      | 06 | 4.0  | 23 | 16.0 | 31 | 12 | 17 | 52         | 800      | 630 |
|        | W1-8S      | 08 | 5.0  | 24 | 17.0 | 32 | 14 | 19 | 76         | 800      | 630 |
|        | W1-10S     | 10 | 7.0  | 25 | 17.5 | 34 | 17 | 22 | 97         | 800      | 630 |
|        | W1-12S     | 12 | 8.0  | 29 | 21.5 | 38 | 17 | 24 | 137        | 630      | 630 |
|        | W1-14S     | 14 | 10.0 | 30 | 22.0 | 40 | 19 | 27 | 145        | 630      | 630 |
|        | W1-16S     | 16 | 12.0 | 33 | 24.5 | 43 | 24 | 30 | 162        | 630      | 400 |
|        | W1-20S     | 20 | 16.0 | 37 | 26.5 | 48 | 27 | 36 | 221        | 420      | 400 |
|        | W1-25S     | 25 | 20.0 | 42 | 30.0 | 54 | 36 | 46 | 424        | 420      | 400 |
|        | W1-30S     | 30 | 25.0 | 49 | 35.5 | 62 | 41 | 50 | 603        | 420      | 400 |
|        | W1-38S     | 38 | 32.0 | 57 | 41.0 | 72 | 50 | 60 | 1010       | 420      | 315 |

## Union T1



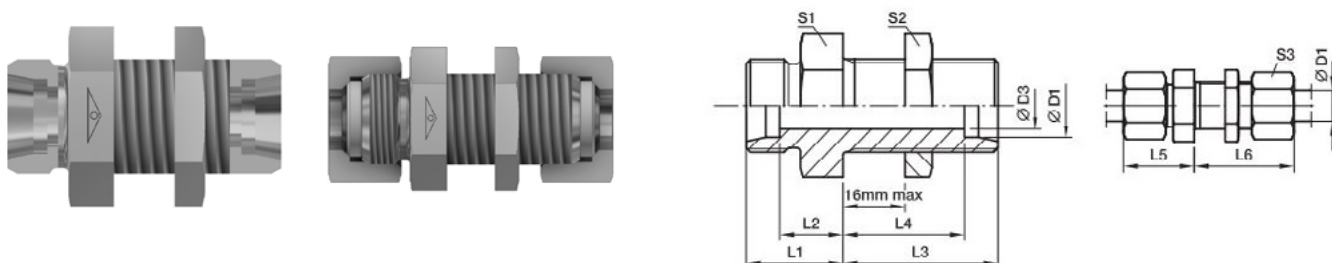
| Series | Order code | D1 | D3   | L1 | L2   | L3 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|------------|----|------|----|------|----|----|----|------------|----------|-----|
|        |            |    |      |    |      |    |    |    |            | Z        | SS  |
| L      | T1-6L      | 06 | 4.0  | 19 | 12.0 | 27 | 12 | 14 | 37         | 500      | 315 |
|        | T1-8L      | 08 | 6.0  | 21 | 14.0 | 29 | 12 | 17 | 53         | 500      | 315 |
|        | T1-10L     | 10 | 8.0  | 22 | 15.0 | 30 | 14 | 19 | 48         | 500      | 315 |
|        | T1-12L     | 12 | 10.0 | 24 | 17.0 | 32 | 17 | 22 | 65         | 400      | 315 |
|        | T1-15L     | 15 | 12.0 | 28 | 21.0 | 36 | 19 | 27 | 106        | 400      | 315 |
|        | T1-18L     | 18 | 15.0 | 31 | 23.5 | 40 | 24 | 32 | 179        | 400      | 315 |
|        | T1-22L     | 22 | 19.0 | 35 | 27.5 | 44 | 27 | 36 | 225        | 250      | 160 |
|        | T1-28L     | 28 | 24.0 | 38 | 30.5 | 47 | 36 | 41 | 396        | 250      | 160 |
|        | T1-35L     | 35 | 30.0 | 45 | 34.5 | 56 | 41 | 50 | 567        | 250      | 160 |
|        | T1-42L     | 42 | 36.0 | 51 | 40.0 | 63 | 50 | 60 | 905        | 250      | 160 |
| S      | T1-6S      | 06 | 4.0  | 23 | 16.0 | 31 | 12 | 17 | 68         | 800      | 630 |
|        | T1-8S      | 08 | 5.0  | 24 | 17.0 | 32 | 14 | 19 | 70         | 800      | 630 |
|        | T1-10S     | 10 | 7.0  | 25 | 17.5 | 34 | 17 | 22 | 91         | 800      | 630 |
|        | T1-12S     | 12 | 8.0  | 29 | 21.5 | 38 | 17 | 24 | 117        | 630      | 630 |
|        | T1-14S     | 14 | 10.0 | 30 | 22.0 | 40 | 19 | 27 | 136        | 630      | 630 |
|        | T1-16S     | 16 | 12.0 | 33 | 24.5 | 43 | 24 | 30 | 202        | 630      | 400 |
|        | T1-20S     | 20 | 16.0 | 37 | 26.5 | 48 | 27 | 36 | 289        | 420      | 400 |
|        | T1-25S     | 25 | 20.0 | 42 | 30.0 | 54 | 36 | 46 | 545        | 420      | 400 |
|        | T1-30S     | 30 | 25.0 | 49 | 35.5 | 62 | 41 | 50 | 758        | 420      | 400 |
|        | T1-38S     | 38 | 32.0 | 57 | 41.0 | 72 | 50 | 60 | 1264       | 420      | 315 |

## Union Cross C1



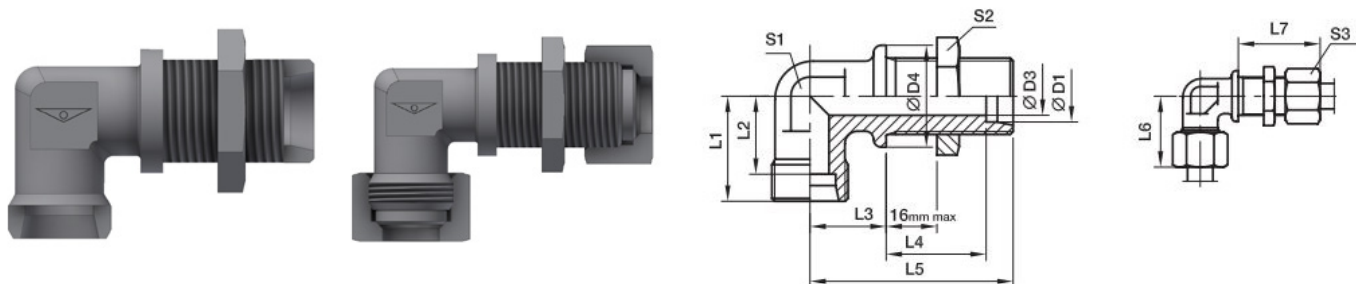
| Series | Order code | D1 | D3   | L1 | L2   | L3 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|------------|----|------|----|------|----|----|----|------------|----------|-----|
|        |            |    |      |    |      |    |    |    |            | Z        | SS  |
| L      | C1-6L      | 06 | 4.0  | 19 | 12.0 | 27 | 12 | 14 | 35         | 315      | 315 |
|        | C1-8L      | 08 | 6.0  | 21 | 14.0 | 29 | 12 | 17 | 40         | 315      | 315 |
|        | C1-10L     | 10 | 8.0  | 22 | 15.0 | 30 | 14 | 19 | 52         | 315      | 315 |
|        | C1-12L     | 12 | 10.0 | 24 | 17.0 | 32 | 17 | 22 | 69         | 315      | 315 |
|        | C1-15L     | 15 | 12.0 | 28 | 21.0 | 36 | 19 | 27 | 130        | 315      | 315 |
|        | C1-18L     | 18 | 15.0 | 31 | 23.5 | 40 | 24 | 32 | 188        | 315      | 315 |
|        | C1-22L     | 22 | 19.0 | 36 | 27.5 | 44 | 28 | 36 | 251        | 160      | 160 |
|        | C1-28L     | 28 | 24.0 | 38 | 30.5 | 47 | 36 | 41 | 293        | 160      | 160 |
|        | C1-35L     | 35 | 30.0 | 45 | 34.5 | 56 | 41 | 50 | 618        | 160      | 160 |
|        | C1-42L     | 42 | 36.0 | 51 | 40.0 | 63 | 50 | 60 | 905        | 160      | 160 |
| S      | C1-6S      | 06 | 4.0  | 23 | 16.0 | 31 | 12 | 17 | 58         | 630      | 630 |
|        | C1-8S      | 08 | 5.0  | 24 | 17.0 | 32 | 14 | 19 | 82         | 630      | 630 |
|        | C1-10S     | 10 | 7.0  | 25 | 17.5 | 34 | 17 | 22 | 97         | 630      | 630 |
|        | C1-12S     | 12 | 8.0  | 29 | 21.5 | 38 | 17 | 24 | 146        | 630      | 630 |
|        | C1-14S     | 14 | 10.0 | 30 | 22.0 | 40 | 19 | 27 | 176        | 400      | 400 |
|        | C1-16S     | 16 | 12.0 | 33 | 24.5 | 43 | 24 | 30 | 220        | 400      | 400 |
|        | C1-20S     | 20 | 16.0 | 37 | 26.2 | 48 | 27 | 36 | 339        | 315      | 315 |
|        | C1-25S     | 25 | 20.0 | 42 | 30.0 | 54 | 36 | 46 | 576        | 315      | 315 |
|        | C1-30S     | 30 | 25.0 | 49 | 35.5 | 62 | 41 | 50 | 843        | 315      | 315 |
|        | C1-38S     | 38 | 32.0 | 57 | 41.0 | 72 | 50 | 60 | 1350       | 315      | 315 |

## Bulkhead Union B1



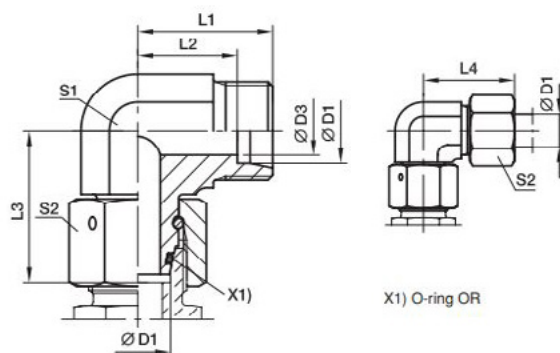
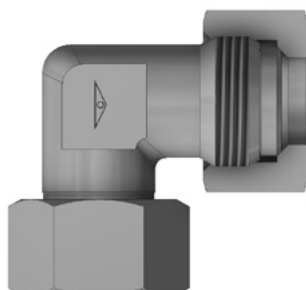
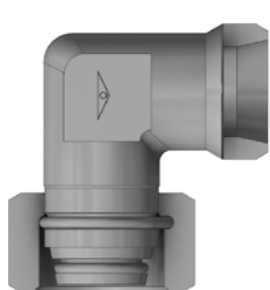
| Series | Order code | D1 | D3 | L1 | L2   | L3 | L4   | L5 | L6 | S1 | S2 | S3 | Weight (g) | PN (bar) |     |
|--------|------------|----|----|----|------|----|------|----|----|----|----|----|------------|----------|-----|
|        |            |    |    |    |      |    |      |    |    |    |    |    |            | Z        | SS  |
| L      | B1-6L      | 06 | 4  | 14 | 7.0  | 34 | 27.0 | 22 | 42 | 17 | 17 | 14 | 39         | 500      | 315 |
|        | B1-8L      | 08 | 6  | 15 | 8.0  | 34 | 27.0 | 23 | 42 | 19 | 19 | 17 | 50         | 500      | 315 |
|        | B1-10L     | 10 | 8  | 17 | 10.0 | 35 | 28.0 | 25 | 43 | 22 | 22 | 19 | 67         | 500      | 315 |
|        | B1-12L     | 12 | 10 | 17 | 10.0 | 36 | 29.0 | 25 | 44 | 24 | 24 | 22 | 78         | 400      | 315 |
|        | B1-15L     | 15 | 12 | 19 | 12.0 | 38 | 31.0 | 27 | 46 | 27 | 30 | 27 | 128        | 400      | 315 |
|        | B1-18L     | 18 | 15 | 21 | 13.5 | 40 | 32.5 | 30 | 49 | 32 | 36 | 32 | 198        | 400      | 315 |
|        | B1-22L     | 22 | 19 | 24 | 16.5 | 42 | 34.5 | 33 | 51 | 36 | 41 | 36 | 254        | 250      | 160 |
|        | B1-28L     | 28 | 24 | 26 | 18.5 | 43 | 35.5 | 35 | 52 | 41 | 46 | 41 | 335        | 250      | 160 |
|        | B1-35L     | 35 | 30 | 29 | 18.5 | 47 | 36.5 | 40 | 58 | 50 | 55 | 50 | 546        | 250      | 160 |
|        | B1-42L     | 42 | 36 | 30 | 19.0 | 47 | 36.0 | 42 | 59 | 60 | 65 | 60 | 758        | 250      | 160 |
| S      | B1-6S      | 06 | 4  | 19 | 12.0 | 36 | 29.0 | 27 | 44 | 19 | 19 | 17 | 65         | 800      | 630 |
|        | B1-8S      | 08 | 5  | 20 | 13.0 | 36 | 29.0 | 28 | 44 | 22 | 22 | 19 | 87         | 800      | 630 |
|        | B1-10S     | 10 | 7  | 22 | 14.5 | 37 | 29.5 | 31 | 46 | 24 | 24 | 22 | 112        | 800      | 630 |
|        | B1-12S     | 12 | 8  | 22 | 14.5 | 38 | 30.5 | 31 | 47 | 27 | 27 | 24 | 141        | 630      | 630 |
|        | B1-14S     | 14 | 10 | 25 | 17.0 | 40 | 32.0 | 35 | 50 | 30 | 30 | 27 | 180        | 630      | 630 |
|        | B1-16S     | 16 | 12 | 25 | 16.5 | 40 | 31.5 | 35 | 50 | 32 | 32 | 30 | 201        | 630      | 400 |
|        | B1-20S     | 20 | 16 | 28 | 17.5 | 44 | 33.5 | 39 | 55 | 41 | 41 | 36 | 462        | 420      | 400 |
|        | B1-25S     | 25 | 20 | 32 | 20.0 | 47 | 35.0 | 44 | 59 | 46 | 46 | 46 | 492        | 420      | 400 |
|        | B1-30S     | 30 | 25 | 35 | 21.5 | 51 | 37.5 | 48 | 64 | 50 | 50 | 50 | 631        | 420      | 400 |
|        | B1-38S     | 38 | 32 | 38 | 22.0 | 53 | 37.0 | 53 | 68 | 60 | 65 | 60 | 1083       | 420      | 315 |

## Elbow Bulkhead Union B2



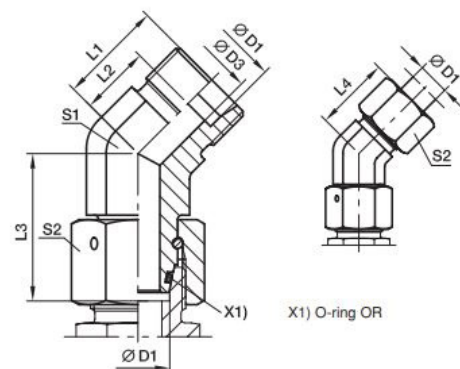
| Series | Order code | D1 | D3 | D4 | L1 | L2   | L3 | L4   | L5 | L6 | L7 | S1 | S2 | S3 | Weight (g) | PN (bar) |     |
|--------|------------|----|----|----|----|------|----|------|----|----|----|----|----|----|------------|----------|-----|
|        |            |    |    |    |    |      |    |      |    |    |    |    |    |    |            | Z        | SS  |
| L      | B2-6L      | 06 | 4  | 17 | 19 | 12.0 | 14 | 27.0 | 48 | 27 | 42 | 12 | 17 | 14 | 51         | 315      | 315 |
|        | B2-8L      | 08 | 6  | 19 | 21 | 14.0 | 17 | 27.0 | 51 | 29 | 42 | 12 | 19 | 17 | 61         | 315      | 315 |
|        | B2-10L     | 10 | 8  | 22 | 22 | 15.0 | 18 | 28.0 | 53 | 30 | 43 | 14 | 22 | 19 | 78         | 315      | 315 |
|        | B2-12L     | 12 | 10 | 24 | 24 | 17.0 | 20 | 29.0 | 56 | 32 | 44 | 17 | 24 | 22 | 85         | 315      | 315 |
|        | B2-15L     | 15 | 12 | 27 | 28 | 21.0 | 23 | 31.0 | 61 | 36 | 46 | 19 | 30 | 27 | 150        | 315      | 315 |
|        | B2-18L     | 18 | 15 | 32 | 31 | 23.5 | 24 | 32.5 | 64 | 40 | 49 | 24 | 36 | 32 | 238        | 315      | 315 |
|        | B2-22L     | 22 | 19 | 36 | 35 | 27.5 | 30 | 34.5 | 72 | 44 | 51 | 27 | 41 | 36 | 327        | 160      | 160 |
|        | B2-28L     | 28 | 24 | 42 | 38 | 30.5 | 34 | 35.5 | 77 | 47 | 52 | 36 | 46 | 41 | 482        | 160      | 160 |
|        | B2-35L     | 35 | 30 | 50 | 45 | 34.5 | 39 | 36.5 | 86 | 56 | 58 | 41 | 55 | 50 | 729        | 160      | 160 |
|        | B2-42L     | 42 | 36 | 60 | 51 | 40.0 | 43 | 36.0 | 90 | 63 | 59 | 50 | 65 | 60 | 1091       | 160      | 160 |
| S      | B2-6S      | 06 | 4  | 19 | 23 | 16.0 | 17 | 29.0 | 53 | 31 | 44 | 12 | 19 | 17 | 72         | 630      | 630 |
|        | B2-8S      | 08 | 5  | 22 | 24 | 17.0 | 18 | 29.0 | 54 | 32 | 44 | 14 | 22 | 19 | 99         | 630      | 630 |
|        | B2-10S     | 10 | 7  | 24 | 25 | 17.5 | 20 | 29.5 | 57 | 34 | 46 | 17 | 24 | 22 | 128        | 630      | 630 |
|        | B2-12S     | 12 | 8  | 27 | 29 | 21.5 | 21 | 30.5 | 59 | 38 | 47 | 17 | 27 | 24 | 168        | 630      | 630 |
|        | B2-14S     | 14 | 10 | 27 | 30 | 22.0 | 23 | 32.0 | 63 | 40 | 50 | 19 | 30 | 27 | 194        | 630      | 630 |
|        | B2-16S     | 16 | 12 | 30 | 33 | 24.5 | 24 | 31.5 | 64 | 43 | 50 | 24 | 32 | 30 | 249        | 400      | 400 |
|        | B2-20S     | 20 | 16 | 36 | 37 | 26.5 | 30 | 33.5 | 74 | 48 | 55 | 27 | 41 | 36 | 390        | 400      | 400 |
|        | B2-25S     | 15 | 20 | 42 | 42 | 30.0 | 34 | 35.0 | 81 | 54 | 59 | 36 | 46 | 46 | 618        | 400      | 400 |
|        | B2-30S     | 30 | 25 | 50 | 49 | 35.5 | 39 | 37.5 | 90 | 62 | 64 | 41 | 50 | 50 | 889        | 400      | 400 |
|        | B2-38S     | 38 | 32 | 60 | 57 | 41.0 | 43 | 37.0 | 96 | 72 | 68 | 50 | 65 | 60 | 1337       | 315      | 315 |

## Swivel nut elbow W2



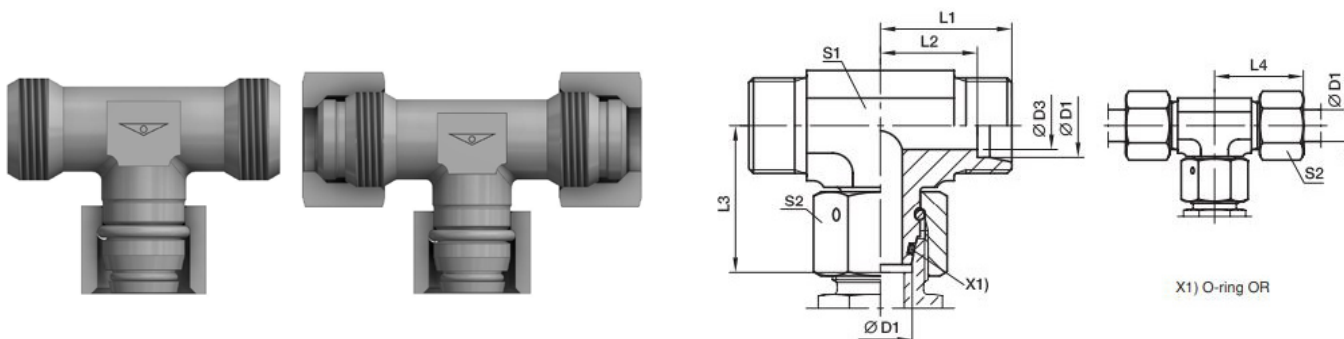
| Series | Order code | D1 | D3 | L1 | L2   | L3   | L4 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|------------|----|----|----|------|------|----|----|----|------------|----------|-----|
|        |            |    |    |    |      |      |    |    |    |            | Z        | SS  |
| L      | W2-6L      | 06 | 4  | 19 | 12.0 | 26.0 | 27 | 12 | 14 | 34         | 500      | 315 |
|        | W2-8L      | 08 | 6  | 21 | 14.0 | 27.5 | 29 | 12 | 17 | 43         | 500      | 315 |
|        | W2-10L     | 10 | 8  | 22 | 15.0 | 29.0 | 30 | 14 | 19 | 58         | 500      | 315 |
|        | W2-12L     | 12 | 10 | 24 | 17.0 | 29.5 | 32 | 17 | 22 | 81         | 400      | 315 |
|        | W2-15L     | 15 | 12 | 28 | 21.0 | 32.5 | 36 | 19 | 27 | 128        | 400      | 315 |
|        | W2-18L     | 18 | 15 | 31 | 23.5 | 35.5 | 40 | 24 | 32 | 197        | 400      | 315 |
|        | W2-22L     | 22 | 19 | 35 | 27.5 | 38.5 | 44 | 27 | 36 | 158        | 250      | 160 |
|        | W2-28L     | 28 | 24 | 38 | 30.5 | 41.5 | 47 | 36 | 41 | 370        | 250      | 160 |
|        | W2-35L     | 35 | 30 | 45 | 34.5 | 51.0 | 56 | 41 | 50 | 593        | 250      | 160 |
|        | W2-42L     | 42 | 36 | 51 | 40.0 | 56.0 | 63 | 50 | 60 | 993        | 250      | 160 |
| S      | W2-6S      | 06 | 4  | 23 | 16.0 | 27.0 | 31 | 12 | 17 | 48         | 800      | 630 |
|        | W2-8S      | 08 | 5  | 24 | 17.0 | 27.5 | 32 | 14 | 19 | 65         | 800      | 630 |
|        | W2-10S     | 10 | 7  | 25 | 17.5 | 30.0 | 34 | 17 | 22 | 92         | 800      | 630 |
|        | W2-12S     | 12 | 8  | 29 | 21.5 | 31.0 | 38 | 17 | 24 | 107        | 630      | 630 |
|        | W2-14S     | 14 | 10 | 30 | 22.0 | 35.0 | 40 | 19 | 27 | 146        | 630      | 630 |
|        | W2-16S     | 16 | 12 | 33 | 24.5 | 36.5 | 43 | 24 | 30 | 212        | 630      | 400 |
|        | W2-20S     | 20 | 16 | 37 | 26.5 | 44.5 | 48 | 27 | 36 | 309        | 420      | 400 |
|        | W2-25S     | 25 | 20 | 42 | 30.0 | 50.0 | 54 | 36 | 46 | 547        | 420      | 400 |
|        | W2-30S     | 30 | 25 | 49 | 35.5 | 55.0 | 62 | 41 | 50 | 744        | 420      | 400 |
|        | W2-38S     | 38 | 32 | 57 | 41.0 | 63.0 | 72 | 50 | 60 | 1222       | 420      | 315 |

## Swivel nut 45 elbow W3



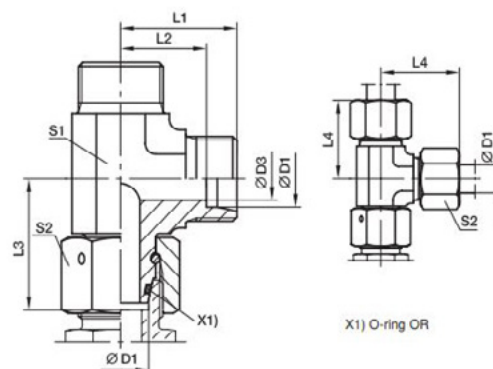
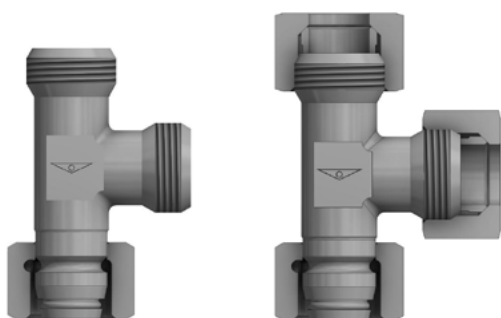
| Series | Order code | D1 | D3 | L1   | L2   | L3   | L4 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|------------|----|----|------|------|------|----|----|----|------------|----------|-----|
|        |            |    |    |      |      |      |    |    |    |            | Z        | SS  |
| L      | W3-6L      | 06 | 4  | 16.0 | 9.0  | 26.0 | 24 | 14 | 14 | 37         | 315      | 315 |
|        | W3-8L      | 08 | 6  | 19.0 | 12.0 | 27.5 | 27 | 14 | 17 | 49         | 315      | 315 |
|        | W3-10L     | 10 | 8  | 19.0 | 12.0 | 29.0 | 27 | 19 | 19 | 77         | 315      | 315 |
|        | W3-12L     | 12 | 10 | 21.0 | 14.0 | 29.5 | 29 | 19 | 22 | 86         | 315      | 315 |
|        | W3-15L     | 15 | 12 | 24.0 | 17.0 | 32.5 | 32 | 22 | 27 | 144        | 315      | 315 |
|        | W3-18L     | 18 | 15 | 24.0 | 16.5 | 35.5 | 33 | 27 | 32 | 210        | 315      | 315 |
|        | W3-22L     | 22 | 19 | 26.0 | 18.5 | 38.5 | 35 | 30 | 36 | 270        | 160      | 160 |
|        | W3-28L     | 28 | 24 | 30.5 | 23.0 | 41.5 | 40 | 36 | 41 | 385        | 160      | 160 |
|        | W3-35L     | 35 | 30 | 37.0 | 26.5 | 51.0 | 48 | 50 | 50 | 805        | 160      | 160 |
|        | W3-42L     | 42 | 36 | 37.0 | 26.5 | 56.0 | 49 | 50 | 60 | 887        | 160      | 160 |
| S      | W3-6S      | 06 | 4  | 16.0 | 9.0  | 27.0 | 24 | 14 | 17 | 50         | 630      | 630 |
|        | W3-8S      | 08 | 5  | 19.0 | 12.0 | 27.5 | 27 | 19 | 19 | 80         | 630      | 630 |
|        | W3-10S     | 10 | 7  | 21.0 | 13.5 | 30.0 | 30 | 19 | 22 | 95         | 630      | 630 |
|        | W3-12S     | 12 | 8  | 24.0 | 16.5 | 31.0 | 33 | 22 | 24 | 137        | 630      | 630 |
|        | W3-16S     | 16 | 12 | 24.0 | 15.5 | 36.5 | 34 | 27 | 30 | 217        | 400      | 400 |
|        | W3-20S     | 20 | 16 | 26.5 | 16.0 | 44.5 | 38 | 30 | 36 | 313        | 400      | 400 |
|        | W3-25S     | 25 | 20 | 30.5 | 18.5 | 50.0 | 43 | 36 | 46 | 529        | 400      | 400 |
|        | W3-30S     | 30 | 25 | 37.0 | 23.5 | 55.0 | 50 | 50 | 50 | 940        | 400      | 400 |
|        | W3-38S     | 38 | 32 | 37.0 | 21.0 | 63.0 | 52 | 50 | 60 | 1055       | 315      | 315 |

## Swivel nut branch tee T2



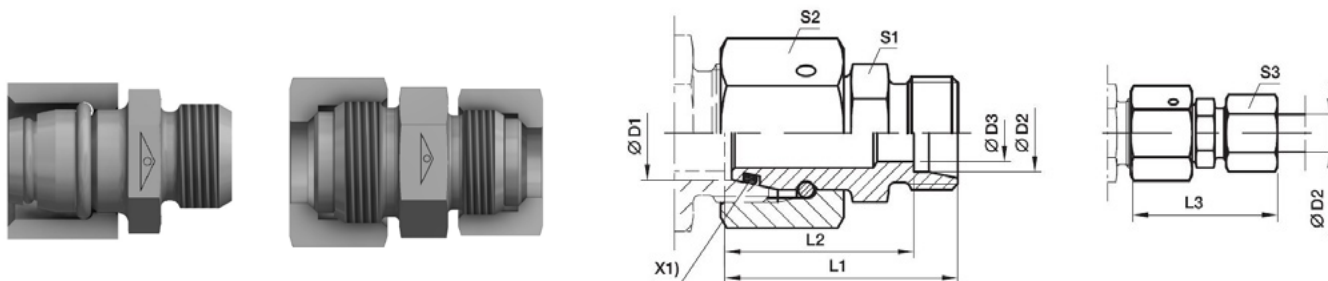
| Series | Order code | D1 | D3 | L1 | L2   | L3   | L4 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|------------|----|----|----|------|------|----|----|----|------------|----------|-----|
|        |            |    |    |    |      |      |    |    |    |            | Z        | SS  |
| L      | T2-6L      | 06 | 4  | 19 | 12.0 | 26.0 | 27 | 12 | 14 | 42         | 500      | 315 |
|        | T2-8L      | 08 | 6  | 21 | 14.0 | 27.5 | 29 | 12 | 17 | 53         | 500      | 315 |
|        | T2-10L     | 10 | 8  | 22 | 15.0 | 29.0 | 30 | 14 | 19 | 71         | 500      | 315 |
|        | T2-12L     | 12 | 10 | 24 | 17.0 | 29.5 | 32 | 17 | 22 | 97         | 400      | 315 |
|        | T2-15L     | 15 | 12 | 28 | 21.0 | 32.5 | 36 | 19 | 27 | 159        | 400      | 315 |
|        | T2-18L     | 18 | 15 | 31 | 23.5 | 35.5 | 40 | 24 | 32 | 239        | 400      | 315 |
|        | T2-22L     | 55 | 19 | 35 | 27.5 | 38.5 | 44 | 27 | 36 | 308        | 250      | 160 |
|        | T2-28L     | 28 | 24 | 38 | 30.5 | 41.5 | 47 | 36 | 41 | 449        | 250      | 160 |
|        | T2-35L     | 35 | 30 | 45 | 34.5 | 51.0 | 56 | 41 | 50 | 679        | 250      | 160 |
|        | T2-42L     | 42 | 36 | 51 | 40.0 | 56.0 | 63 | 50 | 60 | 1131       | 250      | 160 |
| S      | T2-6S      | 06 | 4  | 23 | 16.0 | 27.0 | 31 | 12 | 17 | 63         | 800      | 630 |
|        | T2-8S      | 08 | 5  | 24 | 17.0 | 27.5 | 32 | 14 | 19 | 79         | 800      | 630 |
|        | T2-10S     | 10 | 6  | 25 | 17.5 | 30.0 | 34 | 17 | 22 | 113        | 800      | 630 |
|        | T2-12S     | 12 | 8  | 29 | 21.5 | 31.0 | 38 | 17 | 24 | 136        | 630      | 630 |
|        | T2-14S     | 14 | 9  | 30 | 22.0 | 35.0 | 40 | 19 | 27 | 173        | 630      | 630 |
|        | T2-16S     | 16 | 12 | 33 | 24.5 | 36.5 | 43 | 24 | 30 | 239        | 630      | 400 |
|        | T2-20S     | 20 | 16 | 37 | 26.5 | 44.5 | 48 | 27 | 36 | 388        | 420      | 400 |
|        | T2-25S     | 25 | 20 | 42 | 30.0 | 50.0 | 54 | 36 | 46 | 652        | 420      | 400 |
|        | T2-30S     | 30 | 25 | 49 | 35.5 | 55.0 | 62 | 41 | 50 | 905        | 420      | 400 |
|        | T2-38S     | 38 | 32 | 57 | 41.0 | 63.0 | 72 | 50 | 60 | 1462       | 420      | 315 |

## Swivel nut run tee T4



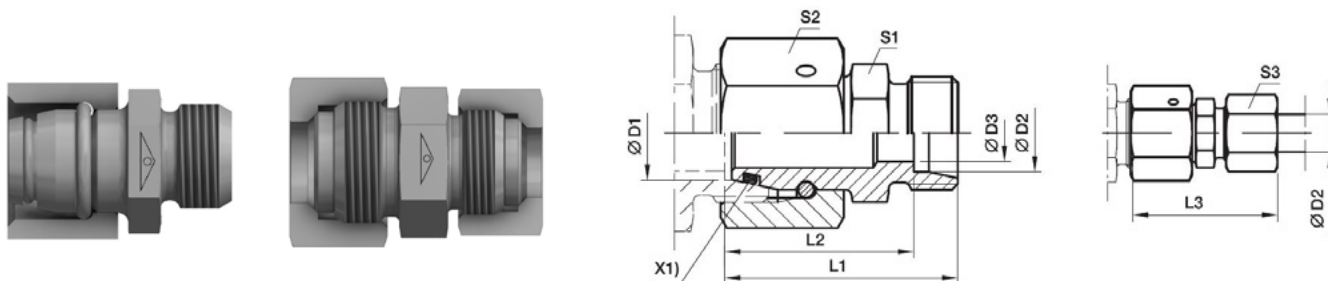
| Series | Order code | D1 | D3 | L1 | L2   | L3   | L4 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|------------|----|----|----|------|------|----|----|----|------------|----------|-----|
|        |            |    |    |    |      |      |    |    |    |            | Z        | SS  |
| L      | T4-6L      | 06 | 4  | 19 | 12.0 | 26.0 | 27 | 12 | 14 | 44         | 500      | 315 |
|        | T4-8L      | 08 | 6  | 21 | 14.0 | 27.5 | 29 | 12 | 17 | 53         | 500      | 315 |
|        | T4-10L     | 10 | 8  | 22 | 15.0 | 29.0 | 30 | 14 | 19 | 68         | 500      | 315 |
|        | T4-12L     | 12 | 10 | 24 | 17.0 | 29.5 | 32 | 17 | 22 | 95         | 400      | 315 |
|        | T4-15L     | 15 | 12 | 28 | 21.0 | 32.5 | 36 | 19 | 27 | 151        | 400      | 315 |
|        | T4-18L     | 18 | 15 | 31 | 23.5 | 35.5 | 40 | 24 | 32 | 233        | 400      | 315 |
|        | T4-22L     | 22 | 19 | 35 | 27.5 | 38.5 | 44 | 27 | 36 | 309        | 250      | 160 |
|        | T4-28L     | 28 | 24 | 38 | 30.5 | 41.5 | 47 | 36 | 41 | 436        | 250      | 160 |
|        | T4-35L     | 35 | 30 | 45 | 34.5 | 51.0 | 56 | 41 | 50 | 666        | 250      | 160 |
|        | T4-42L     | 42 | 36 | 51 | 40.0 | 56.0 | 63 | 50 | 60 | 1163       | 250      | 160 |
| S      | T4-6S      | 06 | 4  | 23 | 16.0 | 27.0 | 31 | 12 | 17 | 65         | 800      | 630 |
|        | T4-8S      | 08 | 5  | 24 | 17.0 | 27.5 | 32 | 14 | 19 | 84         | 800      | 630 |
|        | T4-10S     | 10 | 6  | 25 | 17.5 | 30.0 | 34 | 17 | 22 | 118        | 800      | 630 |
|        | T4-12S     | 12 | 8  | 29 | 21.5 | 31.0 | 38 | 17 | 24 | 136        | 630      | 630 |
|        | T4-14S     | 14 | 9  | 30 | 22.0 | 35.0 | 40 | 19 | 27 | 173        | 630      | 630 |
|        | T4-16S     | 16 | 12 | 33 | 24.5 | 36.5 | 43 | 24 | 30 | 260        | 630      | 400 |
|        | T4-20S     | 20 | 16 | 37 | 26.5 | 44.5 | 48 | 27 | 36 | 375        | 420      | 400 |
|        | T4-25S     | 25 | 20 | 42 | 30.0 | 50.0 | 54 | 36 | 46 | 655        | 420      | 400 |
|        | T4-30S     | 30 | 25 | 49 | 35.5 | 55.0 | 62 | 41 | 50 | 906        | 420      | 400 |
|        | T4-38S     | 38 | 32 | 57 | 41.0 | 63.0 | 72 | 50 | 60 | 1472       | 420      | 315 |

## Red tube end reducer K0 (L Series)



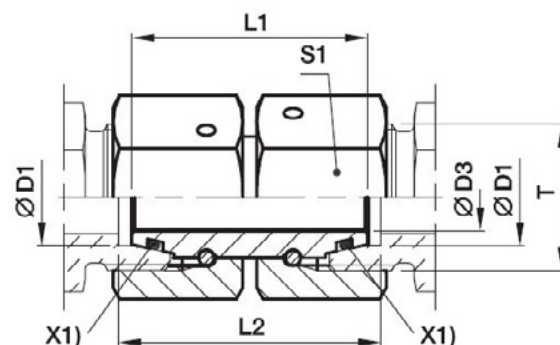
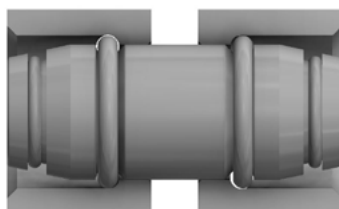
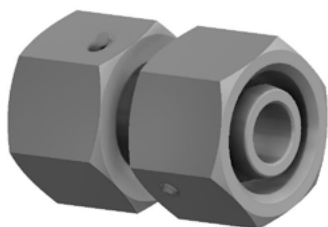
| Series | Order code | D1 | D2 | D3   | L1   | L2   | L3   | S1 | S2 | S3 | Weight (g) | PN (bar) |     |
|--------|------------|----|----|------|------|------|------|----|----|----|------------|----------|-----|
|        |            |    |    |      |      |      |      |    |    |    |            | Z        | SS  |
| L      | K0-8/6L    | 08 | 06 | 4.0  | 30.5 | 23.5 | 38.0 | 12 | 17 | 4  | 29         | 500      | 315 |
|        | K0-10/6L   | 10 | 06 | 4.0  | 32.0 | 25.0 | 40.0 | 14 | 19 | 14 | 36         | 500      | 315 |
|        | K0-10/8L   | 10 | 08 | 6.0  | 32.0 | 25.0 | 40.0 | 14 | 19 | 17 | 38         | 500      | 315 |
|        | K0-12/6L   | 12 | 06 | 4.0  | 32.0 | 25.0 | 40.0 | 17 | 22 | 14 | 49         | 400      | 315 |
|        | K0-12/8L   | 12 | 08 | 6.0  | 32.0 | 25.0 | 40.0 | 17 | 22 | 17 | 49         | 400      | 315 |
|        | K0-12/10L  | 12 | 10 | 8.0  | 33.0 | 26.0 | 41.0 | 17 | 22 | 19 | 51         | 400      | 315 |
|        | K0-15/6L   | 15 | 06 | 4.0  | 35.5 | 28.5 | 43.0 | 19 | 27 | 14 | 81         | 400      | 315 |
|        | K0-15/8L   | 15 | 08 | 6.0  | 35.5 | 28.5 | 43.0 | 19 | 27 | 17 | 85         | 400      | 315 |
|        | K0-15/10L  | 15 | 10 | 8.0  | 36.5 | 29.5 | 44.0 | 19 | 27 | 19 | 83         | 400      | 315 |
|        | K0-15/12L  | 15 | 12 | 10.0 | 36.5 | 29.5 | 44.0 | 19 | 27 | 22 | 83         | 400      | 315 |
|        | K0-18/6L   | 18 | 06 | 4.0  | 35.0 | 28.0 | 43.0 | 24 | 32 | 14 | 109        | 400      | 315 |
|        | K0-18/8L   | 18 | 08 | 6.0  | 35.0 | 28.0 | 43.0 | 24 | 32 | 17 | 111        | 400      | 315 |
|        | K0-18/10L  | 18 | 10 | 8.0  | 36.0 | 29.0 | 44.0 | 24 | 32 | 19 | 110        | 400      | 315 |
|        | K0-18/12L  | 18 | 12 | 10.0 | 36.0 | 29.0 | 44.0 | 24 | 32 | 22 | 110        | 400      | 315 |
|        | K0-18/15L  | 18 | 15 | 12.0 | 37.0 | 30.0 | 45.0 | 24 | 32 | 27 | 115        | 400      | 315 |
|        | K0-22/10L  | 22 | 10 | 8.0  | 40.0 | 33.0 | 48.0 | 27 | 36 | 19 | 159        | 250      | 160 |
|        | K0-22/12L  | 22 | 12 | 10.0 | 40.0 | 33.0 | 48.0 | 27 | 36 | 22 | 157        | 250      | 160 |
|        | K0-22/15L  | 22 | 15 | 12.0 | 41.0 | 34.0 | 49.0 | 27 | 36 | 27 | 164        | 250      | 160 |
|        | K0-22/18L  | 22 | 18 | 15.0 | 41.0 | 33.5 | 50.0 | 27 | 36 | 32 | 167        | 250      | 160 |
|        | K0-28/15L  | 28 | 15 | 12.0 | 43.0 | 36.0 | 51.0 | 32 | 41 | 27 | 218        | 250      | 160 |
|        | K0-28/18L  | 28 | 18 | 15.0 | 43.0 | 35.5 | 52.0 | 32 | 41 | 32 | 220        | 250      | 160 |
|        | K0-28/22L  | 28 | 22 | 19.0 | 45.0 | 37.5 | 54.0 | 32 | 41 | 36 | 222        | 250      | 160 |
|        | K0-35/18L  | 35 | 18 | 15.0 | 46.0 | 38.5 | 55.0 | 41 | 50 | 32 | 328        | 250      | 160 |
|        | K0-35/22L  | 35 | 22 | 19.0 | 48.0 | 40.5 | 57.0 | 41 | 50 | 36 | 331        | 250      | 160 |
|        | K0-35/28L  | 35 | 28 | 24.0 | 48.0 | 40.5 | 57.0 | 41 | 50 | 41 | 327        | 250      | 160 |
|        | K0-42/22L  | 42 | 22 | 19.0 | 51.5 | 44.0 | 60.0 | 50 | 60 | 36 | 543        | 250      | 160 |
|        | K0-42/28L  | 42 | 28 | 24.0 | 51.5 | 44.0 | 61.0 | 50 | 60 | 41 | 539        | 250      | 160 |
|        | K0-42/35L  | 42 | 35 | 30.0 | 53.5 | 43.0 | 65.0 | 50 | 60 | 50 | 541        | 250      | 160 |

## Red tube end reducer K0 (S Series)



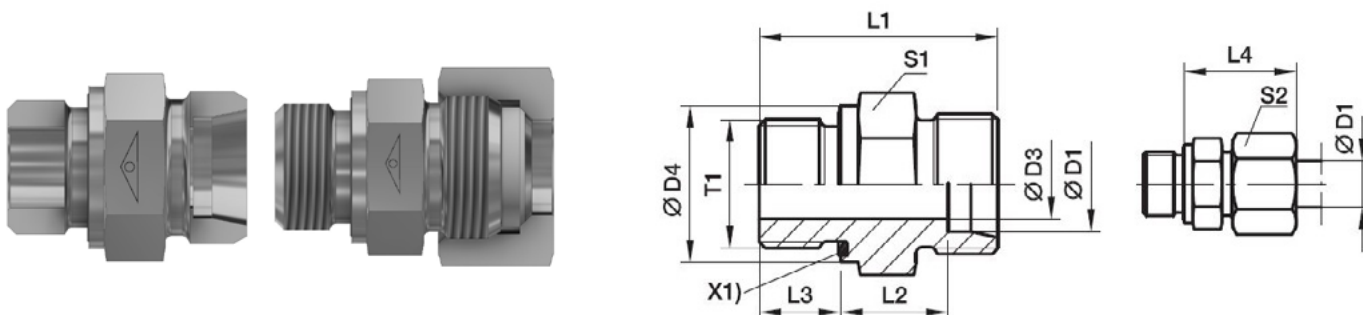
| Serie | Order code | D1 | D2 | D3 | L1   | L2   | L3 | S1 | S2 | S3 | Weight (g) | PN (bar) |     |
|-------|------------|----|----|----|------|------|----|----|----|----|------------|----------|-----|
|       |            |    |    |    |      |      |    |    |    |    |            | Z        | SS  |
| S     | K0-8/6S    | 08 | 06 | 4  | 34.0 | 27.0 | 42 | 14 | 19 | 17 | 42         | 800      | 630 |
|       | K0-10/6S   | 10 | 06 | 4  | 34.5 | 27.5 | 42 | 17 | 22 | 17 | 55         | 800      | 630 |
|       | K0-10/8S   | 10 | 08 | 5  | 34.5 | 27.5 | 42 | 17 | 22 | 19 | 58         | 800      | 630 |
|       | K0-12/6S   | 12 | 06 | 4  | 36.0 | 29.0 | 44 | 17 | 24 | 17 | 66         | 630      | 630 |
|       | K0-12/8S   | 12 | 08 | 5  | 36.0 | 29.0 | 44 | 17 | 24 | 19 | 68         | 630      | 630 |
|       | K0-12/10S  | 12 | 10 | 7  | 37.0 | 29.5 | 46 | 19 | 24 | 22 | 75         | 630      | 630 |
|       | K0-14/10S  | 14 | 10 | 7  | 38.5 | 31.0 | 47 | 19 | 27 | 22 | 91         | 630      | 630 |
|       | K0-14/12S  | 14 | 12 | 8  | 38.5 | 31.0 | 47 | 22 | 27 | 24 | 100        | 630      | 630 |
|       | K0-16/6S   | 16 | 06 | 4  | 39.0 | 32.0 | 47 | 22 | 30 | 17 | 112        | 630      | 400 |
|       | K0-16/8S   | 16 | 08 | 5  | 39.0 | 32.0 | 47 | 22 | 30 | 19 | 114        | 630      | 400 |
|       | K0-16/10S  | 16 | 10 | 7  | 39.0 | 31.5 | 48 | 22 | 30 | 22 | 115        | 630      | 400 |
|       | K0-16/12S  | 16 | 12 | 8  | 39.0 | 31.5 | 48 | 22 | 30 | 24 | 118        | 630      | 400 |
|       | K0-16/14S  | 16 | 14 | 10 | 41.0 | 33.0 | 51 | 24 | 30 | 27 | 128        | 630      | 400 |
|       | K0-20/8S   | 20 | 08 | 5  | 43.0 | 36.0 | 51 | 27 | 36 | 19 | 174        | 420      | 400 |
|       | K0-20/10S  | 20 | 10 | 7  | 43.0 | 35.5 | 52 | 27 | 36 | 22 | 174        | 420      | 400 |
|       | K0-20/12S  | 20 | 12 | 8  | 43.0 | 35.5 | 52 | 27 | 36 | 24 | 177        | 420      | 400 |
|       | K0-20/14S  | 20 | 14 | 10 | 45.0 | 37.0 | 55 | 27 | 36 | 27 | 182        | 420      | 400 |
|       | K0-20/16S  | 20 | 16 | 12 | 45.0 | 36.5 | 55 | 27 | 36 | 30 | 182        | 420      | 400 |
|       | K0-25/10S  | 25 | 10 | 7  | 45.5 | 38.0 | 54 | 32 | 46 | 22 | 296        | 420      | 400 |
|       | K0-25/12S  | 25 | 12 | 8  | 45.5 | 38.0 | 54 | 32 | 46 | 24 | 299        | 420      | 400 |
|       | K0-25/14S  | 25 | 14 | 10 | 47.5 | 39.5 | 57 | 32 | 46 | 27 | 303        | 420      | 400 |
|       | K0-25/16S  | 25 | 16 | 12 | 47.5 | 39.0 | 57 | 32 | 46 | 30 | 304        | 420      | 400 |
|       | K0-25/20S  | 25 | 20 | 16 | 49.5 | 39.0 | 61 | 32 | 46 | 36 | 315        | 420      | 400 |
|       | K0-30/16S  | 30 | 16 | 12 | 53.0 | 44.5 | 63 | 41 | 50 | 30 | 412        | 420      | 400 |
|       | K0-30/20S  | 30 | 20 | 16 | 55.0 | 44.5 | 66 | 41 | 50 | 36 | 421        | 420      | 400 |
|       | K0-30/25S  | 30 | 25 | 20 | 57.0 | 45.0 | 69 | 41 | 50 | 46 | 439        | 420      | 400 |
|       | K0-38/16S  | 38 | 16 | 12 | 56.5 | 48.0 | 66 | 50 | 60 | 30 | 580        | 420      | 315 |
|       | K0-38/20S  | 38 | 20 | 16 | 58.5 | 48.0 | 70 | 50 | 60 | 36 | 601        | 420      | 315 |
|       | K0-38/25S  | 38 | 25 | 20 | 60.5 | 48.5 | 73 | 50 | 60 | 46 | 615        | 420      | 315 |

## Swivel union G5



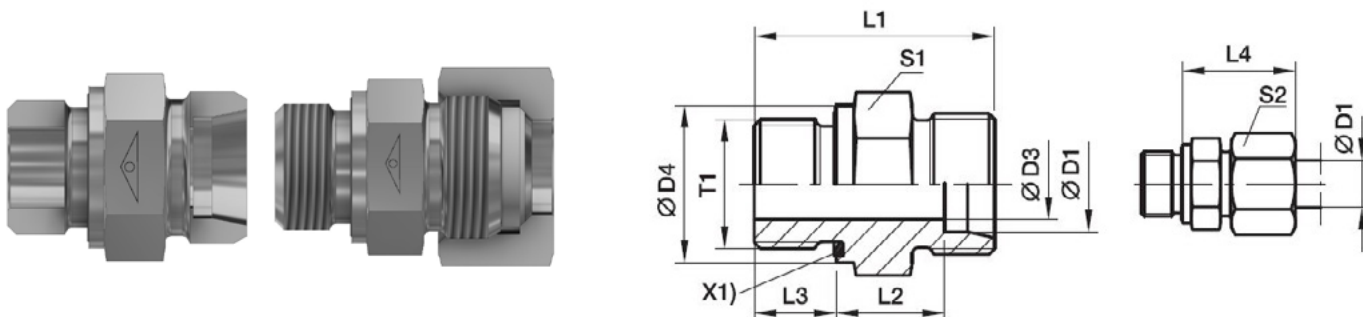
| Series | Order code | D1 | T        | D3   | L1 | L2 | S1 | Weight (g) | PN (bar) |     |
|--------|------------|----|----------|------|----|----|----|------------|----------|-----|
|        |            |    |          |      |    |    |    |            | Z        | SS  |
| L      | G5-6L      | 06 | M 14x1.5 | 2.5  | 32 | 33 | 14 | 28         | 500      | 315 |
|        | G5-8L      | 08 | M 14x1.5 | 4.0  | 32 | 33 | 17 | 41         | 500      | 315 |
|        | G5-10L     | 10 | M 16x1.5 | 6.0  | 33 | 34 | 19 | 53         | 500      | 315 |
|        | G5-12L     | 12 | M 18x1.5 | 8.0  | 33 | 34 | 22 | 71         | 400      | 315 |
|        | G5-15L     | 15 | M 22x1.5 | 10.0 | 38 | 39 | 27 | 129        | 400      | 315 |
|        | G5-18L     | 18 | M 26x1.5 | 13.0 | 36 | 38 | 32 | 165        | 400      | 315 |
|        | G5-22L     | 22 | M 30x2   | 17.0 | 42 | 44 | 36 | 243        | 250      | 160 |
|        | G5-28L     | 28 | M 36x2   | 22.0 | 46 | 48 | 41 | 319        | 250      | 160 |
|        | G5-35L     | 35 | M 45x2   | 28.0 | 48 | 52 | 50 | 449        | 250      | 160 |
|        | G5-42L     | 42 | M 52x2   | 34.0 | 52 | 57 | 60 | 737        | 250      | 160 |
| S      | G5-6S      | 06 | M 14x1.5 | 2.5  | 32 | 33 | 17 | 41         | 800      | 630 |
|        | G5-8S      | 08 | M 16x1.5 | 4.0  | 33 | 34 | 19 | 54         | 800      | 630 |
|        | G5-10S     | 10 | M 18x1.5 | 6.0  | 33 | 35 | 22 | 74         | 800      | 630 |
|        | G5-12S     | 12 | M 20x1.5 | 8.0  | 36 | 38 | 24 | 95         | 630      | 630 |
|        | G5-14S     | 14 | M 22x1.5 | 9.0  | 39 | 41 | 27 | 131        | 630      | 630 |
|        | G5-16S     | 16 | M 24x1.5 | 11.0 | 39 | 42 | 30 | 172        | 630      | 400 |
|        | G5-20S     | 20 | M 30x2   | 14.0 | 44 | 48 | 36 | 261        | 420      | 400 |
|        | G5-25S     | 25 | M 36x2   | 18.0 | 46 | 53 | 46 | 477        | 420      | 400 |
|        | G5-30S     | 30 | M 42x2   | 23.0 | 52 | 62 | 50 | 605        | 420      | 400 |
|        | G5-38S     | 38 | M 52x2   | 30.0 | 52 | 67 | 60 | 826        | 420      | 315 |

## Male stud connector G2-R-ED (L Series)



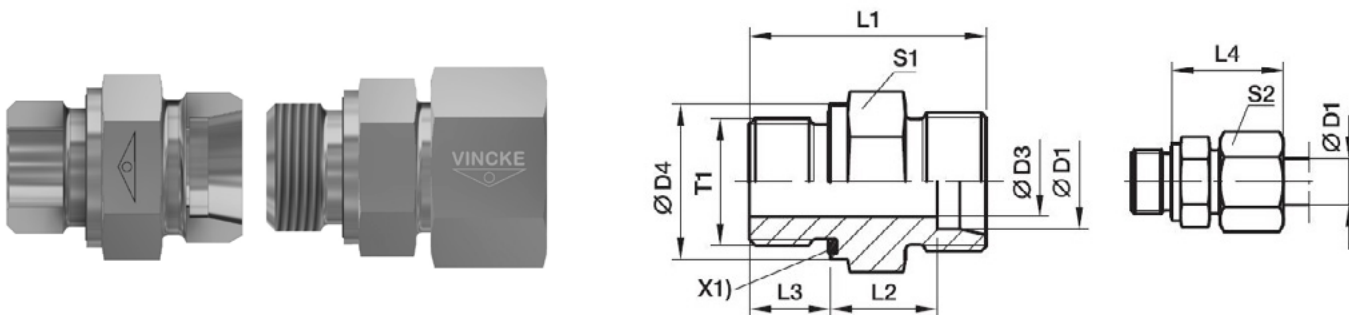
| Series | Order code       | D1 | T         | D3 | D4 | L1   | L2   | L3   | L4 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|------------------|----|-----------|----|----|------|------|------|----|----|----|------------|----------|-----|
|        |                  |    |           |    |    |      |      |      |    |    |    |            | Z        | SS  |
| L      | G2-6LR 1/8 ED    | 06 | G 1/8 A   | 4  | 14 | 23.5 | 8.5  | 8.0  | 23 | 14 | 14 | 13         | 500      | 315 |
|        | G2-6LR 1/4 ED    | 06 | G 1/4 A   | 4  | 19 | 29.0 | 10.0 | 12.0 | 25 | 19 | 14 | 28         | 500      | 315 |
|        | G2-8LR 1/4 ED    | 08 | G 1/4 A   | 6  | 19 | 29.0 | 10.0 | 12.0 | 25 | 19 | 17 | 27         | 500      | 315 |
|        | G2-8LR 1/8 ED    | 08 | G 1/8 A   | 4  | 14 | 24.5 | 9.5  | 8.0  | 24 | 14 | 17 | 16         | 500      | 315 |
|        | G2-8LR 3/8 ED    | 08 | G 3/8 A   | 6  | 22 | 3.05 | 11.5 | 12.0 | 26 | 22 | 17 | 45         | 420      | 315 |
|        | G2-8LR 1/2 ED    | 08 | G 1/2 A   | 6  | 27 | 33.0 | 12.0 | 14.0 | 27 | 27 | 17 | 74         | 400      | 315 |
|        | G2-10LR 1/4 ED   | 10 | G 1/4 A   | 6  | 19 | 30.0 | 11.0 | 12.0 | 26 | 19 | 19 | 29         | 500      | 315 |
|        | G2-10LR 3/8 ED   | 10 | G 3/8 A   | 8  | 22 | 31.5 | 12.5 | 12.0 | 27 | 22 | 19 | 43         | 420      | 315 |
|        | G2-10LR 1/2 ED   | 10 | G 1/2 A   | 8  | 27 | 34.0 | 13.0 | 14.0 | 28 | 27 | 19 | 71         | 400      | 315 |
|        | G2-12LR 1/4 ED   | 12 | G 1/4 A   | 6  | 19 | 31.0 | 12.0 | 12.0 | 27 | 19 | 22 | 31         | 400      | 315 |
|        | G2-12LR 3/8 ED   | 12 | G 3/8 A   | 9  | 22 | 31.5 | 12.5 | 12.0 | 27 | 22 | 22 | 41         | 420      | 315 |
|        | G2-12LR 1/2 ED   | 12 | G 1/2 A   | 10 | 27 | 34.0 | 13.0 | 14.0 | 28 | 27 | 22 | 67         | 400      | 315 |
|        | G2-15LR 3/8 ED   | 15 | G 3/8 A   | 9  | 22 | 32.0 | 13.5 | 12.0 | 29 | 24 | 27 | 54         | 400      | 315 |
|        | G2-15LR 1/2 ED   | 15 | G 1/2 A   | 11 | 27 | 35.0 | 14.0 | 14.0 | 29 | 27 | 27 | 72         | 400      | 315 |
|        | G2-15LR 3/4 ED   | 15 | G 3/4 A   | 12 | 32 | 38.0 | 15.0 | 16.0 | 30 | 32 | 27 | 116        | 250      | 160 |
|        | G2-18LR 1/2 ED   | 18 | G 1/2 A   | 14 | 27 | 36.0 | 14.5 | 14.0 | 31 | 27 | 32 | 71         | 400      | 315 |
|        | G2-18LR 3/4 ED   | 18 | G 3/4 A   | 15 | 32 | 38.0 | 14.5 | 16.0 | 31 | 32 | 32 | 110        | 250      | 160 |
|        | G2-22LR 1/2 ED   | 22 | G 1/2 A   | 14 | 27 | 38.0 | 16.5 | 14.0 | 33 | 32 | 36 | 91         | 250      | 160 |
|        | G2-22LR 3/4 ED   | 22 | G 3/4 A   | 18 | 32 | 40.0 | 16.5 | 16.0 | 33 | 32 | 36 | 102        | 250      | 160 |
|        | G2-28LR 3/4 ED   | 28 | G 3/4 A   | 18 | 32 | 41.0 | 17.5 | 16.0 | 34 | 41 | 41 | 159        | 250      | 160 |
|        | G2-28LR 1 ED     | 28 | G 1 A     | 23 | 40 | 43.0 | 17.5 | 18.0 | 34 | 41 | 41 | 170        | 250      | 160 |
|        | G2-35LR 1 ED     | 35 | G 1 A     | 23 | 40 | 46.0 | 17.5 | 18.0 | 39 | 46 | 50 | 226        | 250      | 160 |
|        | G2-35LR 1 1/4 ED | 35 | G 1 1/4 A | 30 | 50 | 48.0 | 17.5 | 20.0 | 39 | 50 | 50 | 272        | 250      | 260 |
|        | G2-42LR 1 1/2 ED | 42 | G 1 1/2 A | 36 | 55 | 52.0 | 19.0 | 22.0 | 42 | 55 | 60 | 343        | 250      | 160 |

## Male stud connector G2-R-ED (S Series)



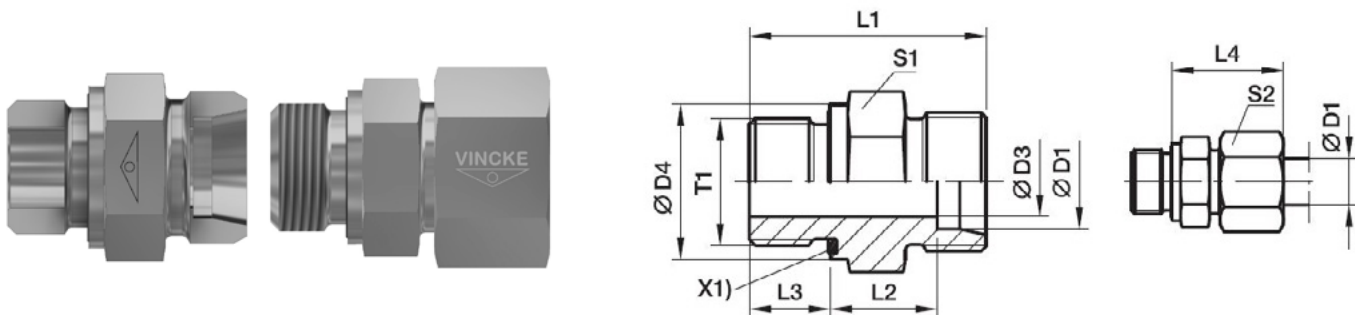
| Series | Order code     | D1 | T       | D3 | D4 | L1   | L2   | L3 | L4 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|----------------|----|---------|----|----|------|------|----|----|----|----|------------|----------|-----|
|        |                |    |         |    |    |      |      |    |    |    |    |            | Z        | SS  |
| S      | G2-6SR 1/4 ED  | 06 | G 1/4 A | 4  | 19 | 32.0 | 13.0 | 12 | 28 | 19 | 17 | 35         | 800      | 630 |
|        | G2-8SR 1/4 ED  | 08 | G 1/4 A | 5  | 19 | 34.0 | 15.0 | 12 | 30 | 19 | 19 | 41         | 800      | 630 |
|        | G2-8SR 3/8 ED  | 08 | G 3/8 A | 5  | 22 | 34.5 | 15.5 | 12 | 30 | 22 | 19 | 57         | 800      | 630 |
|        | G2-8SR 1/2 ED  | 08 | G 1/2 A | 5  | 27 | 39.0 | 18.0 | 14 | 33 | 27 | 19 | 89         | 630      | 400 |
|        | G2-10SR 3/8 ED | 10 | G 3/8 A | 7  | 22 | 34.5 | 15.0 | 12 | 31 | 22 | 22 | 55         | 800      | 630 |
|        | G2-12SR 3/8 ED | 12 | G 3/8 A | 8  | 22 | 36.5 | 17.0 | 12 | 33 | 22 | 24 | 62         | 630      | 630 |
|        | G2-12SR 1/2 ED | 12 | G 1/2 A | 8  | 27 | 39.0 | 17.5 | 14 | 34 | 27 | 24 | 99         | 630      | 630 |
|        | G2-14SR 1/2 ED | 14 | G 1/2 A | 10 | 27 | 41.0 | 19.0 | 14 | 37 | 27 | 27 | 96         | 630      | 630 |
|        | G2-16SR 1/2 ED | 16 | G 1/2 A | 12 | 27 | 41.0 | 18.5 | 14 | 37 | 27 | 30 | 91         | 630      | 400 |
|        | G2-16SR 3/8 ED | 16 | G 3/8 A | 8  | 22 | 38.5 | 18.0 | 12 | 36 | 27 | 30 | 83         | 630      | 400 |
|        | G2-16SR 3/4 ED | 16 | G 3/4 A | 12 | 32 | 45.0 | 20.5 | 16 | 39 | 32 | 30 | 152        | 420      | 400 |
|        | G2-20SR 3/8 ED | 20 | G 3/8 A | 16 | 32 | 47.0 | 20.5 | 16 | 42 | 32 | 36 | 149        | 420      | 400 |
|        | G2-20SR 1/2 ED | 20 | G 1/2 A | 12 | 27 | 45.0 | 20.5 | 14 | 42 | 32 | 36 | 142        | 420      | 400 |
|        | G2-20SR 1 ED   | 20 | G 1 A   | 16 | 40 | 51.0 | 22.5 | 18 | 44 | 41 | 36 | 265        | 420      | 400 |
|        | G2-25SR 1 ED   | 25 | G 1 A   | 20 | 40 | 53.0 | 23.0 | 18 | 47 | 41 | 46 | 266        | 420      | 400 |
|        | G2-25SR 3/4 ED | 25 | G 3/4 A | 16 | 32 | 51.0 | 23.0 | 16 | 47 | 41 | 46 | 255        | 420      | 400 |
|        | G2-30SR 1/4 ED | 30 | G 1/4 A | 25 | 50 | 54.0 | 23.5 | 20 | 50 | 50 | 50 | 418        | 420      | 400 |
|        | G2-30SR 1 ED   | 30 | G 1 A   | 20 | 40 | 55.0 | 23.5 | 18 | 50 | 46 | 50 | 344        | 420      | 400 |
|        | G2-38SR 1/2 ED | 38 | G 1/2 A | 32 | 55 | 64.0 | 26.0 | 22 | 57 | 55 | 60 | 563        | 420      | 315 |

## Male stud connector G2-M-ED (L Series)



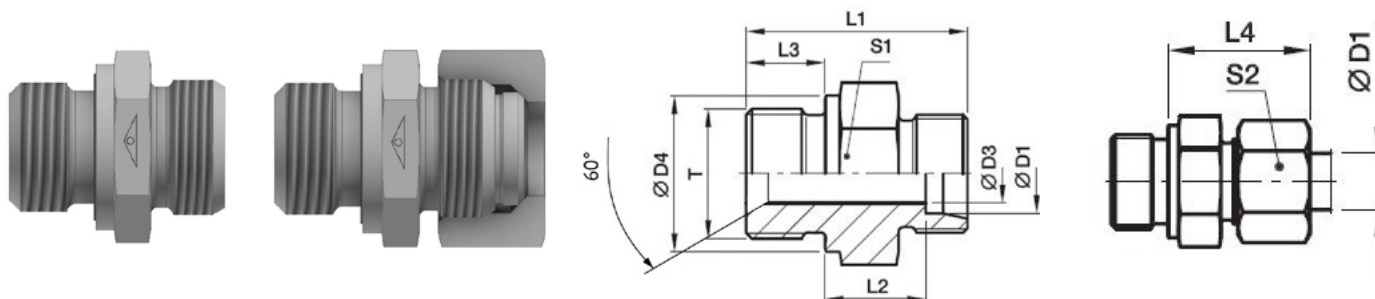
| Series | Order code    | D1 | T1       | D3 | D4 | L1   | L2   | L3 | L4 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|---------------|----|----------|----|----|------|------|----|----|----|----|------------|----------|-----|
|        |               |    |          |    |    |      |      |    |    |    |    |            | Z        | SS  |
| L      | G2-6LM10X1.0  | 06 | M 10x1.0 | 4  | 14 | 23.5 | 8.5  | 8  | 23 | 14 | 14 | 13         | 500      | 315 |
|        | G2-8LM12X1.5  | 08 | M 12x1.5 | 6  | 17 | 29.0 | 10.0 | 12 | 25 | 17 | 17 | 22         | 500      | 315 |
|        | G2-8LM14X1.5  | 08 | M 14x1.5 | 7  | 19 | 29.0 | 10.0 | 12 | 25 | 19 | 17 | 29         | 500      | 315 |
|        | G2-8LM16X1.5  | 08 | M 16x1.5 | 8  | 21 | 30.5 | 11.5 | 12 | 26 | 22 | 17 | 42         | 500      | 315 |
|        | G2-10LM14X1.5 | 10 | M 14x1.5 | 7  | 19 | 30.0 | 11.0 | 12 | 26 | 19 | 19 | 29         | 400      | 315 |
|        | G2-10LM16X1.5 | 10 | M 16x1.5 | 8  | 22 | 31.5 | 12.5 | 12 | 24 | 22 | 19 | 40         | 400      | 315 |
|        | G2-10LM18X1.5 | 10 | M 18x1.5 | 8  | 24 | 31.5 | 12.5 | 12 | 27 | 24 | 19 | 50         | 400      | 315 |
|        | G2-10LM22X1.5 | 10 | M 22x1.5 | 8  | 27 | 35.0 | 14.0 | 14 | 29 | 27 | 19 | 80         | 400      | 315 |
|        | G2-12LM14X1.5 | 12 | M 14x1.5 | 7  | 19 | 30.0 | 11.0 | 12 | 26 | 19 | 22 | 30         | 400      | 315 |
|        | G2-12LM16X1.5 | 12 | M 16x1.5 | 9  | 22 | 31.5 | 12.5 | 12 | 27 | 22 | 22 | 40         | 400      | 315 |
|        | G2-12LM18X1.5 | 12 | M 18x1.5 | 10 | 24 | 31.5 | 12.5 | 12 | 27 | 24 | 22 | 47         | 400      | 315 |
|        | G2-12LM22X1.5 | 12 | M 22x1.5 | 10 | 27 | 35.0 | 14.0 | 14 | 29 | 27 | 22 | 75         | 400      | 315 |
|        | G2-15LM16X1.5 | 15 | M 16x1.5 | 9  | 22 | 32.0 | 13.0 | 12 | 28 | 24 | 27 | 64         | 400      | 315 |
|        | G2-15LM18X1.5 | 15 | M 18x1.5 | 11 | 24 | 32.5 | 13.5 | 12 | 29 | 24 | 27 | 51         | 400      | 315 |
|        | G2-15LM22X1.5 | 15 | M 22x1.5 | 12 | 27 | 36.0 | 15.0 | 14 | 30 | 27 | 27 | 77         | 400      | 315 |
|        | G2-18LM18X1.5 | 18 | M 18x1.5 | 11 | 24 | 33.5 | 14.0 | 12 | 30 | 27 | 32 | 68         | 400      | 315 |
|        | G2-18LM22X1.5 | 18 | M 22x1.5 | 14 | 27 | 36.0 | 14.5 | 14 | 31 | 27 | 32 | 74         | 400      | 315 |
|        | G2-22LM26X1.5 | 22 | M 26x1.5 | 14 | 32 | 38.0 | 16.5 | 14 | 33 | 32 | 36 | 97         | 250      | 160 |
|        | G2-28LM33X2   | 28 | M 33x2   | 23 | 40 | 43.0 | 17.5 | 18 | 34 | 41 | 41 | 168        | 250      | 160 |
|        | G2-35LM42X2   | 35 | M 42x2   | 30 | 50 | 48.0 | 17.5 | 20 | 39 | 50 | 50 | 281        | 250      | 160 |
|        | G2-42LM48X2   | 42 | M 48x2   | 36 | 55 | 52.0 | 19.0 | 22 | 42 | 55 | 60 | 356        | 250      | 160 |

## Male stud connector G2-M-ED (S Series)



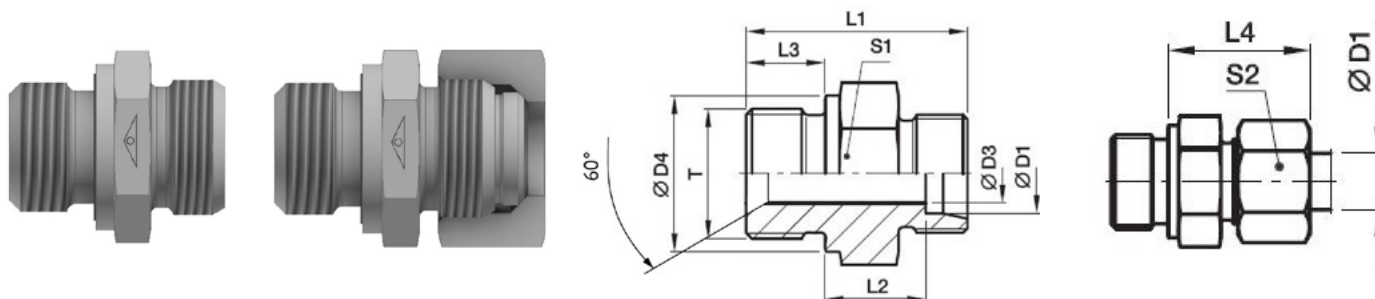
| Series | Order code    | D1 | T1       | D3 | D4 | L1   | L2   | L3 | L4 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|---------------|----|----------|----|----|------|------|----|----|----|----|------------|----------|-----|
|        |               |    |          |    |    |      |      |    |    |    |    |            | Z        | SS  |
| S      | G2-6SM12X1.5  | 06 | M 12x1.5 | 4  | 17 | 32.0 | 13.0 | 12 | 28 | 17 | 17 | 30         | 800      | 630 |
|        | G2- 8SM14X1.5 | 08 | M 14x1.5 | 5  | 19 | 34.0 | 15.0 | 12 | 30 | 19 | 19 | 42         | 800      | 630 |
|        | G2-10SM16X1.5 | 10 | M 16x1.5 | 7  | 22 | 34.5 | 15.0 | 12 | 31 | 22 | 22 | 54         | 800      | 630 |
|        | G2-12SM18X1.5 | 12 | M 18x1.5 | 8  | 24 | 36.5 | 17.0 | 12 | 33 | 24 | 24 | 71         | 630      | 630 |
|        | G2-12SM22X1.5 | 12 | M 22x1.5 | 8  | 27 | 39.0 | 17.5 | 14 | 34 | 27 | 24 | 102        | 630      | 400 |
|        | G2-14SM20X1.5 | 14 | M 20x1.5 | 10 | 26 | 41.0 | 19.0 | 14 | 37 | 27 | 27 | 98         | 630      | 630 |
|        | G2-16SM22X1.5 | 16 | M 22x1.5 | 12 | 27 | 41.0 | 18.5 | 14 | 37 | 27 | 30 | 95         | 630      | 400 |
|        | G2-20SM27X2   | 20 | M 27x2   | 16 | 32 | 47.0 | 20.5 | 16 | 42 | 32 | 36 | 150        | 420      | 400 |
|        | G2-25SM27X2   | 25 | M 27x2   | 16 | 32 | 51.0 | 23.0 | 16 | 47 | 41 | 46 | 247        | 420      | 420 |
|        | G2-25SM33X2   | 25 | M 33x2   | 20 | 40 | 53.0 | 23.0 | 18 | 47 | 41 | 46 | 264        | 420      | 400 |
|        | G2-30SM42X2   | 30 | M 42x2   | 25 | 50 | 57.0 | 23.5 | 20 | 50 | 50 | 50 | 422        | 420      | 400 |
|        | G2-38SM48X2   | 38 | M 48x2   | 32 | 55 | 64.0 | 26.0 | 22 | 57 | 55 | 60 | 569        | 420      | 315 |

## Male stud connector G2-R (L Series)



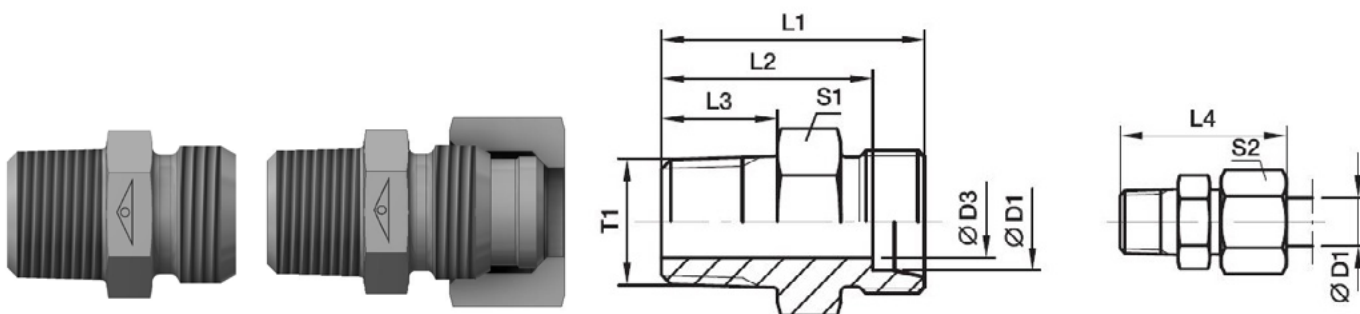
| Series | Order code  | D1 | T         | D3 | D4 | L1   | L2   | L3 | L4   | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|-------------|----|-----------|----|----|------|------|----|------|----|----|------------|----------|-----|
|        |             |    |           |    |    |      |      |    |      |    |    |            | Z        | SS  |
| L      | G2-6LR1/8   | 06 | G 1/8 A   | 4  | 14 | 23.5 | 8.5  | 8  | 23.0 | 14 | 14 | 14         | 315      | 315 |
|        | G2-6LR1/4   | 06 | G 1/4 A   | 4  | 18 | 29.0 | 10.0 | 12 | 25.0 | 19 | 14 | 60         | 315      | 315 |
|        | G2-8LR1/4   | 08 | G 1/4 A   | 6  | 18 | 29.0 | 10.0 | 12 | 25.0 | 19 | 17 | 26         | 315      | 315 |
|        | G2-8-LR1/8  | 08 | G 1/8 A   | 4  | 14 | 23.5 | 8.5  | 8  | 23.0 | 14 | 17 | 16         | 315      | 315 |
|        | G2-8LR3/8   | 08 | G 3/8 A   | 6  | 22 | 30.5 | 11.5 | 12 | 26.0 | 22 | 17 | 44         | 315      | 315 |
|        | G2-8LR1/2   | 08 | G 1/2 A   | 6  | 26 | 33.0 | 12.0 | 14 | 27.0 | 27 | 17 | 74         | 315      | 315 |
|        | G2-10LR1/4  | 10 | G 1/4 A   | 6  | 18 | 30.0 | 11.0 | 12 | 26.0 | 19 | 19 | 31         | 315      | 315 |
|        | G2-10LR3/8  | 10 | G 3/8 A   | 8  | 22 | 31.5 | 12.5 | 12 | 27.0 | 22 | 19 | 44         | 315      | 315 |
|        | G2-10LR1/2  | 10 | G 1/2 A   | 8  | 26 | 34.0 | 13.0 | 14 | 28.0 | 27 | 19 | 72         | 315      | 315 |
|        | G2-12LR1/4  | 12 | G 1/4 A   | 9  | 22 | 31.5 | 12.5 | 12 | 27.0 | 22 | 22 | 43         | 315      | 315 |
|        | G2-12LR3/8  | 12 | G 3/8 A   | 6  | 18 | 31.0 | 12.0 | 12 | 27.0 | 19 | 22 | 32         | 315      | 315 |
|        | G2-12LR1/2  | 12 | G 1/2 A   | 10 | 26 | 34.0 | 13.0 | 14 | 28.0 | 27 | 22 | 67         | 315      | 315 |
|        | G2-15LR3/8  | 15 | G 3/8 A   | 11 | 26 | 35.0 | 14.0 | 14 | 29.0 | 27 | 27 | 72         | 250      | 250 |
|        | G2-15LR1/2  | 15 | G 1/2 A   | 9  | 22 | 32.5 | 13.5 | 12 | 29.0 | 24 | 27 | 56         | 250      | 250 |
|        | G2-18LR3/8  | 18 | G 3/8 A   | 14 | 26 | 36.0 | 14.5 | 14 | 31.0 | 27 | 32 | 72         | 250      | 250 |
|        | G2-18LR1/2  | 18 | G 1/2 A   | 9  | 22 | 33.5 | 14.0 | 12 | 29.5 | 27 | 32 | 69         | 250      | 250 |
|        | G2-22LR1/2  | 22 | G 1/2 A   | 18 | 32 | 40.0 | 16.5 | 16 | 33.0 | 32 | 36 | 103        | 160      | 160 |
|        | G2-22LR3/4  | 22 | G 3/4 A   | 14 | 26 | 38.0 | 16.5 | 14 | 33.0 | 32 | 36 | 91         | 160      | 160 |
|        | G2-22LR1    | 22 | G 1 A     | 19 | 39 | 43.0 | 17.5 | 18 | 33.5 | 41 | 36 | 184        | 160      | 160 |
|        | G2-28LR3/4  | 28 | G 3/4 A   | 23 | 39 | 43.0 | 17.5 | 18 | 34.0 | 41 | 41 | 168        | 160      | 160 |
|        | G2-28LR1    | 28 | G 1 A     | 18 | 32 | 41.0 | 17.5 | 16 | 34.0 | 41 | 41 | 156        | 160      | 16  |
|        | G2-35LR11/4 | 35 | G 1 1/4 A | 30 | 49 | 48.0 | 17.5 | 20 | 39.0 | 50 | 50 | 276        | 160      | 160 |
|        | G2-35LR11/2 | 35 | G 1 1/2 A | 30 | 55 | 52.0 | 19.5 | 22 | 41.0 | 55 | 50 | 355        | 160      | 160 |
|        | G2-42LR11/2 | 42 | G 1 1/2 A | 36 | 55 | 52.0 | 19.0 | 22 | 42.0 | 55 | 60 | 349        | 160      | 160 |

## Male stud connector G2-R (S Series)



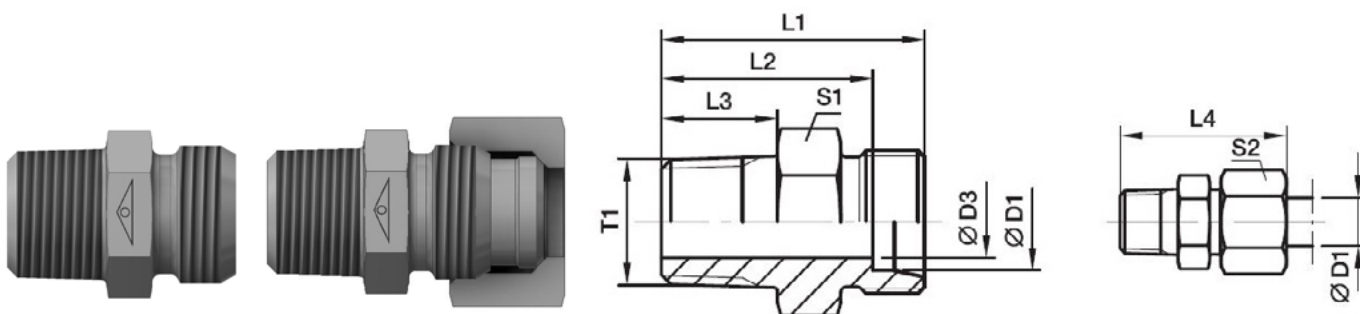
| Series | Order code    | D1 | T         | D3 | D4 | L1   | L2   | L3 | L4 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|---------------|----|-----------|----|----|------|------|----|----|----|----|------------|----------|-----|
|        |               |    |           |    |    |      |      |    |    |    |    |            | Z        | SS  |
| S      | G2-6SR 1/4    | 06 | G 1/4 A   | 4  | 18 | 32.0 | 13.0 | 12 | 28 | 19 | 17 | 35         | 400      | 400 |
|        | G2-6SR 3/8    | 06 | G 3/8 A   | 4  | 22 | 34.5 | 15.5 | 12 | 30 | 22 | 17 | 57         | 400      | 400 |
|        | G2-8SR 1/4    | 08 | G 1/4 A   | 5  | 18 | 34.0 | 15.0 | 12 | 30 | 19 | 19 | 41         | 400      | 400 |
|        | G2-8SR 3/8    | 08 | G 3/8 A   | 5  | 22 | 34.5 | 15.5 | 12 | 30 | 22 | 19 | 59         | 400      | 400 |
|        | G2-10SR 3/8   | 10 | G 3/8 A   | 7  | 22 | 34.5 | 15.0 | 12 | 31 | 22 | 22 | 56         | 400      | 400 |
|        | G2-10SR 1/4   | 10 | G 1/4 A   | 5  | 18 | 34.5 | 14.5 | 12 | 31 | 19 | 22 | 43         | 400      | 400 |
|        | G2-12SR 3/8   | 12 | G 3/8 A   | 8  | 22 | 36.5 | 17.0 | 12 | 33 | 22 | 24 | 62         | 400      | 400 |
|        | G2-12SR 1/4   | 12 | G 1/4 A   | 5  | 18 | 36.0 | 16.5 | 12 | 33 | 22 | 24 | 57         | 400      | 400 |
|        | G2-12SR 1/2   | 12 | G 1/2 A   | 8  | 26 | 39.0 | 17.5 | 14 | 34 | 27 | 24 | 57         | 400      | 400 |
|        | G2-14SR 1/2   | 14 | G 1/2 A   | 10 | 26 | 41.0 | 19.0 | 14 | 37 | 27 | 27 | 96         | 400      | 400 |
|        | G2-14SR 3/8   | 14 | G 3/8 A   | 8  | 22 | 38.5 | 18.5 | 12 | 36 | 24 | 27 | 74         | 400      | 400 |
|        | G2-16SR 1/2   | 16 | G 1/2 A   | 12 | 26 | 41.0 | 18.5 | 14 | 37 | 27 | 30 | 92         | 400      | 400 |
|        | G2-16SR 3/8   | 16 | G 3/8 A   | 8  | 22 | 38.5 | 18.0 | 12 | 36 | 27 | 30 | 83         | 400      | 400 |
|        | G2-20SR 3/4   | 20 | G 3/4 A   | 16 | 32 | 47.0 | 20.5 | 16 | 42 | 32 | 36 | 151        | 400      | 400 |
|        | G2-20SR 1/2   | 20 | G 1/2 A   | 12 | 26 | 45.0 | 20.5 | 14 | 42 | 32 | 36 | 142        | 400      | 400 |
|        | G2-25SR 1     | 25 | G 1 A     | 20 | 39 | 53.0 | 23.0 | 18 | 47 | 41 | 46 | 267        | 250      | 250 |
|        | G2-25SR 3/4   | 25 | G 3/4 A   | 16 | 32 | 51.0 | 23.0 | 16 | 47 | 41 | 46 | 245        | 250      | 250 |
|        | G2-30SR 1     | 30 | G 1 A     | 25 | 32 | 53.0 | 23.5 | 20 | 50 | 50 | 50 | 390        | 160      | 160 |
|        | G2-30SR 1 1/4 | 30 | G 1 1/4 A | 25 | 49 | 57.0 | 23.5 | 20 | 50 | 50 | 50 | 422        | 160      | 160 |
|        | G2-30SR 1     | 30 | G 1 A     | 20 | 39 | 55.0 | 23.5 | 18 | 50 | 46 | 50 | 337        | 160      | 160 |
|        | G2-38SR 1 1/2 | 38 | G 1 1/2 A | 32 | 55 | 64.0 | 26.0 | 22 | 57 | 55 | 60 | 560        | 160      | 160 |
|        | G2-38SR 1 1/4 | 38 | G 1 1/4 A | 25 | 49 | 62.0 | 26.0 | 20 | 57 | 55 | 60 | 578        | 160      | 160 |

## Male stud connector G2-RT (L Series)



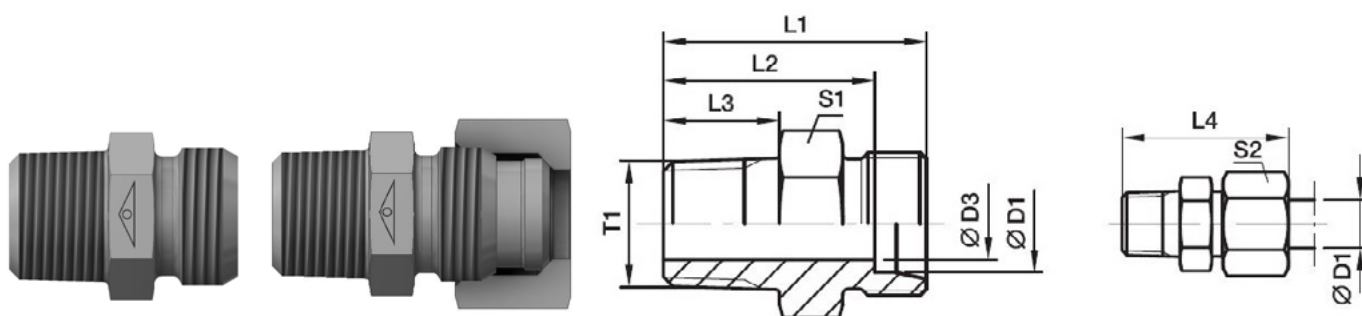
| Series | Order code   | D1 | T           | D3   | L1 | L2   | L3 | L4 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|--------------|----|-------------|------|----|------|----|----|----|----|------------|----------|-----|
|        |              |    |             |      |    |      |    |    |    |    |            | Z        | SS  |
| L      | G2-6LRT      | 06 | R1/8 tap.   | 4.0  | 22 | 15.0 | 8  | 30 | 12 | 14 | 11         | 315      | 315 |
|        | G2-6LRT 1/4  | 06 | R1/4 tap.   | 4.0  | 27 | 20.0 | 12 | 35 | 17 | 14 | 24         | 315      | 315 |
|        | G2-8LRT 1/8  | 08 | R1/8 tap.   | 4.0  | 23 | 16.0 | 8  | 31 | 17 | 17 | 15         | 315      | 315 |
|        | G2-8LRT      | 08 | R1/4 tap.   | 6.0  | 27 | 20.0 | 12 | 35 | 17 | 17 | 22         | 315      | 315 |
|        | G2-8LRT 3/8  | 08 | R3/8 tap.   | 9.0  | 29 | 22.0 | 13 | 39 | 19 | 17 | 34         | 315      | 315 |
|        | G2-8LRT 1/2  | 08 | R1/2 tap.   | 7.0  | 28 | 21.0 | 12 | 36 | 17 | 19 | 24         | 315      | 315 |
|        | G2-10LRT     | 10 | R1/4 tap.   | 7.0  | 28 | 21.0 | 12 | 36 | 17 | 19 | 24         | 315      | 315 |
|        | G2-10LRT 3/8 | 10 | R3/8 tap.   | 7.0  | 30 | 23.0 | 13 | 40 | 19 | 19 | 36         | 315      | 315 |
|        | G2-10LRT 1/2 | 10 | R1/2 tap.   | 7.0  | 33 | 26.0 | 16 | 43 | 22 | 19 | 58         | 315      | 315 |
|        | G2-12LRT 1/4 | 12 | R1/4 tap.   | 7.0  | 29 | 22.0 | 12 | 37 | 19 | 22 | 53         | 315      | 315 |
|        | G2-12LRT     | 12 | R3/8 tap.   | 9.0  | 29 | 22.0 | 12 | 37 | 19 | 22 | 33         | 315      | 315 |
|        | G2-12LRT 1/2 | 12 | R1/2 tap.   | 10.0 | 31 | 24.0 | 14 | 39 | 24 | 22 | 53         | 315      | 315 |
|        | G2-15LRT 3/8 | 15 | R3/8 tap.   | 9.0  | 30 | 23.0 | 12 | 38 | 24 | 27 | 49         | 315      | 315 |
|        | G2-15LRT     | 15 | R1/2 tap.   | 11.0 | 32 | 25.0 | 14 | 40 | 24 | 27 | 59         | 315      | 315 |
|        | G2-18LRT     | 18 | R1/2 tap.   | 14.0 | 33 | 25.5 | 14 | 42 | 27 | 32 | 64         | 315      | 315 |
|        | G2-22LRT     | 22 | R3/4 tap.   | 17.0 | 37 | 29.5 | 16 | 46 | 32 | 36 | 99         | 160      | 160 |
|        | G2-28LRT     | 28 | R1 tap.     | 23.0 | 40 | 32.5 | 18 | 49 | 41 | 41 | 154        | 160      | 160 |
|        | G2-35LRT     | 35 | R1 1/4 tap. | 30.0 | 45 | 34.5 | 20 | 56 | 46 | 50 | 238        | 160      | 160 |
|        | G2-42LRT     | 42 | R1 1/2 tap. | 36.0 | 49 | 38.0 | 22 | 61 | 55 | 60 | 335        | 160      | 160 |

## Male stud connector G2-RT (S series)



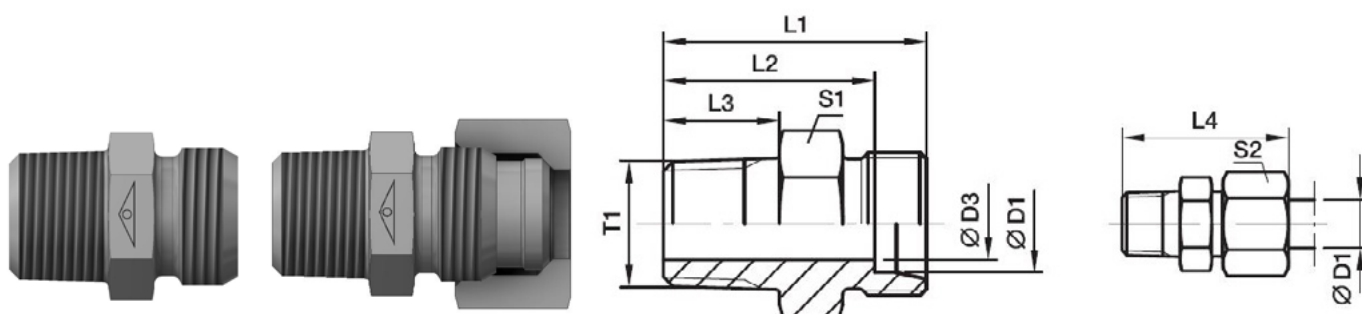
| Series | Order code   | D1 | T            | D3 | L1 | L2   | L3 | L4 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|--------------|----|--------------|----|----|------|----|----|----|----|------------|----------|-----|
|        |              |    |              |    |    |      |    |    |    |    |            | Z        | SS  |
| S      | G2-6SRT      | 06 | R 1/4 tap.   | 4  | 32 | 25.0 | 13 | 31 | 17 | 17 | 32         | 630      | 630 |
|        | G2-8SRT      | 08 | R 1/4 tap.   | 5  | 33 | 26.0 | 13 | 33 | 17 | 19 | 36         | 630      | 630 |
|        | G2-10SRT 1/4 | 10 | R 1/4 tap.   | 5  | 33 | 25.5 | 13 | 44 | 19 | 22 | 41         | 630      | 630 |
|        | G2-10SRT     | 10 | R 3/8 tap.   | 7  | 33 | 25.5 | 13 | 44 | 19 | 22 | 46         | 630      | 630 |
|        | G2-12SRT 1/4 | 12 | R 1/4 tap.   | 5  | 35 | 27.5 | 13 | 46 | 22 | 24 | 56         | 630      | 630 |
|        | G2-12SRT     | 12 | R 3/8 tap.   | 8  | 35 | 27.5 | 13 | 46 | 22 | 24 | 58         | 630      | 630 |
|        | G2-12SRT 1/2 | 12 | R 1/2 tap.   | 8  | 38 | 30.5 | 16 | 49 | 22 | 24 | 75         | 630      | 630 |
|        | G2-14SRT 3/8 | 14 | R 3/8 tap.   | 8  | 37 | 29.0 | 13 | 50 | 24 | 27 | 70         | 630      | 630 |
|        | G2-14SRT     | 14 | R 1/2 tap.   | 10 | 40 | 32.0 | 16 | 53 | 24 | 27 | 82         | 630      | 630 |
|        | G2-16SRT 3/8 | 16 | R 3/8 tap.   | 8  | 39 | 30.5 | 13 | 50 | 27 | 30 | 87         | 400      | 400 |
|        | G2-16SRT     | 16 | R 1/2 tap.   | 12 | 42 | 33.5 | 16 | 53 | 27 | 30 | 96         | 400      | 400 |
|        | G2-20SRT     | 20 | R 3/4 tap.   | 16 | 46 | 35.5 | 18 | 60 | 32 | 36 | 145        | 400      | 400 |
|        | G2-25SRT     | 25 | R 1 tap.     | 20 | 50 | 38   | 20 | 67 | 41 | 46 | 240        | 400      | 400 |
|        | G2-30SRT 1   | 30 | R 1 tap.     | 20 | 53 | 39.5 | 20 | 70 | 46 | 50 | 313        | 400      | 400 |
|        | G2-30SRT     | 30 | R 1 1/4 tap. | 25 | 54 | 43.0 | 21 | 71 | 46 | 50 | 356        | 400      | 400 |
|        | G2-38SRT     | 38 | R 1 1/2 tap. | 55 | 59 | 44.0 | 21 | 48 | 55 | 60 | 515        | 315      | 315 |

## Male stud connector G2-NPT (L Series)



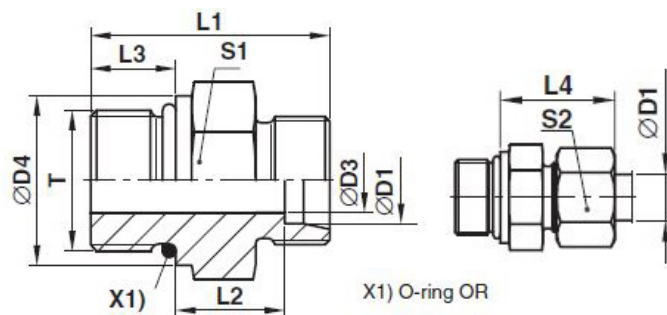
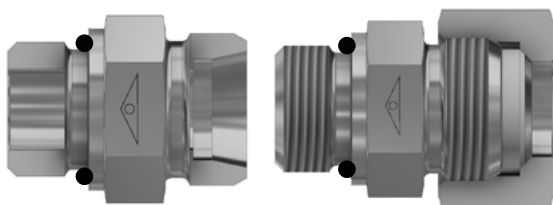
| Series | Order code      | D1 | T1             | D3   | L1   | L2   | L3   | L4 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|-----------------|----|----------------|------|------|------|------|----|----|----|------------|----------|-----|
|        |                 |    |                |      |      |      |      |    |    |    |            | Z        | SS  |
| L      | NPT G2-6LN      | 06 | 1/8-27 NPT     | 4.0  | 24.0 | 17.0 | 10.0 | 32 | 12 | 14 | 12         | 315      | 315 |
|        | NPT G2-6LN 1/4  | 06 | 1/4-18 NPT     | 4.0  | 30.0 | 23.0 | 14.5 | 38 | 17 | 14 | 27         | 315      | 315 |
|        | NPT G2-8LN 1/8  | 08 | 1/8-27 NPT     | 4.0  | 25.0 | 18.0 | 10.0 | 33 | 14 | 17 | 16         | 315      | 315 |
|        | NPT G2-8LN      | 08 | 1/4-18 NPT     | 6.0  | 30.0 | 23.0 | 14.5 | 38 | 17 | 17 | 25         | 315      | 315 |
|        | NPT G2-8LN 1/2  | 08 | 1/2-14 NPT     | 6.0  | 36.0 | 29.0 | 19.5 | 44 | 22 | 17 | 54         | 315      | 315 |
|        | NPT G2-10LN     | 10 | 1/4-18 NPT     | 7.0  | 31.0 | 24.0 | 14.5 | 39 | 17 | 19 | 25         | 315      | 315 |
|        | NPT G2-10LN 3/8 | 10 | 3/8-18 NPT     | 7.0  | 32.0 | 15.0 | 14.5 | 40 | 19 | 19 | 40         | 315      | 315 |
|        | NPT G2-10LN 1/2 | 10 | 1/2-14 NPT     | 8.0  | 37.0 | 30.0 | 19.5 | 45 | 22 | 19 | 54         | 315      | 315 |
|        | NPT G2-12LN 1/4 | 12 | 1/4-18 NPT     | 7.0  | 32.0 | 25.0 | 14.5 | 40 | 19 | 22 | 31         | 315      | 315 |
|        | NPT G2-12LN     | 12 | 3/8-18 NPT     | 8.0  | 32.0 | 25.0 | 14.5 | 40 | 19 | 22 | 37         | 315      | 315 |
|        | NPT G2-12LN 1/2 | 12 | 1/2-14 NPT     | 10.0 | 37.0 | 30.0 | 19.5 | 45 | 22 | 22 | 62         | 315      | 315 |
|        | NPT G2-15LN 3/8 | 15 | 3/8-18NPT      | 8.0  | 33.0 | 26.0 | 14.5 | 41 | 24 | 27 | 53         | 315      | 315 |
|        | NPT G2-15LN     | 15 | 1/2-14 NPT     | 12.0 | 38.0 | 31.0 | 19.5 | 46 | 24 | 27 | 63         | 315      | 315 |
|        | NPT G2-18LN     | 18 | 1/2-14 NPT     | 12.0 | 39.0 | 31.5 | 19.5 | 48 | 27 | 32 | 79         | 315      | 315 |
|        | NPT G2-22LN     | 22 | 3/4-14 NPT     | 16.0 | 41.0 | 33.5 | 19.5 | 50 | 32 | 36 | 108        | 160      | 160 |
|        | NPT G2-28LN     | 28 | 1-11.5 NPT     | 21.0 | 47.0 | 39.5 | 24.5 | 56 | 41 | 41 | 197        | 160      | 160 |
|        | NPT G2-35LN     | 35 | 1 1/4-11.5 NPT | 28.0 | 51.0 | 40.5 | 25.0 | 62 | 46 | 50 | 285        | 160      | 160 |
|        | NPT G2-42LN     | 42 | 1 1/2-11.5 NPT | 36.0 | 53.0 | 42.0 | 26.0 | 65 | 55 | 60 | 377        | 160      | 160 |

## Male stud connector G2-NPT (S Series)



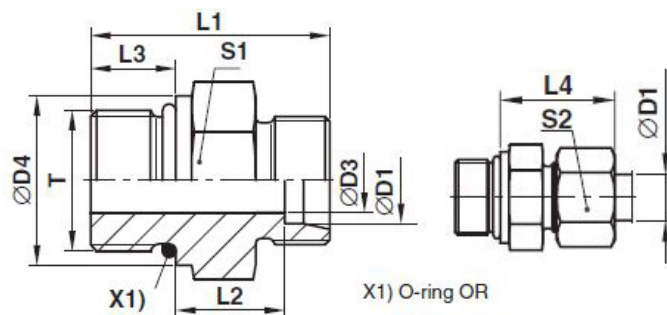
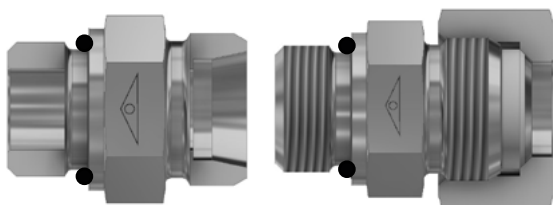
| Series | Order code      | D1 | T1             | D3 | L1 | L2   | L3   | L4 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|-----------------|----|----------------|----|----|------|------|----|----|----|------------|----------|-----|
|        |                 |    |                |    |    |      |      |    |    |    |            | Z        | SS  |
| S      | NPT G2-6SN      | 06 | 1/4-18 NPT     | 4  | 35 | 28.0 | 14.5 | 43 | 17 | 17 | 37         | 630      | 630 |
|        | NPT G2-8SN      | 08 | 1/4-18 NPT     | 5  | 35 | 28.0 | 14.5 | 43 | 17 | 19 | 38         | 630      | 630 |
|        | NPT G2-10SN 1/4 | 10 | 1/4-18 NPT     | 5  | 35 | 27.5 | 14.5 | 44 | 19 | 22 | 45         | 630      | 630 |
|        | NPT G2-10SN     | 10 | 3/8-18 NPT     | 7  | 35 | 27.5 | 14.5 | 44 | 19 | 22 | 49         | 630      | 630 |
|        | NPT G2-12SN 1/4 | 12 | 1/4-18 NPT     | 5  | 37 | 29.5 | 14.5 | 46 | 22 | 24 | 57         | 630      | 630 |
|        | NPT G2-12SN     | 12 | 3/8-18 NPT     | 8  | 37 | 29.5 | 14.5 | 46 | 22 | 24 | 62         | 630      | 630 |
|        | NPT G2-12SN 1/2 | 12 | 1/2-14 NPT     | 8  | 42 | 34.5 | 19.5 | 51 | 22 | 24 | 83         | 630      | 630 |
|        | NPT G2-14SN     | 14 | 1/2-14 NPT     | 10 | 44 | 36.0 | 19.5 | 54 | 24 | 27 | 89         | 630      | 630 |
|        | NPT G2-16SN 3/8 | 16 | 3/8-18 NPT     | 8  | 39 | 30.5 | 14.5 | 49 | 27 | 30 | 84         | 400      | 400 |
|        | NPT G2-16SN     | 16 | 1/2-14 NPT     | 12 | 48 | 39.5 | 19.5 | 58 | 32 | 30 | 97         | 400      | 400 |
|        | NPT G2-20SN 1/2 | 20 | 1/2-14 NPT     | 12 | 48 | 37.5 | 19.5 | 59 | 32 | 36 | 144        | 400      | 400 |
|        | NPT G2-20SN     | 20 | 3/4-14 NPT     | 16 | 48 | 37.5 | 19.5 | 59 | 32 | 36 | 149        | 400      | 400 |
|        | NPT G2-25SN 3/4 | 25 | 3/4-14 NPT     | 16 | 52 | 40.0 | 19.5 | 64 | 41 | 46 | 240        | 400      | 400 |
|        | NPT G2-25SN     | 25 | 1-11.5 NPT     | 20 | 57 | 45.0 | 24.5 | 69 | 41 | 46 | 278        | 400      | 400 |
|        | NPT G2-30SN 1   | 30 | 1-11.5 NPT     | 20 | 59 | 45.5 | 24.5 | 72 | 46 | 50 | 343        | 400      | 400 |
|        | NPT G2-30SN     | 30 | 1 1/4-11.5 NPT | 25 | 60 | 46.5 | 25.0 | 73 | 46 | 50 | 397        | 400      | 400 |
|        | NPT G2-38SN     | 38 | 1 1/2-11.5 NPT | 32 | 65 | 49.0 | 26.0 | 80 | 55 | 60 | 571        | 315      | 315 |

## Male stud connector G2-U (L Series)



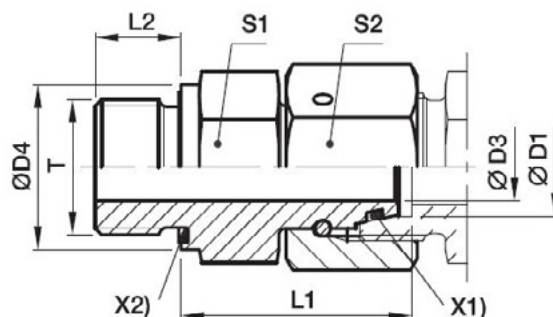
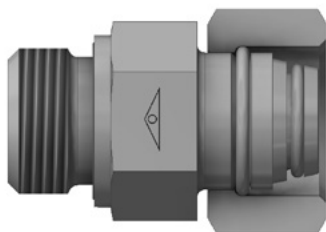
| Series | Order code   | D1 | T         | D3   | D4   | L1 | L2   | L3   | L4 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|--------------|----|-----------|------|------|----|------|------|----|----|----|------------|----------|-----|
|        |              |    |           |      |      |    |      |      |    |    |    |            | Z        | SS  |
| L      | G2-8L7/16U   | 08 | 7/16-20   | 5.0  | -    | 26 | 10.0 | 9.0  | 25 | 17 | 17 | 21         | 315      | 315 |
|        | G2-10L7/16U  | 10 | 7/16-20   | 5.0  | -    | 27 | 11.0 | 9.0  | 26 | 17 | 19 | 23         | 315      | 315 |
|        | G2-12L9/16U  | 12 | 9/16-18   | 7.0  | -    | 28 | 11.0 | 10.0 | 26 | 19 | 22 | 32         | 315      | 315 |
|        | G2-12L3/4U   | 12 | 3/4-16    | 10.0 | -    | 31 | 13.0 | 11.0 | 28 | 24 | 22 | 52         | 315      | 315 |
|        | G2-12L7/8U   | 12 | 7/8-14    | 10.0 | -    | 34 | 14.3 | 12.7 | 29 | 27 | 22 | 77         | 315      | 315 |
|        | G2-15L3/4U   | 15 | 3/4-16    | 11.0 | -    | 32 | 14.0 | 11.0 | 29 | 24 | 27 | 57         | 315      | 315 |
|        | G2-15L7/8U   | 15 | 7/8-14    | 12.0 | -    | 35 | 15.3 | 12.7 | 30 | 27 | 27 | 81         | 315      | 315 |
|        | G2-18L3/4U   | 18 | 3/4-16    | 11.0 | 23.9 | 33 | 14.5 | 11.0 | 31 | 27 | 32 | 68         | 315      | 315 |
|        | G2-18L7/8U   | 18 | 7/8-14    | 14.0 | -    | 35 | 14.8 | 12.7 | 31 | 27 | 32 | 72         | 315      | 315 |
|        | G2-22L7/8U   | 22 | 7/8-14    | 14.0 | 26.9 | 37 | 16.8 | 12.7 | 33 | 32 | 36 | 94         | 160      | 160 |
|        | G2-22L11/16U | 22 | 1 1/16-12 | 18.0 | -    | 39 | 16.5 | 15.0 | 33 | 32 | 36 | 103        | 160      | 160 |
|        | G2-22L15/16U | 22 | 1 5/16-12 | 19.0 | -    | 40 | 17.5 | 15.0 | 34 | 41 | 36 | 163        | 160      | 160 |
|        | G2-28L11/16U | 28 | 1 1/16-12 | 18.0 | 33.3 | 40 | 17.5 | 15.0 | 34 | 41 | 41 | 152        | 160      | 160 |
|        | G2-28L15/16U | 28 | 1 5/16-12 | 23.0 | -    | 40 | 17.5 | 15.0 | 34 | 41 | 41 | 163        | 160      | 160 |
|        | G2-35L15/16U | 35 | 1 5/16-12 | 23.0 | 39.6 | 43 | 17.5 | 15.0 | 39 | 46 | 46 | 222        | 160      | 160 |
|        | G2-35L15/8U  | 35 | 1 5/8-12  | 29.0 | -    | 43 | 17.5 | 15.0 | 39 | 50 | 50 | 257        | 160      | 160 |
|        | G2-42L15/8U  | 42 | 1 5/8-12  | 29.0 | 47.7 | 45 | 19.0 | 15.0 | 42 | 55 | 60 | 339        | 160      | 160 |

## Male stud connector G2-U (S Series)



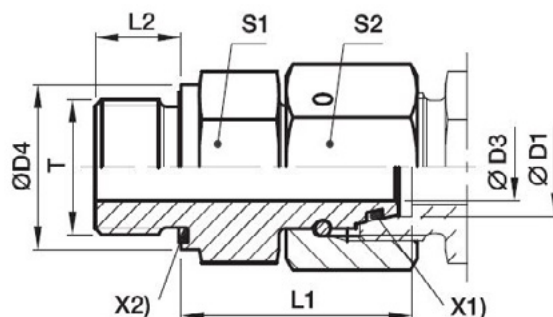
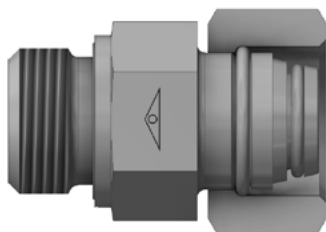
| Series | Order code   | D1 | T         | D3   | D4   | L1 | L2   | L3   | L4 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|--------------|----|-----------|------|------|----|------|------|----|----|----|------------|----------|-----|
|        |              |    |           |      |      |    |      |      |    |    |    |            | Z        | SS  |
| S      | G2-8S7/16U   | 08 | 7/16-20   | 4.0  | -    | 31 | 13.0 | 11.0 | 30 | 17 | 19 | 33         | 630      | 630 |
|        | G2-10S9/16U  | 10 | 9/16-18   | 6.0  | -    | 32 | 12.5 | 12.0 | 31 | 19 | 22 | 42         | 630      | 630 |
|        | G2-12S9/16U  | 12 | 9/16-18   | 6.0  | 19.0 | 32 | 12.5 | 12.0 | 31 | 22 | 24 | 50         | 630      | 630 |
|        | G2-12S3/4U   | 12 | 3/4-16    | 8.0  | -    | 36 | 14.5 | 14.0 | 34 | 24 | 24 | 73         | 630      | 630 |
|        | G2-16S3/4U   | 16 | 3/4-16    | 10.0 | -    | 35 | 12.5 | 14.0 | 34 | 24 | 30 | 90         | 400      | 400 |
|        | G2-16S7/8U   | 16 | 7/8-14    | 12.0 | -    | 40 | 15.5 | 16.0 | 37 | 27 | 30 | 95         | 400      | 400 |
|        | G2-20S3/4U   | 20 | 3/4-16    | 10.0 | 23.9 | 42 | 17.5 | 14.0 | 42 | 32 | 36 | 131        | 400      | 400 |
|        | G2-20S7/8U   | 20 | 7/8-14    | 12.0 | 26.9 | 44 | 17.5 | 16.0 | 42 | 32 | 36 | 141        | 400      | 400 |
|        | G2-20S11/16U | 20 | 1 1/16-12 | 16.0 | -    | 46 | 17.0 | 18.5 | 42 | 32 | 36 | 163        | 400      | 400 |
|        | G2-25S11/16U | 25 | 1 1/16-12 | 16.0 | 33.3 | 50 | 19.5 | 18.5 | 47 | 36 | 46 | 206        | 400      | 400 |
|        | G2-25S15/16U | 25 | 1 5/16-12 | 20.0 | -    | 50 | 19.5 | 18.5 | 47 | 41 | 46 | 258        | 400      | 400 |
|        | G2-30S15/16U | 30 | 1 5/16-12 | 20.0 | 39.6 | 52 | 20.0 | 18.5 | 50 | 46 | 50 | 327        | 400      | 400 |
|        | G2-30S15/8U  | 30 | 1 5/8-12  | 24.0 | -    | 52 | 20.0 | 18.5 | 50 | 50 | 50 | 422        | 400      | 400 |
|        | G2-38S15/8U  | 38 | 1 5/8-12  | 24.0 | 47.7 | 57 | 22.5 | 18.5 | 57 | 55 | 60 | 554        | 315      | 315 |

## Swivel connector E6-R-ED



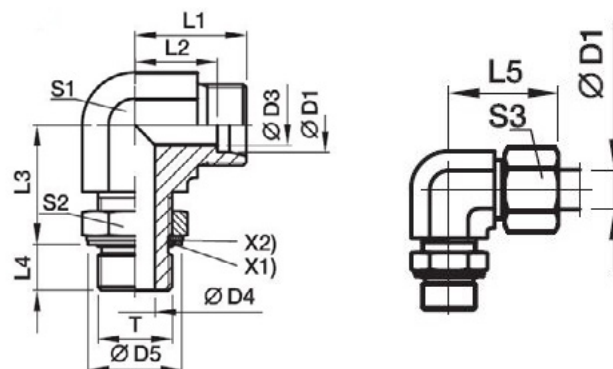
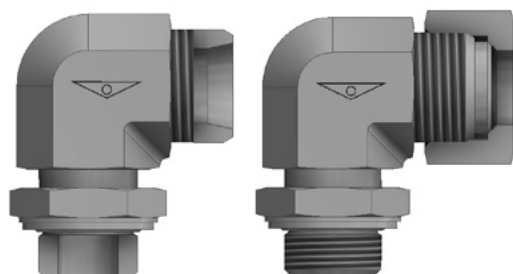
| Series | Order code | D1 | T         | D3   | D4 | L1   | L2 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|------------|----|-----------|------|----|------|----|----|----|------------|----------|-----|
|        |            |    |           |      |    |      |    |    |    |            | Z        | SS  |
| L      | E6-6LR     | 06 | G 1/8 A   | 2.5  | 14 | 24.5 | 8  | 14 | 14 | 27         | 500      | 315 |
|        | E6-8LR     | 08 | G 1/4 A   | 4.0  | 19 | 29.5 | 12 | 19 | 17 | 28         | 500      | 315 |
|        | E6-8LR     | 08 | G 3/8 A   | 5.0  | 22 | 29.5 | 12 | 22 | 17 | 45         | 500      | 315 |
|        | E6-10LR    | 10 | G 1/4 A   | 6.0  | 19 | 27.5 | 12 | 19 | 19 | 54         | 500      | 315 |
|        | E6-10LR    | 10 | G 3/8 A   | 6.0  | 22 | 19.0 | 12 | 22 | 19 | 70         | 400      | 315 |
|        | E6-12LR    | 12 | G 3/8 A   | 8.0  | 22 | 34.0 | 12 | 22 | 22 | 95         | 400      | 315 |
|        | E6-12LR    | 12 | G 1/4 A   | 6.0  | 19 | 27.5 | 12 | 19 | 22 | 65         | 400      | 315 |
|        | E6-12LR    | 12 | G 1/2 A   | 8.0  | 27 | 29.5 | 14 | 27 | 22 | 114        | 400      | 315 |
|        | E6-15LR    | 15 | G 1/2 A   | 10.0 | 27 | 32.0 | 14 | 27 | 27 | 137        | 400      | 315 |
|        | E6-18LR    | 18 | G 1/2 A   | 13.0 | 27 | 31.5 | 14 | 27 | 32 | 143        | 400      | 315 |
|        | E6-22LR    | 22 | G 3/4 A   | 17.0 | 32 | 32.5 | 16 | 32 | 36 | 200        | 250      | 160 |
|        | E6-28LR    | 28 | G 1 A     | 22.0 | 40 | 35.0 | 18 | 41 | 41 | 289        | 250      | 160 |
|        | E6-35LR    | 35 | G 1 1/4 A | 28.0 | 50 | 42.5 | 20 | 50 | 50 | 500        | 250      | 160 |
|        | E6-42LR    | 42 | G 1 1/2 A | 34.0 | 55 | 46.5 | 22 | 55 | 60 | 718        | 250      | 160 |
| S      | E6-6SR     | 06 | G 1/4 A   | 2.5  | 19 | 27.0 | 12 | 19 | 17 | 53         | 800      | 630 |
|        | E6-8SR     | 08 | G 1/4 A   | 4.0  | 19 | 29.5 | 12 | 19 | 19 | 64         | 800      | 630 |
|        | E6-8SR     | 08 | G 3/8 A   | 6.0  | 22 | 29.5 | 12 | 22 | 22 | 75         | 800      | 630 |
|        | E6-10SR    | 10 | G 1/4 A   | 4.0  | 19 | 32.0 | 12 | 19 | 22 | 75         | 800      | 630 |
|        | E6-10SR    | 10 | G 3/8 A   | 6.0  | 22 | 32.0 | 12 | 22 | 22 | 93         | 800      | 630 |
|        | E6-12SR    | 12 | G 3/8 A   | 8.0  | 22 | 34.0 | 12 | 22 | 24 | 100        | 630      | 630 |
|        | E6-12SR    | 12 | G 1/2 A   | 8.0  | 27 | 35.0 | 14 | 27 | 24 | 140        | 630      | 630 |
|        | E6-14SR    | 14 | G 1/2 A   | 9.0  | 27 | 36.5 | 14 | 27 | 27 | 157        | 630      | 630 |
|        | E6-16SR    | 16 | G 1/2 A   | 11.0 | 27 | 37.0 | 14 | 27 | 30 | 170        | 630      | 400 |
|        | E6-20SR    | 20 | G 3/4 A   | 14.0 | 32 | 43.0 | 16 | 32 | 36 | 273        | 420      | 400 |
|        | E6-25SR    | 25 | G 1 A     | 18.0 | 40 | 48.0 | 18 | 41 | 46 | 493        | 420      | 400 |
|        | E6-30SR    | 30 | G 1 1/4 A | 23.0 | 50 | 51.0 | 20 | 50 | 50 | 691        | 420      |     |
|        | E6-38SR    | 38 | G 1 1/2 A | 30.0 | 55 | 60.0 | 22 | 55 | 60 | 934        | 420      | 315 |

## Swivel connector E6-M-ED



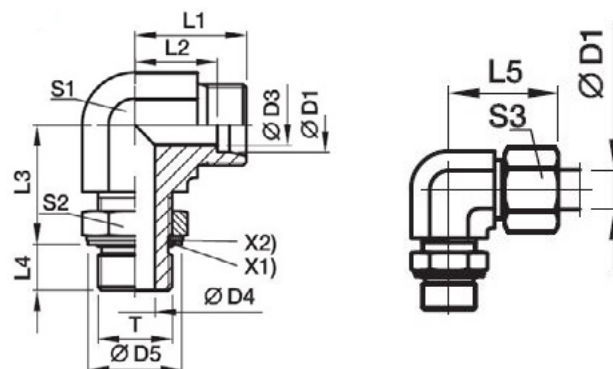
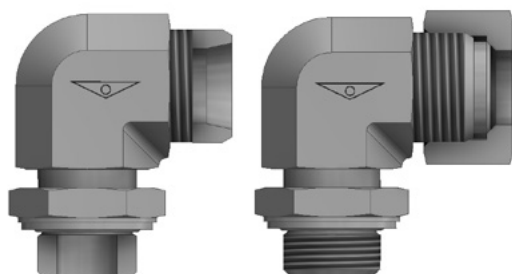
| Series | Order code | D1 | T        | D3   | D4 | L1   | L2 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|------------|----|----------|------|----|------|----|----|----|------------|----------|-----|
|        |            |    |          |      |    |      |    |    |    |            | Z        | SS  |
| L      | E6-6LM     | 06 | M 10x1.0 | 2.5  | 14 | 24.5 | 8  | 14 | 14 | 27         | 500      | 315 |
|        | E6-8LM     | 08 | M 12x1.5 | 4.0  | 17 | 26.5 | 12 | 17 | 17 | 45         | 500      | 315 |
|        | E6-10LM    | 10 | M 14x1.5 | 6.0  | 19 | 27.5 | 12 | 19 | 19 | 57         | 500      | 315 |
|        | E6-12LM    | 12 | M 16x1.5 | 8.0  | 22 | 30.5 | 12 | 22 | 22 | 82         | 400      | 315 |
|        | E6-15LM    | 15 | M 18x1.5 | 10.0 | 24 | 31.5 | 12 | 24 | 27 | 113        | 400      | 315 |
|        | E6-18LM    | 18 | M 22x1.5 | 13.0 | 27 | 31.5 | 14 | 27 | 32 | 148        | 400      | 315 |
|        | E6-22LM    | 22 | M 26x1.5 | 17.0 | 32 | 32.5 | 16 | 32 | 36 | 203        | 250      | 160 |
|        | E6-28LM    | 28 | M 33x1.5 | 22.0 | 40 | 35.0 | 18 | 41 | 41 | 189        | 250      | 160 |
|        | E6-35LM    | 35 | M 42x2.0 | 28.0 | 50 | 42.5 | 20 | 50 | 50 | 511        | 250      | 160 |
|        | E6-42LM    | 42 | M 48x2.0 | 34.0 | 55 | 46.5 | 22 | 55 | 60 | 711        | 250      | 160 |
| S      | E6-6SM     | 06 | M 12x1.5 | 2.5  | 17 | 27.0 | 12 | 17 | 17 | 47         | 800      | 630 |
|        | E6-8SM     | 08 | M 14x1.5 | 4.0  | 19 | 29.5 | 12 | 19 | 19 | 65         | 800      | 630 |
|        | E6-10SM    | 10 | M 16x1.5 | 6.0  | 22 | 32.0 | 12 | 22 | 22 | 91         | 800      | 630 |
|        | E6-12SM    | 12 | M 18x1.5 | 8.0  | 24 | 34.0 | 12 | 24 | 24 | 112        | 630      | 630 |
|        | E6-14SM    | 14 | M 20x1.5 | 9.0  | 26 | 36.5 | 14 | 27 | 27 | 153        | 630      | 630 |
|        | E6-16SM    | 16 | M 22x1.5 | 11.0 | 27 | 37.0 | 14 | 27 | 30 | 174        | 630      | 400 |
|        | E6-20SM    | 20 | M 27x2.0 | 14.0 | 32 | 43.0 | 16 | 32 | 36 | 274        | 420      | 400 |
|        | E6-25SM    | 25 | M 33x2.0 | 18.0 | 40 | 48.0 | 18 | 41 | 46 | 497        | 420      | 400 |
|        | E6-30SM    | 30 | M 42x2.0 | 23.0 | 50 | 51.0 | 20 | 50 | 50 | 691        | 420      | 400 |
|        | E6-38SM    | 38 | M 48x2.0 | 30.0 | 55 | 60.0 | 22 | 55 | 60 | 957        | 420      | 315 |

## Adjustable locknut elbow W6-R



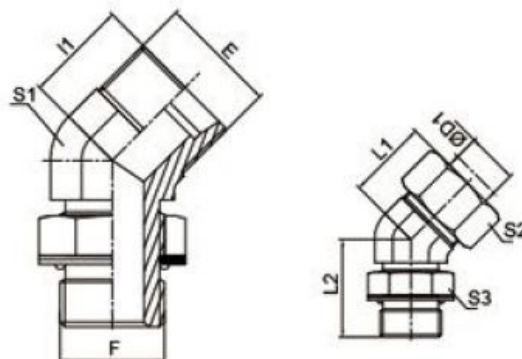
| Series | Order code    | D1 | T         | D3   | D4   | D5 | L1 | L2   | L3 | L4   | L5 | S1 | S2 | S3 | Weight (g) | PN (bar) |     |
|--------|---------------|----|-----------|------|------|----|----|------|----|------|----|----|----|----|------------|----------|-----|
|        |               |    |           |      |      |    |    |      |    |      |    |    |    |    |            | Z        | SS  |
| L      | W6-6LR 1/8    | 06 | G 1/8 A   | 4.0  | 4.5  | 15 | 21 | 14.0 | 19 | 7.0  | 29 | 14 | 14 | 14 | 40         | 315      | 315 |
|        | W6-8LR 1/4    | 08 | G 1/4 A   | 6.0  | 7.5  | 20 | 23 | 16.0 | 23 | 9.0  | 31 | 14 | 19 | 17 | 59         | 315      | 315 |
|        | W6-10LR 1/4   | 10 | G 1/4 A   | 8.0  | 7.5  | 20 | 24 | 17.0 | 25 | 9.0  | 32 | 19 | 19 | 19 | 82         | 315      | 315 |
|        | W6-10LR 3/8   | 10 | G 3/8 A   | 8.0  | 10.0 | 23 | 24 | 17.0 | 28 | 9.0  | 32 | 19 | 22 | 19 | 90         | 315      | 315 |
|        | W6-12LR 3/8   | 12 | G 3/8 A   | 10.0 | 10.0 | 23 | 26 | 19.0 | 28 | 9.0  | 34 | 19 | 22 | 22 | 96         | 250      | 250 |
|        | W6-12LR 1/2   | 12 | G 1/2 A   | 10.0 | 12.5 | 28 | 26 | 19.0 | 30 | 13.0 | 34 | 19 | 27 | 22 | 110        | 250      | 250 |
|        | W6-15LR 1/2   | 15 | G 1/2 A   | 12.0 | 12.5 | 28 | 28 | 21.0 | 30 | 13.0 | 36 | 22 | 27 | 27 | 149        | 250      | 250 |
|        | W6-18LR 1/2   | 18 | G 1/2 A   | 15.0 | 12.5 | 28 | 31 | 24.0 | 36 | 13.0 | 40 | 27 | 27 | 32 | 221        | 250      | 250 |
|        | W6-22LR 3/4   | 22 | G 3/4 A   | 19.0 | 15.5 | 33 | 35 | 28.0 | 36 | 13.0 | 44 | 30 | 36 | 36 | 310        | 160      | 160 |
|        | W6-28LR 1     | 28 | G 1 A     | 24.0 | 21.5 | 41 | 38 | 32.0 | 44 | 15.0 | 47 | 36 | 41 | 41 | 455        | 160      | 160 |
|        | W6-35LR 1 1/4 | 35 | G 1 1/4 A | 30.0 | 27.5 | 51 | 48 | 38.0 | 50 | 15.0 | 59 | 50 | 50 | 50 | 1043       | 160      | 160 |
|        | W6-42LR 1 1/2 | 42 | G 1 1/2 A | 36.0 | 33.0 | 56 | 49 | 38.0 | 52 | 15.0 | 61 | 50 | 55 | 60 | 994        | 160      | 160 |
| S      | W6-6SR 1/4    | 06 | G 1/4 A   | 4.0  | 7.5  | 20 | 22 | 15.0 | 23 | 9.0  | 30 | 14 | 19 | 17 | 56         | 315      | 315 |
|        | W6-8SR 1/4    | 08 | G 1/4 A   | 5.0  | 7.5  | 20 | 24 | 17.0 | 27 | 9.0  | 32 | 19 | 19 | 19 | 88         | 315      | 315 |
|        | W6-10SR 3/8   | 10 | G 3/8 A   | 7.0  | 10.0 | 23 | 25 | 18.0 | 29 | 9.0  | 34 | 19 | 22 | 22 | 98         | 250      | 250 |
|        | W6-12SR 3/8   | 12 | G 3/8 A   | 8.0  | 10.0 | 23 | 29 | 22.0 | 29 | 9.0  | 38 | 22 | 22 | 24 | 128        | 250      | 250 |
|        | W6-16SR 1/2   | 16 | G 1/2 A   | 12.0 | 12.5 | 28 | 33 | 25.0 | 36 | 13.0 | 43 | 27 | 27 | 30 | 234        | 250      | 250 |
|        | W6-20SR 3/4   | 20 | G 3/4 A   | 16.0 | 15.5 | 33 | 38 | 28.0 | 39 | 12.0 | 49 | 30 | 36 | 36 | 344        | 250      | 250 |
|        | W6-25SR 1     | 25 | G 1 A     | 20.0 | 21.5 | 41 | 42 | 30.0 | 44 | 14.0 | 54 | 36 | 41 | 46 | 533        | 250      | 250 |
|        | W6-30SR 1 1/4 | 30 | G 1 1/4 A | 25.0 | 27.5 | 51 | 49 | 36.0 | 49 | 15.0 | 62 | 50 | 50 | 50 | 1085       | 160      | 160 |
|        | W6-38SR 1 1/2 | 38 | G 1 1/2 A | 32.0 | 33.0 | 56 | 50 | 34.0 | 55 | 15.0 | 65 | 50 | 55 | 60 | 1116       | 160      | 160 |

## Adjustable locknut elbow W6-M



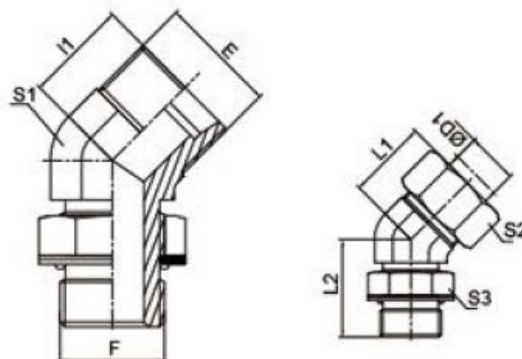
| Series | Order code | D1 | E        | F        | I1   | L1   | L2   | S1 | S2 | S3 | Weight (g) | PN (bar) |     |
|--------|------------|----|----------|----------|------|------|------|----|----|----|------------|----------|-----|
|        |            |    |          |          |      |      |      |    |    |    |            | Z        | SS  |
| L      | W6-6LM     | 06 | M 12x1.5 | M 10x1   | 13   | 28   | 26.5 | 11 | 14 | 14 | 40         | 315      | 315 |
|        | W6-8LM     | 08 | M 14x1.5 | M 12x1.5 | 15.5 | 30.5 | 32   | 14 | 17 | 17 | 59         | 315      | 315 |
|        | W6-10LM    | 10 | M 16x1.5 | M 14x1.5 | 17.5 | 32.5 | 34   | 16 | 19 | 19 | 82         | 315      | 315 |
|        | W6-12LM    | 12 | M 18x1.5 | M 16x1.5 | 19   | 34   | 36   | 19 | 22 | 22 | 96         | 315      | 315 |
|        | W6-15LM    | 15 | M 22x1.5 | M 18x1.5 | 22   | 37   | 39.5 | 22 | 27 | 24 | 149        | 315      | 315 |
|        | W6-18LM    | 18 | M 26x1.5 | M 22x1.5 | 25.5 | 42   | 43.5 | 27 | 32 | 27 | 221        | 315      | 315 |
|        | W6-22LM    | 22 | M 30x2   | M 27x2   | 29.3 | 45.8 | 50   | 30 | 36 | 32 | 310        | 160      | 160 |
|        | W6-28LM    | 28 | M 36x2   | M 33x2   | 33.3 | 49.8 | 54   | 36 | 41 | 41 | 455        | 160      | 160 |
| S      | W6-6SM     | 06 | M 14x1.5 | M 12x1.5 | 17.5 | 32.5 | 32   | 14 | 17 | 17 | 56         | 630      | 630 |
|        | W6-8SM     | 08 | M 16x1.5 | M 14x1.5 | 18.7 | 33.7 | 34   | 16 | 19 | 19 | 88         | 630      | 630 |
|        | W6-10SM    | 10 | M 18x1.5 | M 16x1.5 | 19.5 | 36   | 36   | 19 | 22 | 22 | 98         | 630      | 630 |
|        | W6-12SM    | 12 | M 20x1.5 | M 18x1.5 | 19.5 | 36   | 37   | 18 | 24 | 2  | 128        | 630      | 630 |
|        | W6-14SM    | 14 | M 22x1.5 | M 20x1.5 | 23   | 41   | 40   | 22 | 27 | 27 | 234        | 630      | 630 |
|        | W6-16SM    | 16 | M 24x1.5 | M 22x1.5 | 24   | 42   | 37.5 | 24 | 30 | 27 | 344        | 630      | 630 |
|        | W6-20SM    | 20 | M 27x2   | M 27x2   | 28.3 | 49.8 | 50   | 30 | 36 | 32 | 533        | 400      | 400 |
|        | W6-25SM    | 25 | M 33x2   | M 33x2   | 32.8 | 56.8 | 54   | 36 | 46 | 41 | 1085       | 400      | 400 |
|        | W6-30SM    | 30 | M 42x2   | M 42x2   | 36.2 | 62.7 | 57.2 | 41 | 50 | 50 | 1116       | 400      | 400 |

## Adjustable locknut elbow W7-R



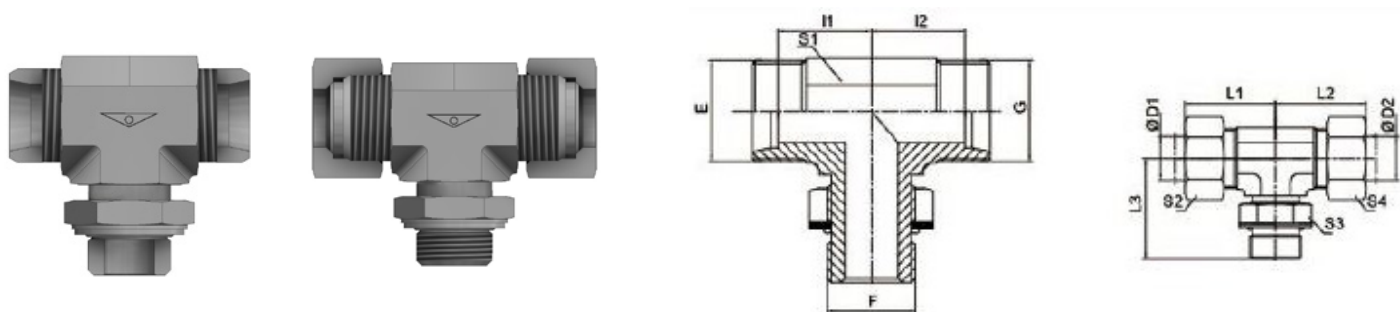
| Series | Order code | D1 | E        | F         | l1   | L1   | L2   | S1 | S2 | S3 | Weight (g) | PN (bar) |     |
|--------|------------|----|----------|-----------|------|------|------|----|----|----|------------|----------|-----|
|        |            |    |          |           |      |      |      |    |    |    |            | Z        | SS  |
| L      | W7-6LR     | 06 | M 12x1.5 | G1/8x28   | 10   | 25   | 24   | 11 | 14 | 14 | 37         | 315      | 315 |
|        | W7-8LR     | 08 | M 14x1.5 | G1/4x19   | 11   | 26   | 27   | 14 | 17 | 19 | 49         | 315      | 315 |
|        | W7-10LR1/4 | 10 | M 16x1.5 | G1/4x19   | 12.3 | 27.3 | 27   | 16 | 19 | 19 | 67         | 315      | 315 |
|        | W7-10LR3/8 | 10 | M 16x1.5 | G3/8x19   | 12.3 | 27.6 | 30   | 16 | 19 | 22 | 67         | 315      | 315 |
|        | W7-12LR    | 12 | M 18x1.5 | G3/8x19   | 13   | 28   | 31   | 19 | 22 | 22 | 86         | 315      | 315 |
|        | W7-15LR    | 15 | M 22x1.5 | G1/2x14   | 15   | 30   | 36   | 22 | 27 | 27 | 139        | 315      | 315 |
|        | W7-18LR1/2 | 18 | M 26x1.5 | G1/2x14   | 16.5 | 33   | 17.5 | 27 | 32 | 27 | 162        | 315      | 315 |
|        | W7-18LR3/4 | 18 | M 16x1.5 | G3/4x14   | 16.5 | 33   | 42   | 27 | 32 | 32 | 162        | 315      | 315 |
|        | W7-22LR    | 22 | M 30x2   | G3/4x25   | 19.7 | 36.2 | 42.5 | 30 | 36 | 32 | 289        | 160      | 160 |
|        | W7-28LR    | 28 | M 36x2   | G1x11     | 21.5 | 38   | 44.5 | 36 | 41 | 41 | 457        | 160      | 160 |
|        | W7-35LR    | 35 | M 45x2   | G1 1/4x11 | 25.5 | 47   | 50.5 | 48 | 50 | 50 | 669        | 160      | 160 |
| S      | W7-6SR     | 06 | M 14x1.5 | G1/4x19   | 13   | 28   | 27   | 14 | 17 | 19 | 53         | 630      | 630 |
|        | W7-8SR     | 08 | M 16x1.5 | G1/4x19   | 13.3 | 28.3 | 27   | 16 | 19 | 19 | 82         | 630      | 630 |
|        | W7-10SR    | 10 | M 18x1.5 | G3/8x19   | 13.5 | 30   | 31   | 19 | 22 | 22 | 95         | 630      | 630 |
|        | W7-12SR    | 12 | M 20x1.5 | G3/8x19   | 13.5 | 30   | 31   | 19 | 24 | 22 | 123        | 630      | 630 |
|        | W7-14SR    | 14 | M 22x1.5 | G1/2x14   | 16.3 | 34.3 | 36   | 22 | 27 | 27 | 154        | 630      | 630 |
|        | W7-16SR    | 16 | M 24x1.5 | G1/2x14   | 16.2 | 34.7 | 36.5 | 24 | 30 | 27 | 179        | 400      | 400 |
|        | W7-20SR    | 20 | M 30x2   | G1/2x14   | 18.7 | 40.2 | 42.5 | 30 | 36 | 32 | 304        | 400      | 400 |
|        | W7-25SR    | 25 | M 36x2   | G1x11     | 21   | 45   | 44.5 | 36 | 46 | 41 | 537        | 400      | 400 |
|        | W7-30SR    | 30 | M 42x2   | G1 1/4x11 | 24.3 | 50.8 | 47.5 | 41 | 50 | 50 | 773        | 400      | 400 |

## Adjustable locknut elbow W7-M



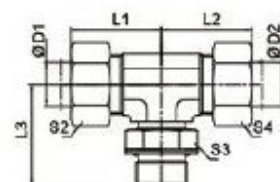
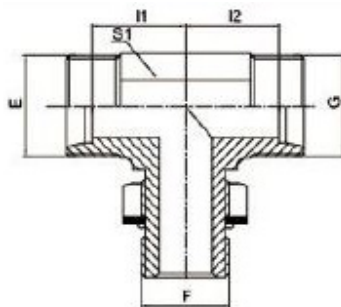
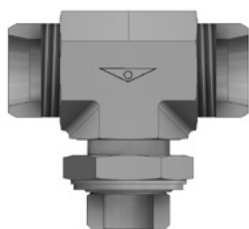
| Series | Order code | D1 | E       | F       | I1   | L1   | L2   | S1 | S2 | S3 | Weight (g) | PN (bar) |     |
|--------|------------|----|---------|---------|------|------|------|----|----|----|------------|----------|-----|
|        |            |    |         |         |      |      |      |    |    |    |            | Z        | SS  |
| L      | W7-6LM     | 06 | M12x1.5 | M10x1   | 10   | 25   | 25.5 | 11 | 14 | 14 | 35         | 315      | 315 |
|        | W7-8LM     | 08 | M14x1.5 | M12x1.5 | 11   | 26   | 30   | 14 | 17 | 17 | 46         | 315      | 315 |
|        | W7-10LM    | 10 | M16x1.5 | M14x1.5 | 12.3 | 27.3 | 30.5 | 16 | 19 | 19 | 74         | 315      | 315 |
|        | W7-12LM    | 12 | M18x1.5 | M16x1.5 | 13   | 28   | 34   | 19 | 22 | 22 | 86         | 315      | 315 |
|        | W7-15LM    | 15 | M22x1.5 | M18x1.5 | 15   | 30   | 38   | 22 | 27 | 24 | 119        | 315      | 315 |
|        | W7-18LM    | 18 | M26x1.5 | M22x1.5 | 16.5 | 33   | 40.5 | 27 | 32 | 27 | 186        | 315      | 315 |
|        | W7-22LM    | 22 | M30x2   | M27x2   | 19.7 | 36.2 | 48   | 30 | 36 | 32 | 323        | 160      | 160 |
|        | W7-28LM    | 28 | M36x2   | M33x2   | 21.5 | 38   | 49.5 | 36 | 41 | 41 | 553        | 160      | 160 |
|        | W7-35LM    | 35 | M45x2   | M42x2   | 25.5 | 47   | 55   | 48 | 50 | 50 | 966        | 160      | 160 |
| S      | W7-6SM     | 06 | M14x1.5 | M12x1.5 | 13   | 28   | 30   | 14 | 17 | 17 | 55         | 400      | 400 |
|        | W7-8SM     | 08 | M16x1.5 | M14x1.5 | 13.3 | 28.3 | 30.5 | 16 | 19 | 19 | 90         | 400      | 400 |
|        | W7-10SM    | 10 | M18x1.5 | M16x1.5 | 13.5 | 30   | 34   | 19 | 22 | 22 | 104        | 400      | 400 |
|        | W7-12SM    | 12 | M20x1.5 | M18x1.5 | 13.5 | 30   | 37   | 19 | 24 | 24 | 145        | 400      | 400 |
|        | W7-16SM    | 16 | M24x1.5 | M22x1.5 | 16.2 | 34.7 | 40   | 24 | 30 | 27 | 257        | 400      | 400 |
|        | W7-20SM    | 20 | M30x2   | M27x2   | 18.7 | 40.2 | 48   | 30 | 36 | 32 | 367        | 400      | 400 |
|        | W7-25SM    | 25 | M36x2   | M33x2   | 21   | 45   | 49.5 | 36 | 46 | 41 | 372        | 315      | 315 |
|        | W7-30SM    | 30 | M42x2   | M42x2   | 24.3 | 50.8 | 54   | 41 | 50 | 50 | 543        | 250      | 250 |

## Male stud elbow W8-R



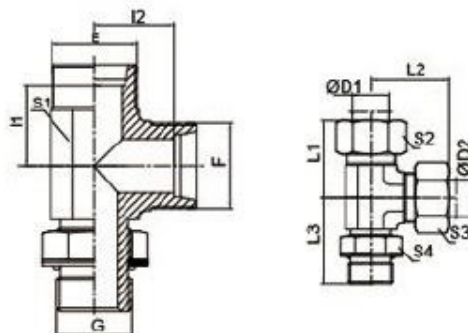
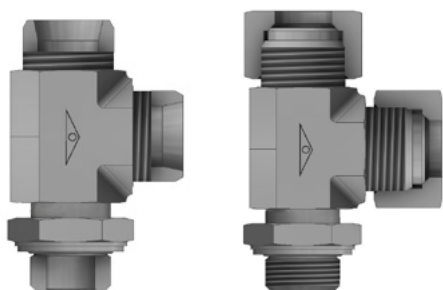
| Series | Order code | D1<br>D2 | E G      | GFG       | I1 I2 | L1 L2 | L3   | S1 | S2<br>S4 | S3 | Weight<br>(g) | PN (bar) |     |
|--------|------------|----------|----------|-----------|-------|-------|------|----|----------|----|---------------|----------|-----|
|        |            |          |          |           |       |       |      |    |          |    |               | Z        | SS  |
| L      | W8-6LR     | 06       | M 12x1.5 | G1/8x28   | 13    | 28    | 26.2 | 11 | 14       | 14 | 52            | 315      | 315 |
|        | W8-8LR     | 08       | M 14x1.5 | G1/4x19   | 15.5  | 30.5  | 31.3 | 14 | 17       | 19 | 68            | 315      | 315 |
|        | W8-10LR    | 10       | M 16x1.5 | G1/4x19   | 17.5  | 32.5  | 32.5 | 16 | 19       | 19 | 97            | 315      | 315 |
|        | W8-12LR    | 12       | M 18x1.5 | G3/8x19   | 19    | 34    | 36.8 | 19 | 22       | 22 | 115           | 315      | 315 |
|        | W8-15LR    | 15       | M 22x1.5 | G1/2x14   | 22    | 37    | 43.2 | 22 | 27       | 27 | 184           | 315      | 315 |
|        | W8-18LR    | 18       | M 26x1.5 | G1/2x14   | 25.5  | 42    | 46.5 | 27 | 32       | 27 | 251           | 315      | 315 |
|        | W8-22LR    | 22       | M 30x2   | G3/4x14   | 29.3  | 45.8  | 52   | 30 | 36       | 32 | 386           | 160      | 160 |
|        | W8-28LR    | 28       | M 36x2   | G1x11     | 33.3  | 4.8   | 56   | 36 | 41       | 41 | 626           | 160      | 160 |
|        | W8-35LR    | 35       | M 45x2   | G1 1/4x11 | 39.2  | 60.7  | 63   | 48 | 50       | 50 | 985           | 160      | 160 |
| S      | W8-6SR     | 06       | M 14x1.5 | G1/4x19   | 17.5  | 32.5  | 31.3 | 14 | 17       | 19 | 78            | 630      | 630 |
|        | W8-8SR     | 08       | M 16x1.5 | G1/4x19   | 18.7  | 33.7  | 32.5 | 1  | 19       | 19 | 118           | 630      | 630 |
|        | W8-10SR    | 10       | M 18x1.5 | G3/8x19   | 19.5  | 36    | 36.8 | 19 | 22       | 22 | 138           | 630      | 630 |
|        | W8-12SR    | 12       | M 20x1.5 | G3/8x19   | 19.5  | 36    | 36.8 | 19 | 24       | 22 | 179           | 630      | 630 |
|        | W8-14SR    | 14       | M 22x1.5 | G1/2x14   | 23    | 41    | 43.2 | 22 | 27       | 27 | 245           | 630      | 630 |
|        | W8-16SR    | 16       | M 24x1.5 | G1/2x14   | 24    | 42    | 44   | 24 | 30       | 27 | 283           | 400      | 400 |
|        | W8-20SR    | 20       | M 30x2   | G3/4x14   | 28.3  | 49.8  | 52   | 30 | 36       | 32 | 452           | 400      | 400 |
|        | W8-25SR    | 25       | M 36x2   | G1x11     | 32.8  | 56.8  | 56   | 36 | 46       | 41 | 762           | 400      | 400 |
|        | W8-30SR    | 30       | M 42x2   | G1 1/4x11 | 36.2  | 62.7  | 58   | 41 | 50       | 50 | 1153          | 400      | 400 |

## Male stud elbow W8-M



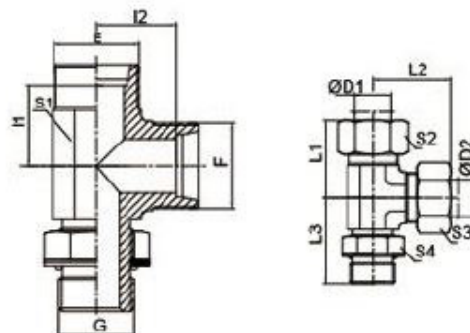
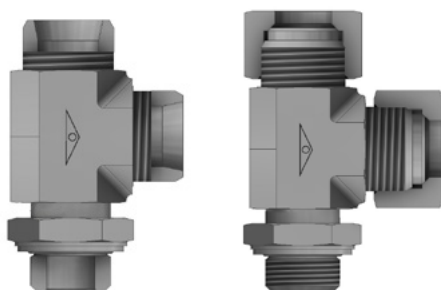
| Series | Order code | D1<br>D2 | E G      | F         | I1 I2 | L1 L2 | L3   | S1 | S2<br>S4 | S3 | Weight<br>(g) | PN (bar) |     |
|--------|------------|----------|----------|-----------|-------|-------|------|----|----------|----|---------------|----------|-----|
|        |            |          |          |           |       |       |      |    |          |    |               | Z        | SS  |
| L      | W8-6LM     | 06       | M 12x1.5 | G1/8x28   | 13    | 28    | 26.2 | 11 | 14       | 14 | 39            | 315      | 315 |
|        | W8-8LM     | 08       | M 14x1.5 | G1/4x19   | 15.5  | 30.5  | 31.3 | 14 | 17       | 19 | 48            | 315      | 315 |
|        | W8-10LM    | 10       | M 16x1.5 | G1/4x19   | 17.5  | 32.5  | 32.5 | 16 | 19       | 19 | 82            | 315      | 315 |
|        | W8-12LM    | 12       | M 18x1.5 | G3/8x19   | 19    | 34    | 36.8 | 19 | 22       | 22 | 91            | 315      | 315 |
|        | W8-15LM    | 15       | M 22x1.5 | G1/2x14   | 22    | 37    | 43.2 | 22 | 27       | 27 | 140           | 315      | 315 |
|        | W8-18LM    | 18       | M 26x1.5 | G1/2x14   | 25.5  | 42    | 46.5 | 27 | 32       | 27 | 205           | 315      | 315 |
|        | W8-22LM    | 22       | M 30x2   | G3/4x14   | 29.3  | 45.8  | 52   | 30 | 36       | 32 | 319           | 160      | 160 |
|        | W8-28LM    | 28       | M 36x2   | G1x11     | 33.3  | 49.8  | 56   | 36 | 41       | 41 | 543           | 160      | 160 |
| S      | W8-6SM     | 06       | M 14x1.5 | G1/4x19   | 17.5  | 32.5  | 31.3 | 14 | 17       | 19 | 56            | 630      | 630 |
|        | W8-8SM     | 08       | M 16x1.5 | G1/4x19   | 18.7  | 33.7  | 32.5 | 1  | 19       | 19 | 93            | 630      | 630 |
|        | W8-10SM    | 10       | M18x1.5  | G3/8x19   | 19.5  | 36    | 36.8 | 19 | 22       | 22 | 109           | 630      | 630 |
|        | W8-12SM    | 12       | M 20x1.5 | G3/8x19   | 19.5  | 36    | 36.8 | 19 | 24       | 22 | 155           | 630      | 630 |
|        | W8-14SM    | 14       | M 22x1.5 | G1/2x14   | 23    | 41    | 43.2 | 22 | 27       | 27 | 188           | 630      | 630 |
|        | W8-16SM    | 16       | M 24x1.5 | G1/2x14   | 24    | 42    | 44   | 24 | 30       | 27 | 248           | 400      | 400 |
|        | W8-20SM    | 20       | M 30x2   | G3/4x14   | 28.3  | 49.8  | 52   | 30 | 36       | 32 | 398           | 400      | 400 |
|        | W8-25SM    | 25       | M 36x2   | G1x11     | 32.8  | 56.8  | 56   | 36 | 46       | 41 | 657           | 400      | 400 |
|        | W8-30SM    | 30       | M 42x2   | G1 1/4x11 | 36.2  | 62.7  | 58   | 41 | 50       | 50 | 1050          | 400      | 400 |

## Male stud elbow W9-R



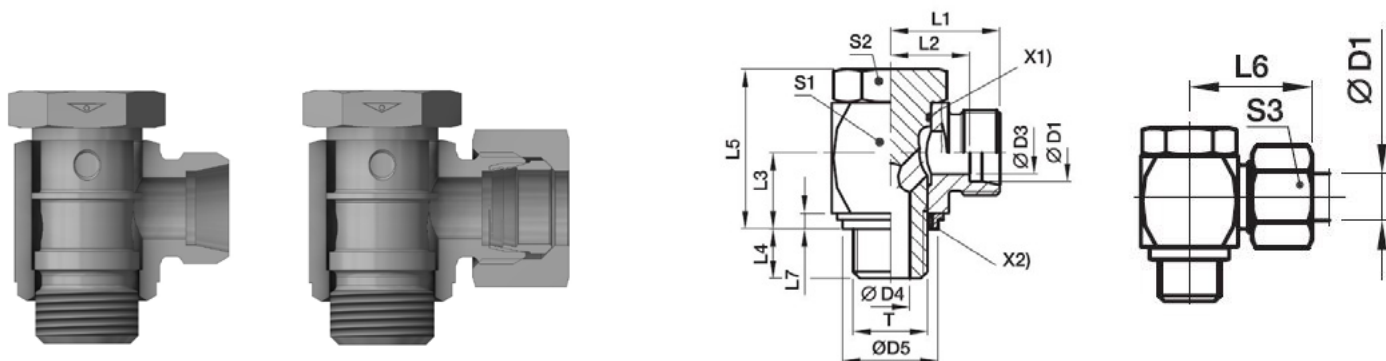
| Series | Order code | D1<br>D2 | E G      | F         | l1 l2 | L1 L2 | L3   | S1 | S2<br>S4 | S3 | Weight<br>(g) | PN (bar) |     |
|--------|------------|----------|----------|-----------|-------|-------|------|----|----------|----|---------------|----------|-----|
|        |            |          |          |           |       |       |      |    |          |    |               | Z        | SS  |
| L      | W9-6LR     | 06       | M 12x1.5 | G1/8x28   | 13    | 28    | 26.2 | 11 | 14       | 14 | 50            | 315      | 315 |
|        | W9-8LR     | 08       | M 14x1.5 | G1/4x19   | 15.5  | 30.5  | 31.3 | 14 | 17       | 19 | 68            | 315      | 315 |
|        | W9-10LR    | 10       | M 16x1.5 | G1/4x19   | 17.5  | 32.5  | 32.5 | 16 | 19       | 19 | 98            | 315      | 315 |
|        | W9-12LR    | 12       | M 18x1.5 | G3/8x19   | 19    | 34    | 36.8 | 19 | 22       | 22 | 116           | 315      | 315 |
|        | W9-15LR    | 15       | M 22x1.5 | G1/2x14   | 22    | 37    | 43.2 | 22 | 27       | 27 | 183           | 315      | 315 |
|        | W9-18LR    | 18       | M 26x1.5 | G1/2x14   | 25.5  | 42    | 46.5 | 27 | 32       | 27 | 247           | 315      | 315 |
|        | W9-22LR    | 22       | M 30x2   | G3/4x14   | 29.3  | 45.8  | 52   | 30 | 36       | 32 | 383           | 160      | 160 |
|        | W9-28LR    | 28       | M 36x2   | G1x11     | 33.3  | 49.8  | 56   | 36 | 41       | 41 | 630           | 160      | 160 |
|        | W9-35LR    | 35       | M 45x2   | G1 1/4x11 | 39.2  | 60.7  | 63   | 48 | 50       | 50 | 1003          | 160      | 160 |
| S      | W9-6SR     | 06       | M 14x1.5 | G1/4x19   | 17.5  | 32.5  | 31.3 | 14 | 17       | 19 | 78            | 630      | 630 |
|        | W9-8SR     | 08       | M 16x1.5 | G1/4x19   | 18.7  | 33.7  | 32.5 | 16 | 1        | 19 | 118           | 630      | 630 |
|        | W9-10SR    | 10       | M18x1.5  | G3/8x19   | 19.5  | 36    | 36.8 | 19 | 22       | 22 | 137           | 630      | 630 |
|        | W9-12SR    | 12       | M 20x1.5 | G3/8x19   | 19.5  | 36    | 36.8 | 19 | 24       | 22 | 177           | 630      | 630 |
|        | W9-14SR    | 14       | M 22x1.5 | G1/2x14   | 23    | 41    | 43.2 | 22 | 27       | 27 | 243           | 630      | 630 |
|        | W9-16SR    | 16       | M 24x1.5 | G1/2x14   | 24    | 42.5  | 44   | 24 | 30       | 27 | 284           | 400      | 400 |
|        | W9-20SR    | 20       | M 30x2   | G3/4x14   | 28.3  | 49.8  | 52   | 30 | 36       | 32 | 464           | 400      | 400 |
|        | W9-25SR    | 25       | M 36x2   | G1x11     | 32.8  | 56.8  | 56   | 36 | 46       | 41 | 765           | 400      | 400 |
|        | W9-30SR    | 30       | M 42x2   | G1 1/4x11 | 36.2  | 62.7  | 58   | 41 | 50       | 50 | 1204          | 400      | 400 |

## Male stud elbow W9-M



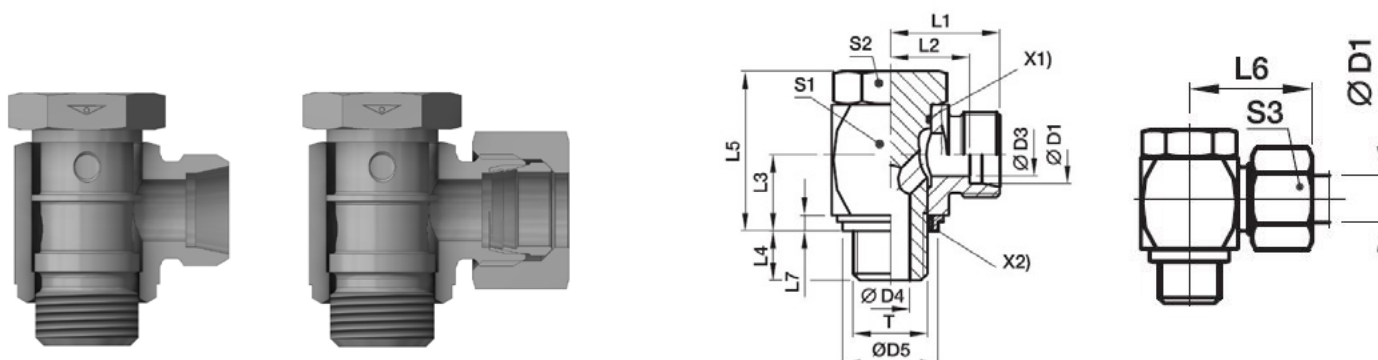
| Series | Order code | D1<br>D2 | E G      | F        | I1 I2 | L1 L2 | L3   | S1 | S2<br>S4 | S3 | Weight<br>(g) | PN (bar) |     |
|--------|------------|----------|----------|----------|-------|-------|------|----|----------|----|---------------|----------|-----|
|        |            |          |          |          |       |       |      |    |          |    |               | Z        | SS  |
| L      | W9-6LM     | 06       | M 12x1.5 | M10x1    | 13    | 28    | 26.5 | 11 | 14       | 14 | 50            | 315      | 315 |
|        | W9-8LM     | 08       | M 14x1.5 | M 12x1.5 | 15.5  | 30.5  | 32   | 14 | 17       | 17 | 62            | 315      | 315 |
|        | W9-10LM    | 10       | M 16x1.5 | M 14x1.5 | 17.5  | 32.5  | 34   | 16 | 19       | 19 | 98            | 315      | 315 |
|        | W9-12LM    | 12       | M 18x1.5 | M 16x1.5 | 19    | 34    | 36   | 19 | 22       | 22 | 107           | 315      | 315 |
|        | W9-15LM    | 15       | M 22x1.5 | M 18x1.5 | 22    | 37    | 39.5 | 22 | 27       | 24 | 158           | 315      | 315 |
|        | W9-18LM    | 18       | M 26x1.5 | M 22x1.5 | 25.5  | 42    | 43.5 | 27 | 32       | 27 | 240           | 315      | 315 |
|        | W9-22LM    | 22       | M 30x2   | M 27x2   | 29.3  | 45.8  | 50   | 30 | 36       | 32 | 368           | 160      | 160 |
|        | W9-28LM    | 28       | M 36x2   | M 33x2   | 33.3  | 49.8  | 54   | 36 | 41       | 41 | 597           | 160      | 160 |
| S      | W9-6SM     | 06       | M 14x1.5 | M 12x1.5 | 17.5  | 32.5  | 32   | 14 | 17       | 17 | 72            | 630      | 630 |
|        | W9-8SM     | 08       | M 16x1.5 | M 14x1.5 | 18.7  | 33.7  | 34   | 16 | 19       | 19 | 134           | 630      | 630 |
|        | W9-10SM    | 10       | M18x1.5  | M 16x1.5 | 19.5  | 36    | 36   | 19 | 22       | 22 | 131           | 630      | 630 |
|        | W9-12SM    | 12       | M 20x1.5 | M 18x1.5 | 19.5  | 36    | 37   | 19 | 24       | 24 | 195           | 630      | 630 |
|        | W9-16SM    | 16       | M 24x1.5 | M 22x1.5 | 24    | 42    | 37.5 | 24 | 30       | 27 | 290           | 400      | 400 |
|        | W9-20SM    | 20       | M 30x2   | M 27x2   | 28.3  | 49.8  | 50   | 30 | 36       | 32 | 457           | 400      | 400 |
|        | W9-25SM    | 25       | M 36x2   | M 33x2   | 32.8  | 56.8  | 54   | 36 | 46       | 41 | 621           | 400      | 400 |
|        | W9-30SM    | 30       | M 42x2   | M 42x2   | 36.2  | 62.7  | 57.2 | 41 | 50       | 50 | 933           | 400      | 400 |

## High pressure banjo elbow W5-R-ED



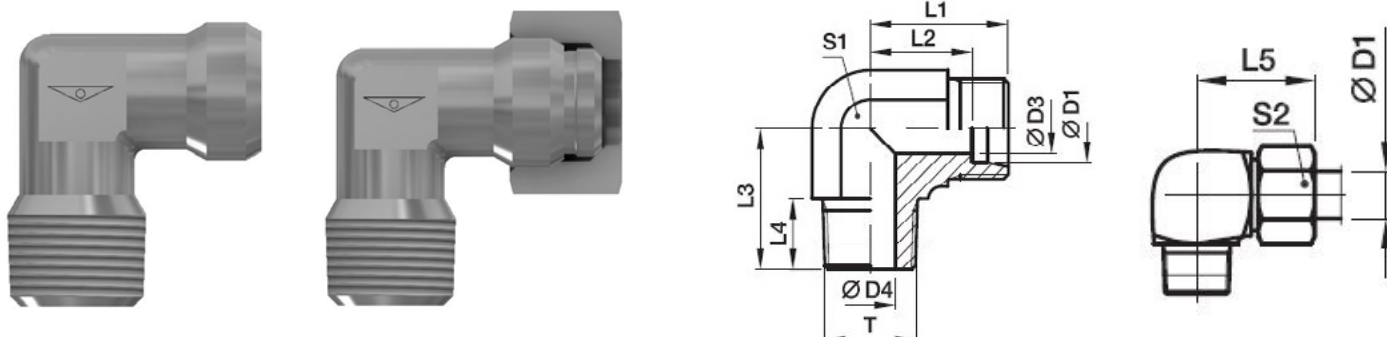
| Series | Order code       | D1 | T         | D3 | D4   | D5   | L1   | L2   | L3   | L4 | L5 | L6 | L7  | S1 | S2 | S3 | Weight (g) | PN (bar) |     |
|--------|------------------|----|-----------|----|------|------|------|------|------|----|----|----|-----|----|----|----|------------|----------|-----|
|        |                  |    |           |    |      |      |      |      |      |    |    |    |     |    |    |    |            | Z        | SS  |
| L      | W5-6LR 1/8 ED    | 06 | G 1/8 A   | 4  | 4.5  | 14.9 | 19.0 | 12.0 | 10.5 | 8  | 24 | 27 | 2.5 | 17 | 17 | 14 | 53         | 315      | 315 |
|        | W5-8LR 1/4 ED    | 08 | G 1/4 A   | 6  | 6.0  | 18.9 | 21.5 | 14.5 | 14.0 | 12 | 30 | 29 | 3.0 | 22 | 19 | 17 | 101        | 315      | 315 |
|        | W5-10LR 1/4 ED   | 10 | G 1/4 A   | 8  | 6.0  | 18.9 | 22.5 | 45.5 | 14.0 | 12 | 30 | 30 | 3.0 | 22 | 19 | 19 | 102        | 315      | 315 |
|        | W5-12LR 3/8 ED   | 12 | G 3/8 A   | 10 | 7.5  | 21.9 | 25.0 | 18.0 | 16.5 | 12 | 36 | 33 | 3.0 | 27 | 24 | 22 | 181        | 315      | 315 |
|        | W5-15LR 1/2 ED   | 15 | G 1/2 A   | 12 | 11.0 | 26.9 | 28.5 | 21.5 | 21.5 | 14 | 45 | 37 | 4.5 | 32 | 30 | 27 | 312        | 315      | 315 |
|        | W5-18LR 1/2 ED   | 18 | G 1/2 A   | 15 | 11.0 | 26.9 | 28.5 | 21.0 | 21.5 | 14 | 45 | 37 | 4.5 | 32 | 30 | 32 | 319        | 315      | 315 |
|        | W5-22LR 3/4 ED   | 22 | G 3/4 A   | 19 | 17.0 | 32.9 | 36.0 | 27.5 | 24.0 | 16 | 53 | 44 | 3.5 | 41 | 36 | 36 | 578        | 160      | 160 |
|        | W5-28LR 1 ED     | 28 | G 1 A     | 24 | 21.0 | 39.9 | 39.5 | 32.0 | 30.5 | 18 | 66 | 49 | 3.5 | 50 | 46 | 41 | 1035       | 160      | 160 |
|        | W5-35LR 1 1/4 ED | 35 | G 1 1/4 A | 30 | 27.0 | 49.9 | 46.5 | 36.0 | 35.5 | 20 | 76 | 58 | 3.5 | 60 | 55 | 50 | 1499       | 160      | 160 |
|        | W5-42LR 1 1/2 ED | 42 | G 1 1/2 A | 36 | 34.0 | 55.9 | 51.5 | 40.5 | 40.5 | 22 | 87 | 63 | 3.5 | 70 | 60 | 60 | 2196       | 160      | 160 |
| S      | W5-6SR 1/4 ED    | 06 | G 1/4 A   | 4  | 6.0  | 18.9 | 23.5 | 16.5 | 14.0 | 12 | 30 | 31 | 3.0 | 22 | 19 | 17 | 107        | 400      | 400 |
|        | W5-8SR 1/4 ED    | 08 | G 1/4 A   | 5  | 6.0  | 18.9 | 23.5 | 16.5 | 14.0 | 12 | 30 | 31 | 3.0 | 22 | 19 | 19 | 107        | 400      | 400 |
|        | W5-10SR 3/8 ED   | 10 | G 3/8 A   | 7  | 7.5  | 21.9 | 26.0 | 18.5 | 16.5 | 12 | 36 | 35 | 3.0 | 27 | 24 | 22 | 188        | 400      | 400 |
|        | W5-12SR 3/8 ED   | 12 | G 3/8 A   | 8  | 7.5  | 21.9 | 26.0 | 18.5 | 16.5 | 12 | 36 | 35 | 3.0 | 27 | 24 | 24 | 190        | 400      | 400 |
|        | W5-14SR 1/2 ED   | 14 | G 1/2 A   | 10 | 11.0 | 26.9 | 30.5 | 22.5 | 21.5 | 15 | 45 | 40 | 4.5 | 32 | 30 | 27 | 320        | 400      | 400 |
|        | W5-16SR 1/2 ED   | 16 | G 1/2 A   | 12 | 11.0 | 26.9 | 30.5 | 22.0 | 21.5 | 14 | 45 | 40 | 4.5 | 32 | 30 | 30 | 324        | 315      | 315 |
|        | W5-20SR 3/4 ED   | 20 | G 3/4 A   | 16 | 17.0 | 32.9 | 37   | 26.5 | 24.0 | 16 | 53 | 48 | 3.5 | 41 | 36 | 36 | 588        | 315      | 315 |
|        | W5-25SR 1 ED     | 25 | G 1 A     | 20 | 21.0 | 39.9 | 43.5 | 31.5 | 30.5 | 18 | 66 | 56 | 3.5 | 50 | 46 | 46 | 1073       | 250      | 250 |
|        | W5-30SR 1 1/4 ED | 30 | G 1 1/4 A | 25 | 27.0 | 49.9 | 50.5 | 37.0 | 35.5 | 20 | 76 | 64 | 3.5 | 60 | 55 | 50 | 1559       | 160      | 160 |
|        | W5-38SR 1 1/2 ED | 38 | G 1 1/2 A | 32 | 34.0 | 55.9 | 57.5 | 41.5 | 40.5 | 22 | 87 | 72 | 3.5 | 70 | 60 | 60 | 2296       | 160      | 160 |

## High pressure banjo elbow W5-M-ED



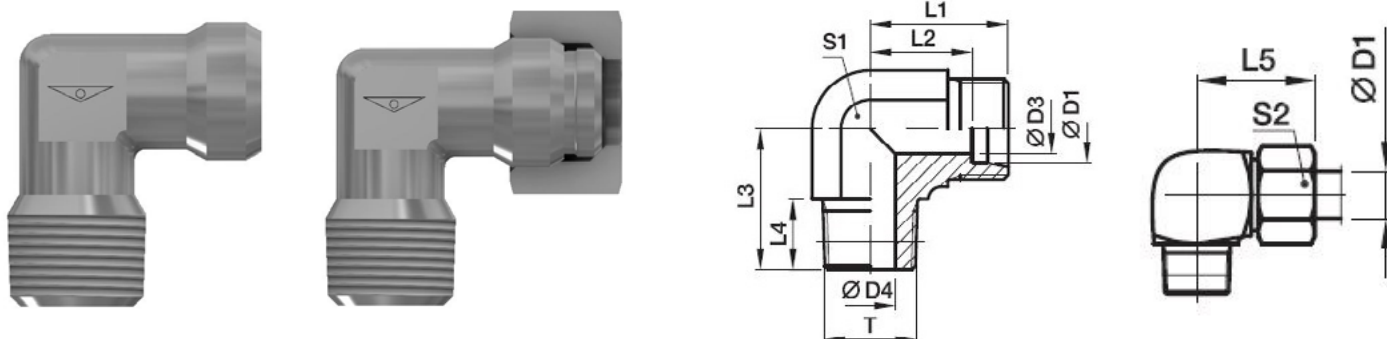
| Series | Order code | D1 | T        | D3 | D4   | D5   | L1   | L2   | L3   | L4 | L5   | L6 | L7  | S1 | S2 | S3 | Weight (g) | PN (bar) |     |
|--------|------------|----|----------|----|------|------|------|------|------|----|------|----|-----|----|----|----|------------|----------|-----|
|        |            |    |          |    |      |      |      |      |      |    |      |    |     |    |    |    |            | Z        | SS  |
| L      | W5-6LMED   | 06 | M 10x1.0 | 04 | 4.5  | 14.9 | 19.0 | 12.0 | 10.5 | 08 | 24.0 | 27 | 2.5 | 17 | 17 | 14 | 54         | 315      | 315 |
|        | W5-8LMED   | 08 | M 12x1.5 | 06 | 6.0  | 17.0 | 21.5 | 14.5 | 14.0 | 12 | 30.0 | 29 | 3.0 | 22 | 19 | 17 | 97         | 315      | 315 |
|        | W5-10LMED  | 10 | M 14x1.5 | 08 | 6.0  | 18.9 | 22.5 | 15.5 | 14.0 | 12 | 30.0 | 30 | 3.0 | 22 | 19 | 19 | 104        | 315      | 315 |
|        | W5-12LMED  | 12 | M 16x1.5 | 10 | 7.5  | 21.9 | 25.0 | 18.0 | 16.5 | 12 | 36.0 | 33 | 3.0 | 27 | 24 | 22 | 180        | 315      | 315 |
|        | W5-15LMED  | 15 | M 18x1.5 | 11 | 9.0  | 23.9 | 27.5 | 21.5 | 18.5 | 12 | 39.5 | 37 | 3.0 | 30 | 30 | 27 | 244        | 315      | 315 |
|        | W5-18LMED  | 18 | M 22x1.5 | 15 | 12.0 | 26.9 | 28.5 | 21.0 | 21.5 | 14 | 45.0 | 37 | 4.5 | 32 | 30 | 32 | 327        | 315      | 315 |
|        | W5-22LMED  | 22 | M 26x1.5 | 19 | 17.0 | 31.9 | 35.0 | 27.5 | 24.0 | 16 | 53.0 | 4  | 3.5 | 41 | 36 | 36 | 573        | 160      | 160 |
|        | W5-28LMED  | 28 | M 33x2.0 | 24 | 21.0 | 39.9 | 39.5 | 32.0 | 30.5 | 18 | 66.0 | 49 | 3.5 | 50 | 46 | 41 | 1017       | 160      | 160 |
|        | W5-35LMED  | 35 | M 42x2.0 | 30 | 27.0 | 49.9 | 46.5 | 36.0 | 35.5 | 20 | 76.0 | 58 | 3.5 | 60 | 55 | 50 | 1512       | 160      | 160 |
|        | W5-42LMED  | 42 | M 48x2.0 | 36 | 34.0 | 55.9 | 51.5 | 40.5 | 40.5 | 22 | 87.0 | 63 | 3.5 | 70 | 60 | 60 | 2217       | 160      | 160 |
| S      | W5-6SMED   | 06 | M 12x1.5 | 04 | 6.0  | 17.0 | 23.5 | 16.0 | 16.5 | 12 | 30.0 | 31 | 3.0 | 22 | 19 | 17 | 104        | 400      | 400 |
|        | W5-8SMED   | 08 | M 14x1.5 | 05 | 6.0  | 18.9 | 23.5 | 16.0 | 16.5 | 12 | 30.0 | 31 | 3.0 | 22 | 19 | 19 | 110        | 400      | 400 |
|        | W5-10SMED  | 10 | M 16x1.5 | 07 | 7.5  | 21.9 | 26.0 | 18.6 | 18.5 | 12 | 36.0 | 35 | 3.0 | 27 | 24 | 22 | 186        | 400      | 400 |
|        | W5-12SMED  | 12 | M 18x1.5 | 08 | 9.0  | 23.9 | 27.5 | 20.0 | 20.0 | 12 | 39.5 | 36 | 3.0 | 27 | 27 | 24 | 246        | 400      | 400 |
|        | W5-14SMED  | 14 | M 20x1.5 | 10 | 10.0 |      | 30.5 | 22.5 | 22.5 | 14 | 43.5 | 40 | 3.0 | 32 | 30 | 27 | 322        |          | 400 |
|        | W5-16SMED  | 16 | M 22x1.5 | 12 | 12.0 | 26.9 | 30.5 | 22.0 | 22.0 | 14 | 45.0 | 40 | 4.5 | 32 | 30 | 30 | 327        | 315      | 315 |
|        | W5-20SMED  | 20 | M 27x2.0 | 16 | 16.0 | 32.9 | 37.0 | 26.5 | 26.5 | 16 | 53.0 | 48 | 3.5 | 41 | 36 | 36 | 598        | 315      | 315 |
|        | W5-25SMED  | 25 | M 33x2.0 | 20 | 21.0 | 39.9 | 43.5 | 31.5 | 31.5 | 18 | 66.0 | 56 | 3.5 | 50 | 46 | 46 | 1055       | 250      | 250 |
|        | W5-30SMED  | 30 | M 42x2.0 | 25 | 27.0 | 49.9 | 50.5 | 37.0 | 37.0 | 20 | 76.0 | 64 | 3.5 | 60 | 55 | 50 | 1572       | 160      | 160 |
|        | W5-38SMED  | 38 | M 48x2.0 | 32 | 34.0 | 55.9 | 57.5 | 41.0 | 41.5 | 22 | 87.0 | 72 | 3.5 | 70 | 60 | 60 | 2317       | 160      | 160 |

## Male stud elbow W4-RT



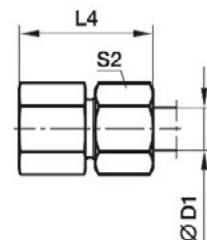
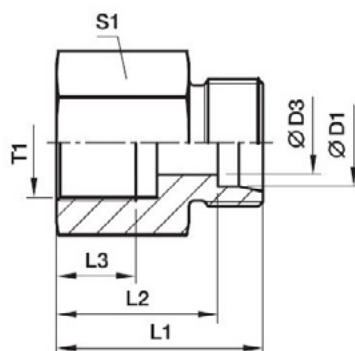
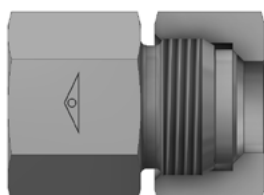
| Series | Order code     | D1 | T            | D3   | D4   | L1 | L2   | L3 | L4   | L5 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|----------------|----|--------------|------|------|----|------|----|------|----|----|----|------------|----------|-----|
|        |                |    |              |      |      |    |      |    |      |    |    |    |            | Z        | SS  |
| L      | W4-6LRT 1/8    | 06 | R 1/8 tap.   | 4.0  | 4.0  | 19 | 12.0 | 20 | 8    | 27 | 12 | 14 | 30         | 315      | 315 |
|        | W4-6LRT 1/4    | 06 | R 1/4 tap.   | 4.0  | 6.0  | 21 | 14.0 | 26 | 12   | 29 | 12 | 14 | 47         | 315      | 315 |
|        | W4-8LRT 1/8    | 08 | R 1/4 tap.   | 6.0  | 6.0  | 21 | 14.0 | 26 | 12   | 29 | 12 | 17 | 46         | 315      | 315 |
|        | W4-8LRT 1/4    | 08 | R 3/8 tap.   | 6.0  | 9.0  | 24 | 17.0 | 28 | 12   | 32 | 17 | 17 | 94         | 315      | 315 |
|        | W4-10LRT 1/4   | 10 | R 1/4 tap.   | 8.0  | 7.0  | 22 | 15.0 | 27 | 12   | 30 | 14 | 19 | 61         | 315      | 315 |
|        | W4-10LRT 3/8   | 10 | R 3/8 tap.   | 8.0  | 9.0  | 24 | 17.0 | 28 | 12   | 32 | 17 | 19 | 87         | 315      | 315 |
|        | W4-10LRT 1/2   | 10 | R 1/2 tap.   | 10.0 | 11.0 | 28 | 21.0 | 34 | 14   | 36 | 19 | 19 | 88         | 315      | 315 |
|        | W4-12LRT 3/8   | 12 | R 3/8 tap.   | 10.0 | 9.0  | 24 | 17.0 | 28 | 12   | 32 | 17 | 22 | 88         | 315      | 315 |
|        | W4-12LRT 1/4   | 12 | R 1/4 tap.   | 10.0 | 7.0  | 24 | 17.0 | 27 | 12   | 32 | 17 | 22 | 80         | 315      | 315 |
|        | W4-12LRT 1/2   | 12 | R 1/2 tap.   | 10.0 | 11.0 | 28 | 21.0 | 34 | 14   | 36 | 19 | 22 | 89         | 315      | 315 |
|        | W4-15LRT 1/2   | 15 | R 1/2 tap.   | 12.0 | 11.0 | 28 | 21.0 | 34 | 14   | 36 | 19 | 27 | 94         | 315      | 315 |
|        | W4-18LRT 1/2   | 18 | R 1/2 tap.   | 15.0 | 14.0 | 31 | 23.5 | 36 | 14   | 40 | 24 | 32 | 141        | 315      | 315 |
|        | W4-22LRT 3/4   | 22 | R 3/4 tap.   | 19.0 | 16.0 | 35 | 27.5 | 42 | 19.5 | 44 | 27 | 36 | 167        | 160      | 160 |
|        | W4-28LRT 1     | 28 | R 1 tap.     | 24.0 | 21.0 | 38 | 30.5 | 48 | 18   | 47 | 36 | 41 | 293        | 160      | 160 |
|        | W4-35LRT 1 1/4 | 35 | R 1 1/4 tap. | 30.0 | 28.0 | 45 | 34.5 | 54 | 20   | 56 | 41 | 50 | 437        | 160      | 160 |
|        | W4-42LRT 1 1/2 | 42 | R 1 1/2 tap. | 36.0 | 34.0 | 51 | 40   | 61 | 22   | 63 | 50 | 60 | 695        | 160      | 160 |
| S      | W4-6SRT 1/4    | 06 | R 1/4 tap.   | 4.0  | 4.0  | 23 | 16.0 | 26 | 12   | 31 | 12 | 17 | 56         | 400      | 400 |
|        | W4-8SRT 1/4    | 08 | R 1/4 tap.   | 5.0  | 5.0  | 24 | 17.0 | 27 | 12   | 32 | 14 | 19 | 73         | 400      | 400 |
|        | W4-10SRT 3/8   | 10 | R 3/8 tap.   | 7.0  | 7.0  | 25 | 17.5 | 28 | 12   | 34 | 17 | 22 | 104        | 400      | 400 |
|        | W4-12SRT 3/8   | 12 | R 3/8 tap.   | 8.0  | 8.0  | 29 | 21.5 | 28 | 12   | 35 | 17 | 24 | 126        | 400      | 400 |
|        | W4-14SRT 1/2   | 14 | R 1/2 tap.   | 10.0 | 10.0 | 30 | 22.0 | 32 | 14   | 40 | 19 | 27 | 101        | 400      | 400 |
|        | W4-16SRT 1/2   | 16 | R 1/2 tap.   | 12.0 | 12.0 | 33 | 24.5 | 32 | 14   | 43 | 24 | 30 | 150        | 400      | 400 |
|        | W4-20SRT 3/4   | 20 | R 3/4 tap.   | 16.0 | 16.0 | 37 | 26.5 | 42 | 16   | 48 | 27 | 36 | 209        | 400      | 400 |
|        | W4-25SRT 1     | 25 | R 1 tap.     | 20.0 | 20.0 | 42 | 30   | 48 | 18   | 54 | 36 | 46 | 376        | 400      | 400 |
|        | W4-30SRT 1 1/4 | 30 | R 1 1/4 tap. | 25.0 | 25.0 | 49 | 35.5 | 54 | 20   | 62 | 41 | 50 | 604        | 400      | 400 |
|        | W4-38SRT 1 1/2 | 38 | R 1 1/2 tap. | 32.0 | 32.0 | 57 | 41   | 61 | 22   | 72 | 50 | 60 | 937        | 315      | 315 |

## Male stud elbow W4-NPT



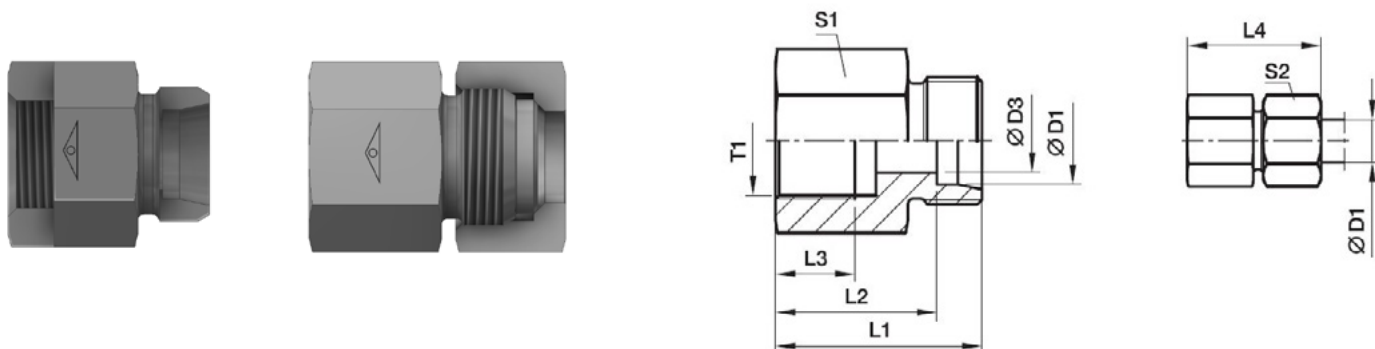
| Series | Order code    | D1 | T             | D3   | D4   | L1 | L2   | L3 | L4   | L5 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|---------------|----|---------------|------|------|----|------|----|------|----|----|----|------------|----------|-----|
|        |               |    |               |      |      |    |      |    |      |    |    |    |            | Z        | SS  |
| L      | W4-6LN 1/8    | 06 | 1/8-27NPT     | 4.0  | 4.0  | 19 | 12.0 | 20 | 10.0 | 27 | 12 | 14 | 29         | 315      | 315 |
|        | W4-6LN 1/4    | 06 | 1/4-18NPT     | 4.0  | 7.0  | 21 | 14.0 | 26 | 14.5 | 29 | 12 | 14 | 44         | 315      | 315 |
|        | W4-8LN 1/4    | 08 | 1/8-27NPT     | 6.0  | 4.0  | 21 | 14.0 | 26 | 10.0 | 29 | 12 | 17 | 48         | 315      | 315 |
|        | W4-8LN 3/8    | 08 | 1/4-18NPT     | 6.0  | 6.0  | 21 | 14.0 | 26 | 14.5 | 29 | 12 | 17 | 47         | 315      | 315 |
|        | W4-10LN 1/4   | 10 | 1/4-18NPT     | 8.0  | 7.0  | 22 | 15.0 | 27 | 14.5 | 30 | 14 | 19 | 61         | 315      | 315 |
|        | W4-10LN 3/8   | 10 | 3/8-18NPT     | 8.0  | 8.0  | 24 | 17.0 | 28 | 14.5 | 32 | 17 | 19 | 92         | 315      | 315 |
|        | W4-12LN 3/8   | 12 | 3/8-18NPT     | 10.0 | 7.0  | 24 | 17.0 | 28 | 14.5 | 32 | 17 | 22 | 82         | 315      | 315 |
|        | W4-12LN 1/4   | 12 | 1/4-14NPT     | 10.0 | 8.0  | 24 | 17.0 | 28 | 14.5 | 32 | 17 | 22 | 92         | 315      | 315 |
|        | W4-12LN 1/2   | 12 | 1/2-14NPT     | 10.0 | 11.0 | 28 | 21.0 | 34 | 19.5 | 36 | 19 | 22 | 90         | 315      | 315 |
|        | W4-15LN 1/2   | 15 | 1/2-14NPT     | 12.0 | 11.0 | 28 | 21.0 | 34 | 19.5 | 36 | 19 | 27 | 89         | 315      | 315 |
|        | W4-18LN 1/2   | 18 | 1/2-14NPT     | 15.0 | 12.0 | 31 | 23.5 | 36 | 19.5 | 40 | 24 | 32 | 150        | 315      | 315 |
|        | W4-22LN 3/4   | 22 | 3/4-14NPT     | 19.0 | 16.0 | 35 | 27.5 | 42 | 19.5 | 44 | 27 | 36 | 176        | 160      | 160 |
|        | W4-28LN 1     | 28 | 1-11.5NPT     | 24.0 | 21.0 | 38 | 30.5 | 48 | 24.5 | 47 | 36 | 41 | 314        | 160      | 160 |
|        | W4-35LN 1 1/4 | 35 | 1 1/4-11.5NPT | 30.0 | 28.0 | 45 | 34.5 | 54 | 25.0 | 56 | 41 | 50 | 465        | 160      | 160 |
|        | W4-42LN 1 1/2 | 42 | 1 1/2-11.5NPT | 36.0 | 34.0 | 51 | 40.0 | 61 | 26.0 | 63 | 50 | 60 | 849        | 160      | 160 |
| S      | W4-6SN 1/4    | 06 | 1/4-18NPT     | 4.0  | 4.0  | 23 | 16.0 | 26 | 14.5 | 31 | 12 | 17 | 56         | 400      | 400 |
|        | W4-8SN 1/4    | 08 | 1/4-18NPT     | 5.0  | 5.0  | 24 | 17.0 | 27 | 14.5 | 32 | 14 | 19 | 73         | 400      | 400 |
|        | W4-10SN 3/8   | 10 | 3/8-18NPT     | 7.0  | 7.0  | 25 | 17.5 | 28 | 14.5 | 34 | 17 | 22 | 98         | 400      | 400 |
|        | W4-12SN 3/8   | 12 | 3/8-18NPT     | 8.0  | 8.0  | 29 | 22.5 | 28 | 14.5 | 38 | 17 | 24 | 123        | 400      | 400 |
|        | W4-14SN 1/2   | 14 | 1/2-14NPT     | 10.0 | 10.0 | 30 | 22.0 | 34 | 19.5 | 40 | 19 | 27 | 103        | 400      | 400 |
|        | W4-16SN 1/2   | 16 | 1/2-14NPT     | 12.0 | 12.0 | 33 | 24.5 | 36 | 19.5 | 43 | 24 | 30 | 157        | 400      | 400 |
|        | W4-20SN 3/4   | 20 | 3/4-14NPT     | 16.0 | 16.0 | 37 | 26.5 | 42 | 19.5 | 48 | 27 | 36 | 205        | 400      | 400 |
|        | W4-25SN 1     | 25 | 1-11.5NPT     | 20.0 | 20.0 | 42 | 30.0 | 48 | 24.5 | 54 | 36 | 46 | 381        | 400      | 400 |
|        | W4-30SN 1 1/4 | 30 | 1 1/4-11.5NPT | 25.0 | 25.0 | 49 | 35.5 | 54 | 25.0 | 62 | 41 | 50 | 598        | 400      | 400 |
|        | W4-38SN 1 1/2 | 38 | 1 1/2-11.5NPT | 32.0 | 32.0 | 57 | 41.0 | 61 | 26.0 | 72 | 50 | 60 | 1029       | 315      | 315 |

## Female connector L1-R



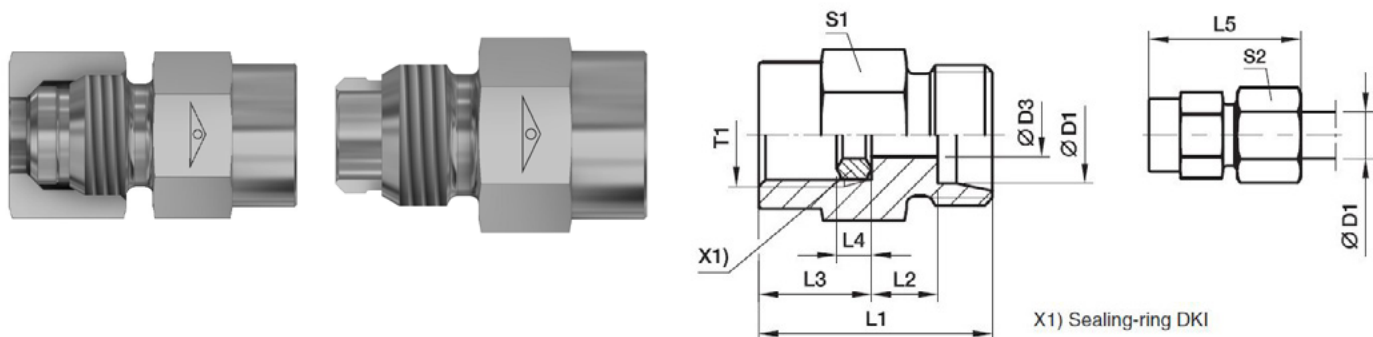
| Series | Order code    | D1 | T1      | D3 | L1   | L2   | L3   | L4 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|---------------|----|---------|----|------|------|------|----|----|----|------------|----------|-----|
|        |               |    |         |    |      |      |      |    |    |    |            | Z        | SS  |
| L      | L1-6LR 1/8    | 06 | G 1/8   | 4  | 26.0 | 19.0 | 8.0  | 34 | 14 | 14 | 18         | 315      | 315 |
|        | L1-8LR 1/4    | 08 | G 1/4   | 6  | 31.0 | 24.0 | 12.0 | 39 | 09 | 17 | 39         | 315      | 315 |
|        | L1-8LR 3/8    | 08 | G 3/8   | 6  | 32.0 | 45.0 | 12.0 | 40 | 24 | 17 | 61         | 315      | 315 |
|        | L1-8LR 1/2    | 08 | G 1/2   | 6  | 36.0 | 29.0 | 14.0 | 44 | 27 | 17 | 80         | 315      | 315 |
|        | L1-10LR 1/4   | 10 | G 1/4   | 8  | 32.0 | 25.0 | 12.0 | 40 | 19 | 19 | 40         | 315      | 315 |
|        | L1-10LR 3/8   | 10 | G 3/8   | 8  | 33.0 | 26.0 | 12.0 | 41 | 24 | 19 | 63         | 315      | 315 |
|        | L1-10LR 1/2   | 10 | G 1/2   | 8  | 37.0 | 30.0 | 14.0 | 45 | 27 | 19 | 81         | 315      | 315 |
|        | L1-12LR 3/8   | 12 | G 3/8   | 10 | 33.0 | 26.0 | 12.0 | 41 | 24 | 22 | 64         | 315      | 315 |
|        | L1-12LR 1/2   | 12 | G 1/2   | 10 | 37.0 | 30.0 | 14.0 | 45 | 27 | 22 | 83         | 315      | 315 |
|        | L1-15LR 1/2   | 15 | G 1/2   | 12 | 38.0 | 31.0 | 14.0 | 46 | 27 | 27 | 87         | 315      | 315 |
|        | L1-18LR 1/2   | 18 | G 1/2   | 15 | 38.0 | 30.5 | 14.0 | 47 | 27 | 32 | 89         | 315      | 315 |
|        | L1-22LR 3/4   | 22 | G 3/4   | 19 | 43.0 | 35.5 | 16.0 | 52 | 36 | 36 | 173        | 160      | 160 |
|        | L1-28LR 1     | 28 | G 1     | 24 | 45.5 | 38.0 | 18.0 | 55 | 41 | 41 | 211        | 160      | 160 |
|        | L1-35LR 1 1/4 | 35 | G 1 1/4 | 30 | 54.5 | 41.0 | 20.0 | 63 | 55 | 50 | 469        | 160      | 160 |
|        | L1-42LR 1 1/2 | 42 | G 1 1/2 | 36 | 63.5 | 12.5 | 22.0 | 65 | 60 | 60 | 540        | 160      | 160 |
| S      | L1-6SR 1/4    | 06 | G 1/4   | 4  | 33.0 | 26.0 | 12.0 | 41 | 19 | 17 | 43         | 400      | 400 |
|        | L1-8SR 1/4    | 08 | G 1/4   | 5  | 33.0 | 26.0 | 12.0 | 41 | 19 | 19 | 447        | 400      | 400 |
|        | L1-10SR 3/8   | 10 | G 3/8   | 7  | 34.0 | 26.5 | 12.0 | 43 | 24 | 22 | 68         | 400      | 400 |
|        | L1-12SR 3/8   | 12 | G 3/8   | 8  | 34.0 | 26.5 | 12.0 | 43 | 24 | 24 | 71         | 400      | 400 |
|        | L1-14SR 1/2   | 14 | G 1/2   | 10 | 40.0 | 32.0 | 14.0 | 50 | 30 | 27 | 125        | 400      | 400 |
|        | L1-16SR 1/2   | 16 | G 1/2   | 12 | 40.0 | 31.5 | 14.0 | 50 | 30 | 30 | 126        | 400      | 400 |
|        | L1-20SR 3/4   | 20 | G 3/4   | 16 | 45.0 | 34.5 | 16.0 | 56 | 36 | 36 | 196        | 315      | 315 |
|        | L1-25SR 1     | 25 | G 1     | 20 | 49.5 | 37.5 | 18.0 | 62 | 41 | 46 | 246        | 315      | 315 |
|        | L1-30SR 1 1/4 | 30 | G 1 1/4 | 25 | 55.5 | 42.0 | 22.0 | 69 | 55 | 50 | 537        | 315      | 315 |
|        | L1-38SR 1 1/2 | 38 | G 1 1/2 | 32 | 59.5 | 43.5 | 22.0 | 74 | 60 | 60 | 649        | 250      | 250 |

## Female connector L1-M



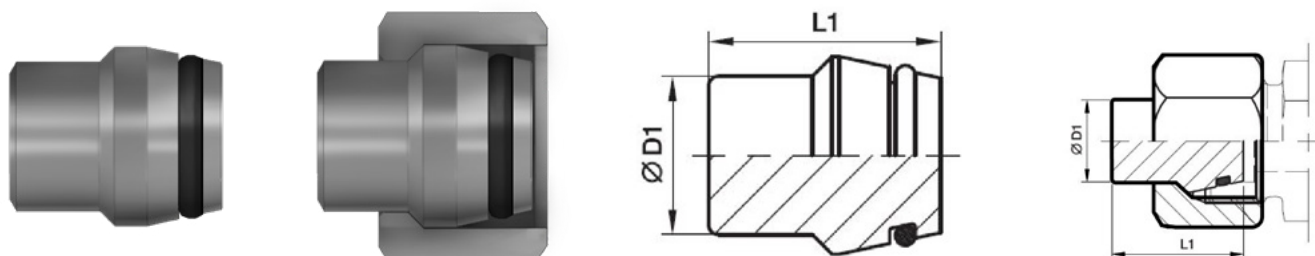
| Series | Order code | D1 | T1       | D3 | L1   | L2   | L3   | L4 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|------------|----|----------|----|------|------|------|----|----|----|------------|----------|-----|
|        |            |    |          |    |      |      |      |    |    |    |            | Z        | SS  |
| L      | L1-6LM     | 06 | M 10x1.0 | 4  | 26.5 | 19.5 | 8.0  | 34 | 14 | 14 | 18         | 315      | 315 |
|        | L1-8LM     | 08 | M 12x1.5 | 6  | 31.0 | 24.0 | 12.0 | 39 | 17 | 17 | 32         | 315      | 315 |
|        | L1-10LM    | 10 | M 14x1.5 | 8  | 32.0 | 25.0 | 12.0 | 40 | 19 | 19 | 39         | 315      | 315 |
|        | L1-12LM    | 12 | M 16x1.5 | 10 | 33.0 | 26.0 | 12.0 | 41 | 22 | 22 | 52         | 315      | 315 |
|        | L1-15LM    | 15 | M 18x1.5 | 12 | 35.0 | 28.0 | 12.0 | 43 | 24 | 27 | 68         | 315      | 315 |
|        | L1-18LM    | 18 | M 22x1.5 | 15 | 37.0 | 29.5 | 14.0 | 46 | 30 | 32 | 111        | 315      | 315 |
|        | L1-22LM    | 22 | M 26x2.0 | 19 | 42.0 | 34.5 | 16.0 | 51 | 32 | 36 | 123        | 160      | 160 |
|        | L1-28LM    | 28 | M 33x2.0 | 24 | 45.0 | 37.5 | 18.0 | 54 | 41 | 41 | 211        | 160      | 160 |
|        | L1-35LM    | 35 | M 42x2.0 | 30 | 51.0 | 40.5 | 20.0 | 62 | 55 | 50 | 459        | 160      | 160 |
|        | L1-42LM    | 42 | M 48x2.0 | 36 | 53.0 | 42.0 | 22.0 | 65 | 60 | 60 | 522        | 160      | 160 |
| S      | L1-6SM     | 06 | M 12x1.5 | 4  | 33.0 | 26.0 | 12.0 | 41 | 17 | 17 | 35         | 400      | 400 |
|        | L1-8SM     | 08 | M 14x1.5 | 5  | 33.0 | 26.0 | 12.0 | 41 | 17 | 19 | 42         | 400      | 400 |
|        | L1-10SM    | 10 | M 16x1.5 | 7  | 34.0 | 26.5 | 12.0 | 43 | 22 | 22 | 58         | 400      | 400 |
|        | L1-12SM    | 12 | M 18x1.5 | 8  | 35.0 | 27.5 | 12.0 | 44 | 24 | 24 | 70         | 400      | 400 |
|        | L1-14SM    | 14 | M 20x1.5 | 10 | 39.0 | 31.0 | 14.0 | 49 | 27 | 27 | 95         | 400      | 400 |
|        | L1-16SM    | 16 | M 22x1.5 | 12 | 39.0 | 30.5 | 14.0 | 49 | 30 | 30 | 114        | 400      | 400 |
|        | L1-20SM    | 20 | M 27x2.0 | 16 | 45.0 | 34.5 | 16.0 | 56 | 36 | 36 | 189        | 315      | 315 |
|        | L1-25SM    | 25 | M 33x2.0 | 20 | 49.0 | 37.0 | 18.0 | 61 | 41 | 46 | 235        | 315      | 315 |
|        | L1-30SM    | 30 | M 42x2.0 | 25 | 55.0 | 41.5 | 20.0 | 68 | 55 | 50 | 490        | 315      | 315 |
|        | L1-38SM    | 38 | M 48x2.0 | 32 | 59.0 | 43.0 | 22.0 | 74 | 60 | 60 | 597        | 250      | 250 |

## Pressure gauge connector MV



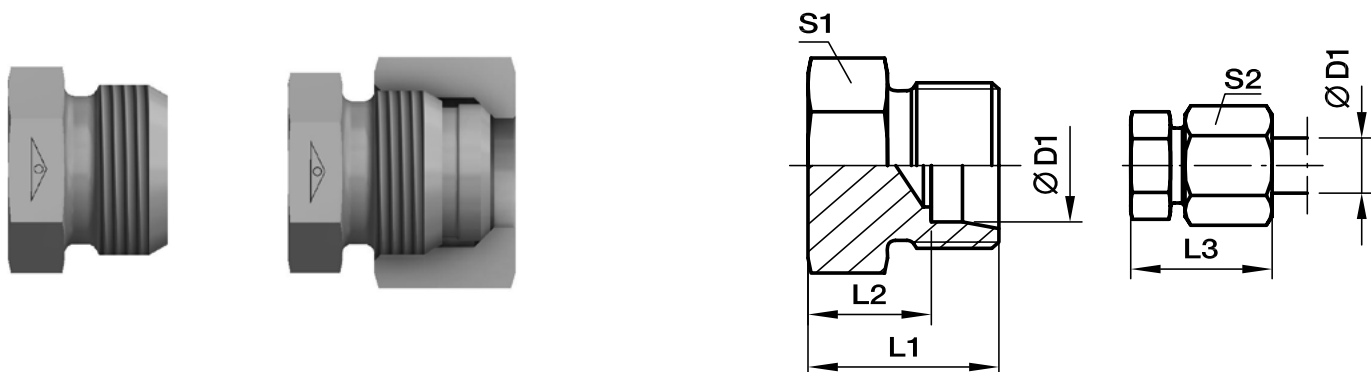
| Series | Order code | D1 | T1    | D3  | L1 | L2   | L3   | L4   | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|------------|----|-------|-----|----|------|------|------|----|----|------------|----------|-----|
|        |            |    |       |     |    |      |      |      |    |    |            | Z        | SS  |
| L      | NR MV-6L   | 06 | G 1/4 | 2.5 | 29 | 7.5  | 14.5 | 4.5  | 37 | 14 | 37         | 315      | 315 |
|        | NR MV-8L   | 08 | G 1/4 | 5.5 | 29 | 7.5  | 14.5 | 4.5  | 37 | 17 | 38         | 315      | 315 |
|        | NR MV-10L  | 10 | G 1/4 | 5.5 | 30 | 8.5  | 14.5 | 4.5  | 38 | 19 | 41         | 315      | 315 |
|        | NR MV-12L  | 12 | G 1/4 | 5.5 | 30 | 8.5  | 14.5 | 4.50 | 38 | 22 | 43         | 315      | 315 |
| S      | NR MV-6S   | 06 | G 1/2 | 3.5 | 38 | 11.0 | 20.0 | 5.0  | 46 | 27 | 86         | 630      | 630 |
|        | NR MV-8S   | 08 | G 1/2 | 3.5 | 38 | 11.0 | 20.0 | 5.0  | 46 | 27 | 86         | 630      | 630 |
|        | NR MV-10S  | 10 | G 1/2 | 7.5 | 38 | 10.5 | 20.0 | 5.0  | 47 | 27 | 88         | 630      | 630 |
|        | NR MV-12L  | 12 | G 1/2 | 7.5 | 38 | 10.5 | 20.0 | 5.0  | 47 | 27 | 93         | 630      | 630 |

## Blaking plug with nut for cone P1



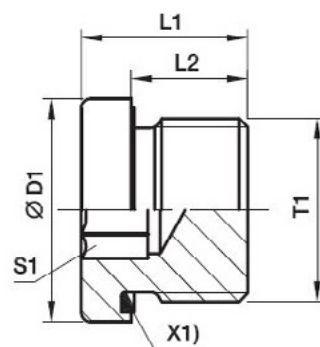
| Series | Order code | D1 | L1   | Weight (g) | PN (bar) |     |
|--------|------------|----|------|------------|----------|-----|
|        |            |    |      |            | Z        | SS  |
| L      | P1-6L      | 06 | 18.5 | 15         | 500      | 315 |
|        | P1-8L      | 08 | 18.5 | 24         | 500      | 315 |
|        | P1-10L     | 10 | 20.0 | 33         | 500      | 315 |
|        | P1-12L     | 12 | 20.5 | 46         | 400      | 315 |
|        | P1-15L     | 15 | 20.5 | 73         | 400      | 315 |
|        | P1-18L     | 18 | 22.0 | 111        | 400      | 315 |
|        | P1-22L     | 22 | 25.0 | 162        | 250      | 160 |
|        | P1-28L     | 28 | 25.5 | 220        | 250      | 160 |
|        | P1-35L     | 35 | 30.0 | 376        | 250      | 160 |
|        | P1-42L     | 42 | 30.0 | 558        | 250      | 160 |
| S      | P1-6S      | 06 | 18.5 | 23         | 800      | 630 |
|        | P1-8S      | 08 | 18.5 | 29         | 800      | 630 |
|        | P1-10S     | 10 | 20.0 | 46         | 800      | 630 |
|        | P1-12S     | 12 | 20.5 | 55         | 630      | 630 |
|        | P1-14S     | 14 | 22.5 | 83         | 630      | 630 |
|        | P1-16S     | 16 | 23.5 | 106        | 630      | 400 |
|        | P1-20S     | 20 | 28.5 | 180        | 420      | 400 |
|        | P1-25S     | 25 | 29.0 | 322        | 420      | 400 |
|        | P1-30S     | 30 | 30.5 | 398        | 420      | 400 |
|        | P1-38S     | 38 | 33.0 | 647        | 420      | 315 |

## Blaking plug with nut for cone P3



| Series | Order code | D1 | L1 | L2   | L3 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|------------|----|----|------|----|----|----|------------|----------|-----|
|        |            |    |    |      |    |    |    |            | Z        | SS  |
| L      | P3-6L      | 06 | 14 | 7.0  | 22 | 12 | 14 | 8          | 315      | 315 |
|        | P3-8L      | 08 | 15 | 8.0  | 23 | 14 | 17 | 13         | 315      | 315 |
|        | P3-10L     | 10 | 16 | 9.0  | 24 | 17 | 19 | 17         | 315      | 315 |
|        | P3-12L     | 12 | 17 | 10.0 | 25 | 19 | 22 | 24         | 315      | 315 |
|        | P3-15L     | 15 | 18 | 11.0 | 26 | 24 | 27 | 41         | 315      | 315 |
|        | P3-18L     | 18 | 19 | 11.5 | 28 | 27 | 32 | 56         | 315      | 315 |
|        | P3-22L     | 22 | 21 | 13.5 | 30 | 32 | 36 | 84         | 160      | 160 |
|        | P3-28L     | 28 | 22 | 14.5 | 31 | 41 | 41 | 138        | 160      | 160 |
|        | P3-35L     | 35 | 25 | 14.5 | 36 | 46 | 50 | 203        | 160      | 160 |
|        | P3-42L     | 42 | 27 | 16.0 | 39 | 55 | 60 | 318        | 160      | 160 |
| S      | P3-6S      | 06 | 18 | 11.0 | 26 | 14 | 17 | 17         | 630      | 630 |
|        | P3-8S      | 08 | 20 | 13.0 | 28 | 17 | 19 | 28         | 630      | 630 |
|        | P3-10S     | 10 | 20 | 12.5 | 29 | 19 | 22 | 33         | 630      | 630 |
|        | P3-12S     | 12 | 22 | 14.5 | 31 | 22 | 24 | 50         | 630      | 630 |
|        | P3-14S     | 14 | 24 | 16.0 | 34 | 24 | 27 | 62         | 630      | 630 |
|        | P3-16S     | 16 | 24 | 15.5 | 34 | 27 | 30 | 75         | 400      | 400 |
|        | P3-20S     | 20 | 28 | 17.5 | 39 | 32 | 36 | 125        | 400      | 400 |
|        | P3-25S     | 25 | 32 | 20.0 | 44 | 41 | 46 | 229        | 400      | 400 |
|        | P3-30S     | 30 | 34 | 20.5 | 47 | 46 | 50 | 310        | 400      | 400 |
|        | P3-38S     | 38 | 39 | 23.0 | 54 | 55 | 60 | 508        | 315      | 315 |

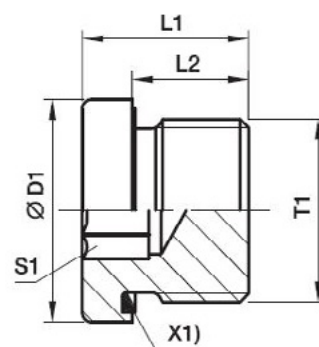
## Plug VST-R-ED



X1) Elastoc-sealing ED

| Order code | Male stud<br>BSP thread T1 | D1   | L1   | L2 | S1 | Weight (g) | PN (bar) |     |
|------------|----------------------------|------|------|----|----|------------|----------|-----|
|            |                            |      |      |    |    |            | Z        | SS  |
| VST1/8ED   | G 1/8 A                    | 14.0 | 12.3 | 8  | 5  | 8          | 400      | 400 |
| VST1/4ED   | G 1/4 A                    | 19.0 | 17.3 | 12 | 6  | 20         | 400      | 400 |
| VST3/8ED   | G 3/8 A                    | 22.0 | 17.3 | 12 | 8  | 25         | 400      | 400 |
| VST1/2ED   | G 1/2 A                    | 27.0 | 19.3 | 14 | 10 | 51         | 400      | 400 |
| VST3/4ED   | G 3/4 A                    | 32.0 | 21.3 | 16 | 12 | 79         | 400      | 400 |
| VST1ED     | G 1 A                      | 40.0 | 22.8 | 16 | 17 | 130        | 400      | 400 |
| VST1 1/4ED | G 1 1/4 A                  | 50.0 | 22.8 | 16 | 22 | 198        | 315      | 315 |
| VST1 1/2ED | G 1 1/2 A                  | 55.0 | 22.8 | 16 | 24 | 263        | 315      | 315 |

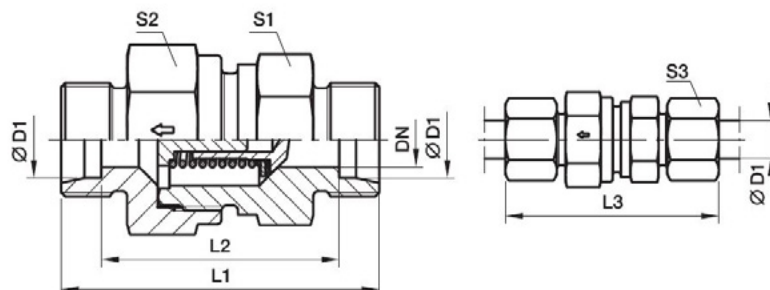
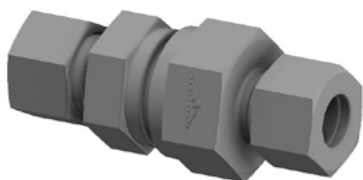
## Plug VST-M-ED



X1) Elastic-sealing ED

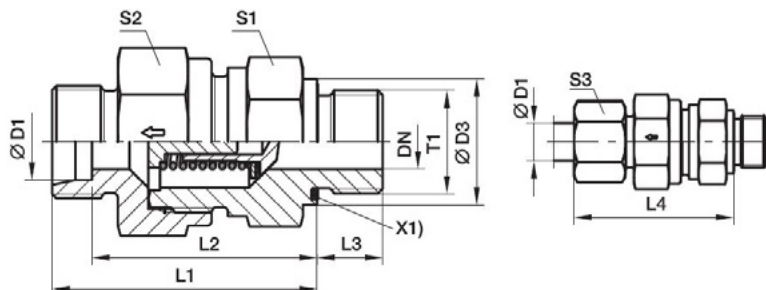
| Order code  | Male metric parallel thread T1 | D1   | L1   | L2 | S1 | Weight (g) | PN (bar) |     |
|-------------|--------------------------------|------|------|----|----|------------|----------|-----|
|             |                                |      |      |    |    |            | Z        | SS  |
| VST10x1ED   | M10x1.0                        | 14.0 | 12.3 | 8  | 5  | 8          | 400      | 400 |
| VST12x1.5ED | M12x1.5                        | 17.0 | 17.3 | 12 | 6  | 14         | 400      | 400 |
| VST14x1.5ED | M14x1.5                        | 19.0 | 17.3 | 12 | 6  | 20         | 400      | 400 |
| VST16x1.5ED | M16x1.5                        | 22.0 | 17.3 | 12 | 8  | 25         | 400      | 400 |
| VST18x1.5ED | M18x1.5                        | 24.0 | 17.3 | 12 | 8  | 32         | 400      | 400 |
| VST20x1.5ED | M20x1.5                        | 26.0 | 19.3 | 14 | 10 | 42         | 400      | 400 |
| VST22x1.5ED | M22x1.5                        | 27.0 | 19.3 | 14 | 10 | 51         | 400      | 400 |
| VST26x1.5ED | M26x1.5                        | 32.0 | 21.3 | 16 | 12 | 78         | 400      | 400 |
| VST27x2ED   | M27x2.0                        | 32.0 | 21.3 | 16 | 12 | 79         | 400      | 400 |
| VST33x2ED   | M33x2.0                        | 40.0 | 22.8 | 16 | 17 | 130        | 400      | 400 |
| VST42x2ED   | M42x2.0                        | 50.0 | 22.8 | 16 | 22 | 198        | 315      | 315 |
| VST48x2ED   | M48x2.0                        | 55.0 | 22.8 | 16 | 24 | 263        | 315      | 315 |

## Check Valve CHD



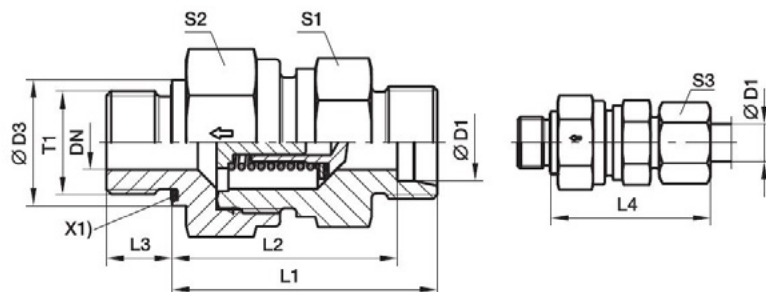
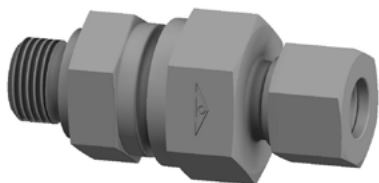
| Series | Order code | D1 | DN   | L1   | L2   | L3    | S1 | S2 | S3 | Weight (g) | PN (bar) |     |
|--------|------------|----|------|------|------|-------|----|----|----|------------|----------|-----|
|        |            |    |      |      |      |       |    |    |    |            | Z        | SS  |
| L      | CHD-6L     | 06 | 3.5  | 43   | 29.0 | 58.0  | 17 | 17 | 14 | 46         | 400      | 250 |
|        | CHD-8L     | 08 | 5.5  | 44   | 30.0 | 59.0  | 19 | 19 | 17 | 61         | 400      | 250 |
|        | CHD-10L    | 10 | 7.5  | 54.5 | 40.5 | 69.5  | 22 | 24 | 19 | 104        | 400      | 250 |
|        | CHD-12L    | 12 | 9.5  | 57.5 | 43.5 | 72.5  | 27 | 30 | 22 | 166        | 400      | 250 |
|        | CHD-15L    | 15 | 11.5 | 61.5 | 47.5 | 77.5  | 27 | 32 | 27 | 192        | 400      | 250 |
|        | CHD-18L    | 18 | 14.0 | 66.5 | 51.5 | 83.5  | 36 | 36 | 32 | 292        | 400      | 160 |
|        | CHD-22L    | 22 | 18.0 | 76.5 | 61.5 | 93.5  | 41 | 46 | 36 | 472        | 250      | 160 |
|        | CHD-28L    | 28 | 23.0 | 84.5 | 69.5 | 102.5 | 50 | 55 | 41 | 746        | 250      | 100 |
| S      | CHD-6S     | 06 | 3.5  | 48.5 | 34.5 | 63.5  | 19 | 19 | 17 | 70         | 420      | 400 |
|        | CHD-8S     | 08 | 3.5  | 48.5 | 34.5 | 63.5  | 19 | 19 | 19 | 74         | 420      | 400 |
|        | CHD-10S    | 10 | 5.5  | 55.5 | 40.5 | 72.5  | 22 | 24 | 22 | 121        | 420      | 400 |
|        | CHD-12S    | 12 | 7.5  | 57.5 | 42.5 | 74.5  | 24 | 27 | 24 | 148        | 420      | 400 |
|        | CHD-14S    | 14 | 9.5  | 63.5 | 47.5 | 82.5  | 27 | 32 | 27 | 218        | 420      | 315 |
|        | CHD-16S    | 16 | 11.5 | 67.5 | 50.5 | 86.5  | 32 | 36 | 30 | 286        | 420      | 315 |
|        | CHD-20S    | 20 | 15.0 | 75.5 | 54.5 | 97.5  | 41 | 46 | 36 | 506        | 420      | 250 |
|        | CHD-25S    | 25 | 19.0 | 82.5 | 58.5 | 106.5 | 46 | 50 | 46 | 639        | 420      | 250 |

## CHECK VALVE CHV-R- ED



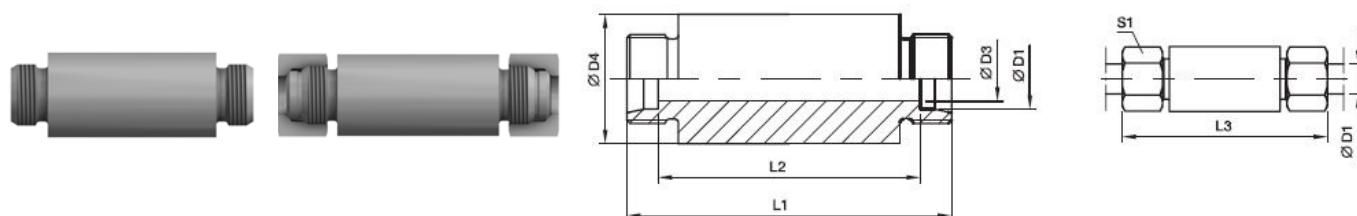
| Series | Order code      | D1 | T1  | DN   | D3 | L1   | L2   | L3 | L4   | S1 | S2 | S3 | Weight (g) | PN (bar) |     |
|--------|-----------------|----|-----|------|----|------|------|----|------|----|----|----|------------|----------|-----|
|        |                 |    |     |      |    |      |      |    |      |    |    |    |            | Z        | SS  |
| L      | CHV-6LR 1/8 ED  | 06 | 1/8 | 3.5  | 14 | 35   | 28.0 | 8  | 42.5 | 17 | 17 | 14 | 47         | 400      | 250 |
|        | CHV-8LR 1/4 ED  | 08 | 1/4 | 5.5  | 19 | 38   | 30.0 | 12 | 44.5 | 19 | 19 | 17 | 62         | 400      | 250 |
|        | CHV-10LR 1/4 ED | 10 | 1/4 | 7.5  | 19 | 45.5 | 38.5 | 12 | 53.0 | 22 | 24 | 19 | 105        | 400      | 250 |
|        | CHV-12LR 3/8 ED | 12 | 3/8 | 9.5  | 22 | 49.5 | 42.5 | 12 | 57.0 | 27 | 30 | 22 | 175        | 400      | 250 |
|        | CHV-15LR 1/2 ED | 15 | 1/2 | 11.5 | 27 | 52.5 | 45.5 | 14 | 60.5 | 27 | 32 | 27 | 205        | 400      | 250 |
|        | CHV-18LR 1/2 ED | 18 | 1/2 | 14.0 | 27 | 57.5 | 50.0 | 14 | 66.0 | 36 | 36 | 32 | 294        | 400      | 160 |
|        | CHV-22LR 3/4 ED | 22 | 3/4 | 18.0 | 32 | 62.5 | 55.0 | 16 | 71.0 | 41 | 46 | 36 | 450        | 250      | 160 |
|        | CHV-28LR 1 ED   | 28 | 1   | 23.0 | 40 | 70.5 | 63.0 | 18 | 79.5 | 50 | 55 | 41 | 720        | 250      | 100 |
| S      | CHV-6SR 1/4 ED  | 06 | 1/4 | 3.5  | 19 | 38.5 | 31.5 | 12 | 46.0 | 19 | 19 | 17 | 73         | 420      | 400 |
|        | CHV-8SR 1/4 ED  | 08 | 1/4 | 3.5  | 19 | 38.5 | 31.5 | 12 | 46.0 | 19 | 19 | 19 | 79         | 420      | 400 |
|        | CHV-10SR 3/8 ED | 10 | 3/8 | 5.5  | 22 | 45.5 | 38.5 | 12 | 54.0 | 22 | 24 | 22 | 132        | 420      | 400 |
|        | CHV-12SR 3/8 ED | 12 | 3/8 | 7.5  | 22 | 48.5 | 41.0 | 12 | 57.0 | 24 | 27 | 24 | 153        | 420      | 400 |
|        | CHV-14SR 1/2 ED | 14 | 1/2 | 9.5  | 27 | 52.5 | 44.5 | 14 | 62.0 | 27 | 32 | 27 | 230        | 420      | 315 |
|        | CHV-16SR 1/2 ED | 16 | 1/2 | 11.5 | 27 | 56.5 | 48.0 | 14 | 66.0 | 32 | 36 | 30 | 293        | 420      | 315 |
|        | CHV-20SR 3/4 ED | 20 | 3/4 | 15.0 | 32 | 62.5 | 52.0 | 16 | 73.5 | 41 | 46 | 36 | 511        | 420      | 250 |
|        | CHV-25SR 1 ED   | 25 | 1   | 19.0 | 40 | 66.5 | 54.5 | 18 | 78.5 | 46 | 50 | 46 | 648        | 420      | 250 |

## CHECK VALVE CHZ-R-ED



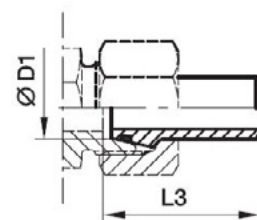
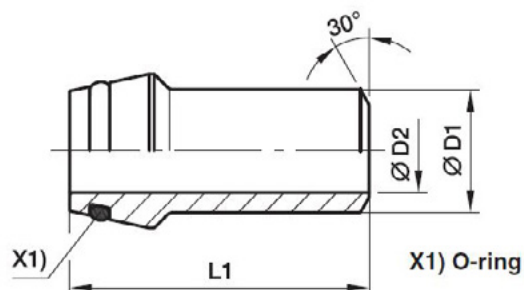
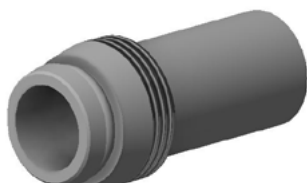
| Series | Order code      | D1 | T1  | DN   | D3 | L1   | L2   | L3 | L4   | S1 | S2 | S3 | Weight (g) | PN (bar) |     |
|--------|-----------------|----|-----|------|----|------|------|----|------|----|----|----|------------|----------|-----|
|        |                 |    |     |      |    |      |      |    |      |    |    |    |            | Z        | SS  |
| L      | CHZ-6LR 1/8 ED  | 06 | 1/8 | 3.5  | 14 | 33.5 | 26.5 | 8  | 4.1  | 17 | 17 | 14 | 44         | 400      | 250 |
|        | CHZ-8LR 1/4 ED  | 08 | 1/4 | 5.5  | 19 | 35.5 | 28.5 | 12 | 43.0 | 19 | 19 | 17 | 59         | 400      | 250 |
|        | CHZ-10LR 1/4 ED | 10 | 1/4 | 7.5  | 19 | 45.5 | 38.5 | 12 | 53.0 | 22 | 24 | 19 | 125        | 400      | 250 |
|        | CHZ-12LR 3/8 ED | 12 | 3/8 | 9.5  | 22 | 17.5 | 40.5 | 12 | 55.0 | 27 | 30 | 22 | 161        | 400      | 250 |
|        | CHZ-15LR 1/2 ED | 15 | 1/2 | 11.5 | 27 | 49.5 | 42.5 | 14 | 57.5 | 27 | 32 | 27 | 186        | 400      | 250 |
|        | CHZ-18LR 1/2 ED | 18 | 1/2 | 14.0 | 27 | 55.5 | 48.0 | 14 | 64.0 | 36 | 36 | 32 | 275        | 400      | 160 |
|        | CHZ-22LR 3/4 ED | 22 | 3/4 | 18.0 | 32 | 63.5 | 56.0 | 16 | 72.0 | 41 | 46 | 36 | 463        | 250      | 160 |
|        | CHZ-28LR 1 ED   | 28 | 1   | 23.0 | 40 | 71.5 | 64.0 | 18 | 80.5 | 50 | 55 | 41 | 721        | 250      | 100 |
| S      | CHZ-6SR 1/4 ED  | 06 | 1/4 | 3.5  | 17 | 38.5 | 31.5 | 12 | 46.0 | 19 | 19 | 17 | 70         | 420      | 400 |
|        | CHZ-8SR 1/4 ED  | 08 | 1/4 | 3.5  | 19 | 38.5 | 31.5 | 12 | 46.0 | 19 | 19 | 19 | 75         | 420      | 400 |
|        | CHZ-10SR 3/8 ED | 10 | 3/8 | 5.5  | 22 | 45.5 | 38.0 | 12 | 54.0 | 22 | 24 | 22 | 123        | 420      | 400 |
|        | CHZ-12SR 3/8 ED | 12 | 3/8 | 7.5  | 24 | 48.5 | 41.0 | 12 | 57.0 | 24 | 27 | 24 | 157        | 420      | 400 |
|        | CHZ-14SR 1/2 ED | 14 | 1/2 | 9.5  | 26 | 51.5 | 43.5 | 14 | 61.0 | 27 | 32 | 27 | 214        | 420      | 315 |
|        | CHZ-16SR 1/2 ED | 16 | 1/2 | 11.5 | 27 | 54.5 | 46.0 | 14 | 64.0 | 32 | 36 | 30 | 279        | 420      | 315 |
|        | CHZ-20SR 3/4 ED | 20 | 3/4 | 15.0 | 32 | 60.5 | 50.0 | 16 | 71.5 | 41 | 46 | 36 | 487        | 420      | 250 |
|        | CHZ-25SR 1 ED   | 25 | 1   | 19.0 | 40 | 66.5 | 54.5 | 18 | 78.5 | 46 | 50 | 46 | 647        | 420      | 250 |

## Welding bulkhead B3



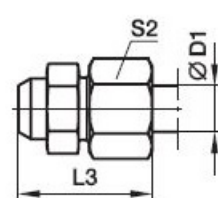
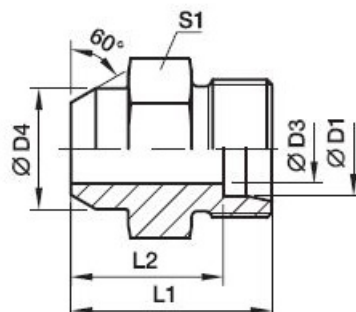
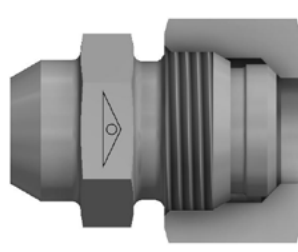
| Series | Order code | D1 | D3 | D4   | L1  | L2 | L3  | S1 | Weight (g) | PN (bar) |     |
|--------|------------|----|----|------|-----|----|-----|----|------------|----------|-----|
|        |            |    |    |      |     |    |     |    |            | Z        | SS  |
| L      | B3-6L      | 06 | 4  | 18   | 70  | 56 | 85  | 14 | 103        | 500      | 315 |
|        | B3-8L      | 08 | 6  | 20   | 70  | 56 | 85  | 17 | 121        | 500      | 315 |
|        | B3-10L     | 10 | 8  | 22   | 72  | 58 | 87  | 19 | 140        | 500      | 315 |
|        | B3-12L     | 12 | 10 | 25   | 72  | 58 | 87  | 22 | 176        | 400      | 315 |
|        | B3-15L     | 15 | 12 | 28   | 84  | 70 | 100 | 27 | 262        | 400      | 315 |
|        | B3-18L     | 18 | 15 | 32   | 84  | 69 | 101 | 32 | 333        | 400      | 315 |
|        | B3-22L     | 22 | 19 | 36   | 88  | 73 | 105 | 36 | 394        | 250      | 160 |
|        | B3-28L     | 28 | 24 | 40   | 88  | 73 | 106 | 41 | 448        | 250      | 160 |
|        | B3-35L     | 35 | 30 | 50   | 92  | 71 | 114 | 50 | 713        | 250      | 160 |
|        | B3-42L     | 42 | 36 | 60   | 92  | 70 | 115 | 60 | 997        | 250      | 160 |
| S      | B3-6S      | 06 | 4  | 20   | 74  | 60 | 89  | 17 | 135        | 800      | 630 |
|        | B3-8S      | 08 | 5  | 22   | 74  | 60 | 89  | 19 | 163        | 800      | 630 |
|        | B3-10S     | 10 | 7  | 22.5 | 74  | 59 | 91  | 22 | 201        | 800      | 630 |
|        | B3-12S     | 12 | 8  | 28   | 74  | 59 | 91  | 24 | 149        | 630      | 630 |
|        | B3-14S     | 14 | 10 | 30   | 88  | 72 | 107 | 27 | 337        | 630      | 630 |
|        | B3-16S     | 16 | 12 | 35   | 88  | 71 | 107 | 30 | 441        | 30       | 400 |
|        | B3-20S     | 20 | 16 | 38   | 92  | 71 | 114 | 36 | 509        | 420      | 400 |
|        | B3-25S     | 25 | 20 | 45   | 96  | 72 | 120 | 46 | 720        | 420      | 400 |
|        | B3-30S     | 30 | 25 | 50   | 100 | 73 | 126 | 50 | 873        | 420      | 400 |
|        | B3-38S     | 38 | 32 | 60   | 104 | 72 | 133 | 60 | 1248       | 420      | 315 |

## Weld nipple WR



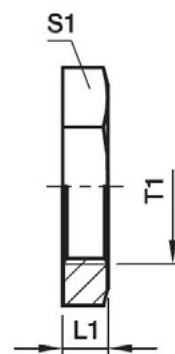
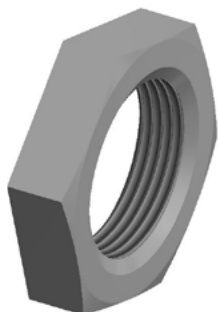
| Series | Order code | D1 | D2   | L1   | L3   | Recommended tube | Weight (g) | PN (bar) |     |
|--------|------------|----|------|------|------|------------------|------------|----------|-----|
|        |            |    |      |      |      |                  |            | Z        | SS  |
| LS     | WR-6x1.5   | 06 | 3.0  | 31.0 | 31.5 | 06x1.5           | 7          | 528      | 539 |
|        | WR-8x2     | 08 | 4.0  | 31.0 | 31.5 | 08x2.0           | 11         | 528      | 539 |
|        | WR-10x2    | 10 | 6.0  | 32.5 | 33.5 | 10x2.0           | 16         | 460      | 447 |
|        | WR-12x2,5  | 12 | 7.0  | 32.5 | 33.5 | 12x2.5           | 22         | 476      | 463 |
| L      | WR-15x2,5  | 15 | 10.0 | 34.0 | 34.5 | 15x2.5           | 31         | 315      | 315 |
|        | WR-18x2,5  | 18 | 13.0 | 35.5 | 36.5 | 18x2.5           | 40         | 315      | 315 |
|        | WR-22x2,5  | 22 | 17.0 | 38.5 | 39.5 | 22x2.5           | 57         | 160      | 160 |
|        | WR-28x3    | 28 | 22.0 | 41.5 | 42.5 | 28x3.0           | 89         | 160      | 160 |
|        | WR-35x4    | 35 | 27.0 | 47.5 | 49.5 | 35x4.0           | 150        | 160      | 160 |
|        | WR-42x4    | 42 | 34.0 | 47.5 | 50.0 | 42x4.0           | 190        | 160      | 160 |
| S      | WR-14x3    | 14 | 8.0  | 83.5 | 89.5 | 14x3.0           | 33         | 487      | 474 |
|        | WR-16x3    | 16 | 10.0 | 39.0 | 40.5 | 16x3.0           | 41         | 400      | 400 |
|        | WR-20x4    | 20 | 12.0 | 45.0 | 47.0 | 20x4.0           | 78         | 400      | 400 |
|        | WR-25x4    | 25 | 17.0 | 49.5 | 53.0 | 25x4.0           | 111        | 379      | 369 |
|        | WR-30x5    | 30 | 20.0 | 52.0 | 57.0 | 30x5.0           | 166        | 393      | 383 |
|        | WR-38x6    | 38 | 26.0 | 56.5 | 64.0 | 38x6.0           | 270        | 315      | 315 |

## Weld connector WS



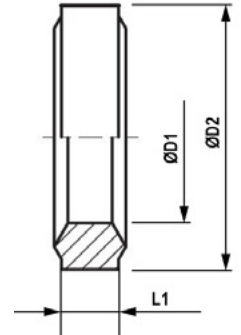
| Series | Order code | D1 | D3 | D4 | L1 | L2   | L3 | S1 | S2 | Weight (g) | PN (bar) |     |
|--------|------------|----|----|----|----|------|----|----|----|------------|----------|-----|
|        |            |    |    |    |    |      |    |    |    |            | Z        | SS  |
| L      | WS-06L     | 06 | 4  | 10 | 21 | 14.0 | 29 | 12 | 14 | 11         | 315      | 315 |
|        | WS-08L     | 08 | 6  | 12 | 23 | 16.0 | 31 | 14 | 17 | 15         | 315      | 315 |
|        | WS-10L     | 10 | 8  | 14 | 25 | 18.0 | 33 | 17 | 19 | 22         | 315      | 315 |
|        | WS-12L     | 12 | 10 | 16 | 25 | 18.0 | 33 | 19 | 22 | 25         | 315      | 315 |
|        | WS-15L     | 15 | 12 | 19 | 29 | 22.0 | 37 | 22 | 27 | 44         | 315      | 315 |
|        | WS-18L     | 18 | 15 | 22 | 31 | 23.5 | 40 | 27 | 32 | 67         | 315      | 315 |
|        | WS-22L     | 22 | 19 | 27 | 36 | 28.5 | 45 | 32 | 36 | 98         | 160      | 160 |
|        | WS-28L     | 28 | 24 | 32 | 37 | 30.5 | 47 | 41 | 41 | 165        | 160      | 160 |
|        | WS-35L     | 35 | 30 | 40 | 43 | 32.5 | 54 | 46 | 50 | 232        | 160      | 160 |
|        | WS-42L     | 42 | 36 | 46 | 46 | 35.0 | 58 | 55 | 60 | 342        | 160      | 160 |
| S      | WS-06S     | 06 | 4  | 11 | 26 | 19.0 | 34 | 14 | 17 | 21         | 630      | 630 |
|        | WS-08S     | 08 | 5  | 13 | 28 | 21.0 | 36 | 17 | 19 | 31         | 630      | 630 |
|        | WS-10S     | 10 | 7  | 15 | 30 | 22.5 | 39 | 19 | 22 | 41         | 630      | 630 |
|        | WS-12S     | 12 | 8  | 17 | 32 | 24.5 | 41 | 22 | 24 | 93         | 630      | 630 |
|        | WS-14S     | 14 | 10 | 19 | 35 | 27.0 | 45 | 24 | 27 | 55         | 630      | 630 |
|        | WS-16S     | 16 | 12 | 21 | 35 | 26.5 | 45 | 27 | 30 | 82         | 400      | 400 |
|        | WS-20S     | 20 | 16 | 26 | 40 | 29.5 | 51 | 32 | 36 | 131        | 400      | 400 |
|        | WS-25S     | 25 | 20 | 31 | 44 | 32.0 | 56 | 41 | 46 | 219        | 400      | 400 |
|        | WS-30S     | 30 | 25 | 36 | 49 | 35.5 | 62 | 46 | 50 | 297        | 400      | 400 |
|        | WS-38S     | 38 | 32 | 44 | 54 | 38.0 | 69 | 55 | 60 | 448        | 315      | 315 |

## Nut Bulkhead B5



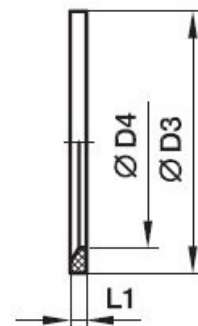
| Series | Order code | Tube O.D | T1       | L1 | S1 | Weight (g) |
|--------|------------|----------|----------|----|----|------------|
| L      | B5-6L      | 06       | M 12x1.5 | 6  | 17 | 7          |
|        | B5-6S/8L   | 06       | M 14x1.5 | 6  | 19 | 8          |
|        | B5-10L/8S  | 10       | M 16x1.5 | 6  | 22 | 11         |
|        | B5-12L/10S | 12       | M 18x1.5 | 6  | 24 | 12         |
|        | B5-15L/14S | 15       | M 22x1.5 | 7  | 30 | 23         |
|        | B5-18L     | 18       | M 26x1.5 | 8  | 36 | 37         |
|        | B5-22L/20S | 22       | M 30x2   | 8  | 41 | 46         |
|        | B5-28L/25S | 28       | M 36x2   | 9  | 46 | 58         |
|        | B5-35L     | 35       | M 45x2   | 9  | 55 | 71         |
|        | B5-42L/38S | 42       | M 52x2   | 10 | 65 | 123        |
| S      | B5-12S     | 12       | M 20x1.5 | 6  | 27 | 15         |
|        | B5-16S     | 16       | M 24x1.5 | 7  | 32 | 24         |
|        | B5-30S     | 30       | M 42x2   | 10 | 50 | 58         |

## Sealing ring for pressure gauge connectors MV



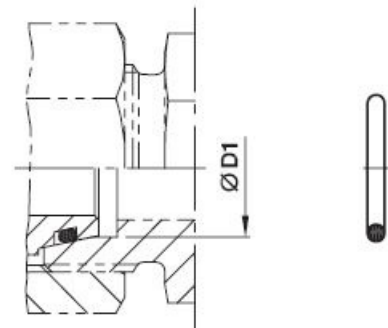
| Order code | Female thread | D1 | D2   | L1  | Weight (g) |
|------------|---------------|----|------|-----|------------|
| MV-L 1/4   | 1/4           | 6  | 11.3 | 4.5 | 2.5        |
| MV-S1/2    | 1/2           | 12 | 18.5 | 5.0 | 5.0        |

## Component ED



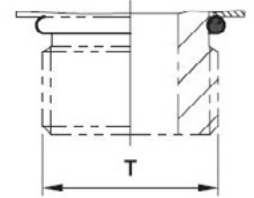
| Series | Order code | D1        | D3   | D4   | L1  | Weight (g) |
|--------|------------|-----------|------|------|-----|------------|
| L      | ED08x1.0   |           | 9.9  | 6.5  | 1.0 | 0.1        |
|        | ED10x1.0   | G 1/8 A   | 11.9 | 8.4  | 1.0 | 0.1        |
|        | ED12x1.5   |           | 14.4 | 9.8  | 1.5 | 0.2        |
|        | ED14x1.5   | G 1/4 A   | 16.5 | 11.6 | 1.5 | 0.2        |
|        | ED16x1.5   |           | 18.9 | 13.8 | 1.5 | 0.1        |
|        |            | G 3/8 A   | 18.9 | 14.7 | 1.5 | 0.2        |
|        | ED18x1.5   |           | 20.9 | 15.7 | 1.5 | 0.1        |
|        | ED20x1.5   |           | 22.9 | 17.8 | 1.5 | 0.2        |
|        |            | G 1/2 A   | 23.9 | 18.5 | 1.5 | 0.3        |
| S      | ED22x1.5   |           | 24.3 | 19.6 | 1.5 | 0.2        |
|        | ED26x1.5   | G 3/4 A   | 29.2 | 23.9 | 1.5 | 0.4        |
|        | ED27x2.0   | G 3/4 A   | 29.2 | 23.9 | 1.5 | 0.4        |
|        | ED33x2.0   | G 1 A     | 35.7 | 29.7 | 2.0 | 0.7        |
|        | ED42x2.0   | G 1 1/4 A | 45.8 | 38.8 | 2.0 | 0.9        |
|        | ED48x2.0   | G 1 1/2 A | 50.7 | 44.7 | 2.0 | 1.0        |

## Component OR



| Series | Order code | D1 |
|--------|------------|----|
| L      | OR4.5x1.5  | 6  |
|        | OR6.5x1.5  | 8  |
|        | OR8.5x1.5  | 10 |
|        | OR10.5x1.5 | 12 |
|        | OR12.5x2   | 15 |
|        | OR16x2     | 18 |
|        | OR20x2     | 22 |
|        | OR26x2     | 28 |
|        | OR32x2.5   | 35 |
|        | OR39x2.5   | 42 |
| S      | OR4.5x1.5  | 6  |
|        | OR6.5x1.5  | 8  |
|        | OR8.5x1.5  | 10 |
|        | OR10.5x1.5 | 12 |
|        | OR12x2     | 14 |
|        | OR14x2     | 16 |
|        | OR17x2.5   | 20 |
|        | OR22x2.5   | 25 |
|        | OR27x2.5   | 30 |
|        | OR35x2.5   | 38 |

## O-ring UNF



| Thread T     | Order code   |
|--------------|--------------|
| 7/16-20UNF   | OR8.92x1.83  |
| 9/16-18UNF   | OR11.89x1.98 |
| 3/4-16UNF    | OR16.36x2.21 |
| 7/8-14UNF    | OR19.18x2.46 |
| 1 1/16-12UNF | OR23.47x2.95 |
| 1 5/16-12UNF | OR29.74x2.95 |
| 1 5/8-12UNF  | OR37.46x3    |
| 1 7/8-12UNF  | OR43.69x3    |

# 24° TUBE FITTINGS

DIN2353 & ISO 8434-1

