

# ***BIBUS***

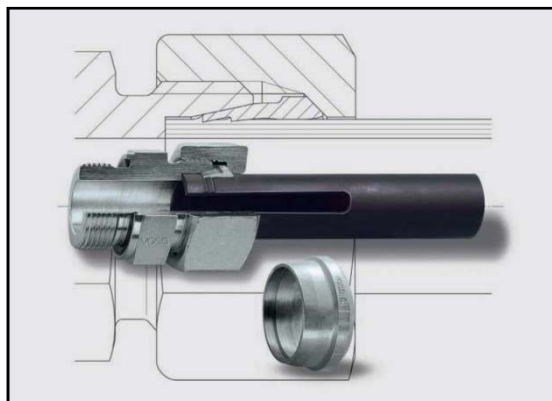
MOVICONTROL BIBUS



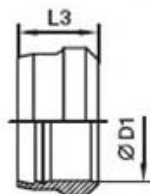
## **Junções de anel cortante**

Estas junções fabricadas de acordo com a norma ISO 8434-1/DIN2353 são constituídas por um anel cortante com duplo gume para cravação no tubo de aço de medidas milimétricas

Estão disponíveis em aço carbono e aço inoxidável.

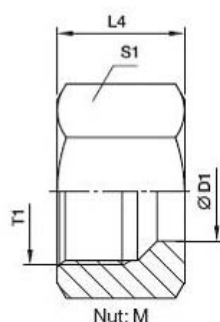


### DPR - ANEL CORTANTE



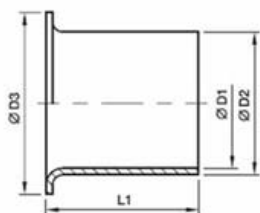
| série | D1<br> | L3   | Referência | Bar | g/Pç |
|-------|-------------------------------------------------------------------------------------------|------|------------|-----|------|
| LL    | 04                                                                                        | —    | —          | —   | 0.3  |
|       | 06                                                                                        | —    | —          | —   | 0.8  |
|       | 08                                                                                        | —    | —          | —   | 1.0  |
|       | 10                                                                                        | —    | —          | —   | 1.3  |
|       | 12                                                                                        | —    | —          | —   | 1.6  |
| L     | 06                                                                                        | 9.0  | DPR06L     | 315 | 1.7  |
|       | 08                                                                                        | 9.0  | DPR08L     | 315 | 2.2  |
|       | 10                                                                                        | 9.5  | DPR10L     | 315 | 3.1  |
|       | 12                                                                                        | 9.8  | DPR12L     | 315 | 3.5  |
|       | 15                                                                                        | 9.5  | DPR15L     | 315 | 4.5  |
|       | 18                                                                                        | 9.5  | DPR18L     | 315 | 5.5  |
|       | 22                                                                                        | 10.5 | DPR22L     | 160 | 7.3  |
|       | 28                                                                                        | 11.0 | DPR28L     | 160 | 9.4  |
|       | 35                                                                                        | 13.5 | DPR35L     | 160 | 20.0 |
|       | 42                                                                                        | 13.5 | DPR42L     | 160 | 23.0 |
| S     | 06                                                                                        | 9.0  | DPR06S     | 630 | 1.7  |
|       | 08                                                                                        | 9.0  | DPR08S     | 630 | 3.2  |
|       | 10                                                                                        | 9.5  | DPR10S     | 630 | 3.1  |
|       | 12                                                                                        | 9.8  | DPR12S     | 630 | 3.5  |
|       | 14                                                                                        | 9.5  | DPR14S     | 630 | 3.9  |
|       | 16                                                                                        | 9.5  | DPR16S     | 400 | 5.6  |
|       | 20                                                                                        | 12.5 | DPR20S     | 400 | 11.4 |
|       | 25                                                                                        | 12.5 | DPR25S     | 400 | 13.3 |
|       | 30                                                                                        | 12.5 | DPR30S     | 400 | 19.3 |
|       | 38                                                                                        | 13.0 | DPR38S     | 315 | 22.5 |

## M - PORCA MÉTRICA



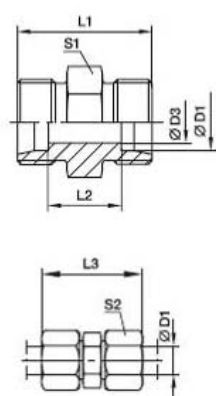
| Série | D1 | T1      | L4   | S1 | Peso<br>g/pç | Referência | PN (bar) |     |     |     |
|-------|----|---------|------|----|--------------|------------|----------|-----|-----|-----|
|       |    |         |      |    |              |            | CF       | A3C | 71  | MS  |
| LL    | 04 | M8x1    | 11.0 | 10 | 4            | M04LL      | 100      | 100 | 100 | 63  |
|       | 06 | M10x1   | 11.5 | 12 | 6            | M06LL      | 100      | 100 | 100 | 63  |
|       | 08 | M12x1   | 12.0 | 14 | 7            | M08LL      | 100      | 100 | 100 | 63  |
|       | 10 | M14x1   | 12.5 | 17 | 11           | M10LL      | 100      | 100 | 100 | 63  |
|       | 12 | M16x1   | 13.0 | 19 | 13           | M12LL      | 100      | 100 | 100 | 63  |
| L     | 06 | M12x1.5 | 14.5 | 14 | 10           | M06L       | 500      | 315 | 315 | 200 |
|       | 08 | M14x1.5 | 14.5 | 17 | 15           | M08L       | 500      | 315 | 315 | 200 |
|       | 10 | M16x1.5 | 15.5 | 19 | 18           | M10L       | 500      | 315 | 315 | 200 |
|       | 12 | M18x1.5 | 15.5 | 22 | 25           | M12L       | 400      | 315 | 315 | 200 |
|       | 15 | M22x1.5 | 17.0 | 27 | 42           | M15L       | 400      | 315 | 315 | 200 |
|       | 18 | M26x1.5 | 18.0 | 32 | 62           | M18L       | 400      | 315 | 315 | 200 |
|       | 22 | M30x2   | 20.0 | 36 | 82           | M22L       | 250      | 160 | 160 | 100 |
|       | 28 | M36x2   | 21.0 | 41 | 89           | M28L       | 250      | 160 | 160 | 100 |
|       | 35 | M45x2   | 24.0 | 50 | 137          | M35L       | 250      | 160 | 160 | 100 |
|       | 42 | M52x2   | 24.0 | 60 | 216          | M42L       | 250      | 160 | 160 | 100 |
| S     | 06 | M14x1.5 | 16.5 | 17 | 17           | M06S       | 800      | 630 | 630 | 400 |
|       | 08 | M16x1.5 | 16.5 | 19 | 20           | M08S       | 800      | 630 | 630 | 400 |
|       | 10 | M18x1.5 | 17.5 | 22 | 31           | M10S       | 800      | 630 | 630 | 400 |
|       | 12 | M20x1.5 | 17.5 | 24 | 34           | M12S       | 630      | 630 | 630 | 400 |
|       | 14 | M22x1.5 | 20.5 | 27 | 53           | M14S       | 630      | 630 | 630 | 400 |
|       | 16 | M24x1.5 | 20.5 | 30 | 66           | M16S       | 630      | 400 | 400 | 250 |
|       | 20 | M30x2   | 24.0 | 36 | 102          | M20S       | 420      | 400 | 400 | 250 |
|       | 25 | M36x2   | 27.0 | 46 | 202          | M25S       | 420      | 400 | 400 | 250 |
|       | 30 | M42x2   | 29.0 | 50 | 219          | M30S       | 420      | 400 | 400 | 250 |
|       | 38 | M52x2   | 32.5 | 60 | 339          | M38S       | 420      | 315 | 315 | 200 |

## E - CASQUILHO DE REFERÇO



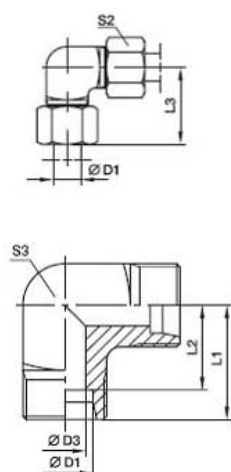
| Diâmetro<br>ext. tubo | Diâmetro<br>int. tubo | D1   | D2   | D3   | L1 | Peso<br>g/Pç | Referência  |
|-----------------------|-----------------------|------|------|------|----|--------------|-------------|
| 04                    | 2.0                   | 1.3  | 2.0  | 3.5  | 8  | 1            | E04/02X     |
| 04                    | 2.5                   | 1.7  | 2.5  | 4.0  | 8  | 1            | E04/2.5X    |
| 05                    | 3.0                   | 2.2  | 3.0  | 5.0  | 14 | 1            | E0506/03X   |
| 06                    | 3.0                   | 2.2  | 3.0  | 5.0  | 14 | 1            | E0506/03X   |
| 05                    | 4.0                   | 3.2  | 4.0  | 5.0  | 14 | 1            | E0506/04X   |
| 06                    | 4.0                   | 3.2  | 4.0  | 5.0  | 14 | 1            | E0506/04X   |
| 08                    | 4.0                   | 3.2  | 4.0  | 6.6  | 14 | 1            | E08/04X     |
| 06                    | 5.0                   | 4.0  | 5.0  | 6.0  | 14 | 1            | E06/05X     |
| 08                    | 5.0                   | 4.0  | 5.0  | 6.0  | 14 | 1            | E08/05X     |
| 10                    | 6.0                   | 5.0  | 6.0  | 8.0  | 15 | 1            | E0810/06X   |
| 08                    | 6.0                   | 5.0  | 6.0  | 8.0  | 15 | 1            | E0810/06X   |
| 10                    | 8.0                   | 6.7  | 8.0  | 10.0 | 15 | 1            | E10/08X     |
| 12                    | 8.0                   | 6.7  | 8.0  | 12.0 | 15 | 2            | E12/08X     |
| 12                    | 9.0                   | 7.7  | 9.0  | 12.0 | 15 | 2            | E12/09X     |
| 12                    | 10.0                  | 8.7  | 10.0 | 12.0 | 15 | 2            | E1215/10X   |
| 15                    | 12.0                  | 10.7 | 12.0 | 14.8 | 15 | 3            | E15/12X     |
| 15                    | 12.5                  | 11.2 | 12.5 | 14.8 | 15 | 3            | E1516/12.5X |
| 16                    | 12.5                  | 11.2 | 12.5 | 14.8 | 15 | 3            | E1516/12.5X |
| 18                    | 14.0                  | 12.7 | 14.0 | 17.8 | 15 | 4            | E18/14X     |
| 18                    | 16.0                  | 14.7 | 16.0 | 17.8 | 20 | 4            | E1820/16X   |
| 20                    | 16.0                  | 14.7 | 16.0 | 17.8 | 20 | 4            | E1820/16X   |
| 22                    | 18.0                  | 16.7 | 18.0 | 21.8 | 16 | 5            | E22/18X     |

## G- JUNÇÃO TUBO-TUBO



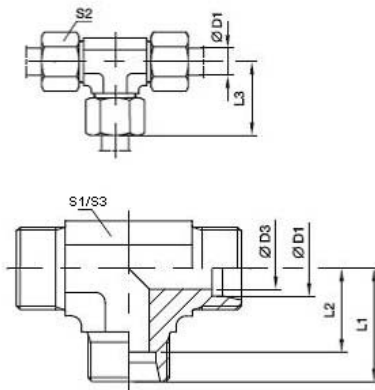
| Série | D1 | D3   | L1 | L2 | L3 | S1 | S2 | Peso<br>g/Pç | Referência | PN (bar) |     |     |     |
|-------|----|------|----|----|----|----|----|--------------|------------|----------|-----|-----|-----|
|       |    |      |    |    |    |    |    |              |            | CF       | A3C | 71  | MS  |
| LL    | 04 | 3,0  | 20 | 12 | 31 | 9  | 10 | 5            | G04LL      | 100      | 100 | 100 | 63  |
|       | 06 | 4,5  | 20 | 9  | 32 | 11 | 12 | 7            | G06LL      | 100      | 100 | 100 | 63  |
|       | 08 | 6,0  | 23 | 12 | 35 | 12 | 14 | 10           | G08LL      | 100      | 100 | 100 | 63  |
|       | 10 | 8,0  | 23 | 12 | 35 | 14 | 17 | 13           | G10LL      | 100      | 100 | 100 | 63  |
| L     | 12 | 10,0 | 23 | 11 | 35 | 17 | 19 | 16           | G12LL      | 100      | 100 | 100 | 63  |
|       | 06 | 4,0  | 24 | 10 | 39 | 12 | 14 | 12           | G06L       | 500      | 315 | 315 | 200 |
|       | 08 | 6,0  | 25 | 11 | 40 | 14 | 17 | 16           | G08L       | 500      | 315 | 315 | 200 |
|       | 10 | 8,0  | 27 | 13 | 42 | 17 | 19 | 23           | G10L       | 500      | 315 | 315 | 200 |
|       | 12 | 10,0 | 28 | 14 | 43 | 19 | 22 | 28           | G12L       | 400      | 315 | 315 | 200 |
|       | 15 | 12,0 | 30 | 16 | 46 | 24 | 27 | 51           | G15L       | 400      | 315 | 315 | 200 |
|       | 18 | 15,0 | 31 | 16 | 48 | 27 | 32 | 69           | G18L       | 400      | 315 | 315 | 200 |
|       | 22 | 19,0 | 35 | 20 | 52 | 32 | 36 | 90           | G22L       | 250      | 160 | 160 | 100 |
|       | 28 | 24,0 | 36 | 21 | 54 | 41 | 41 | 137          | G28L       | 250      | 160 | 160 | 100 |
|       | 35 | 30,0 | 41 | 20 | 63 | 46 | 50 | 214          | G35L       | 250      | 160 | 160 | 100 |
|       | 42 | 36,0 | 43 | 21 | 66 | 55 | 60 | 296          | G42L       | 250      | 160 | 160 | 100 |
| S     | 06 | 4,0  | 30 | 16 | 45 | 14 | 17 | 26           | G06S       | 800      | 630 | 630 | 400 |
|       | 08 | 5,0  | 32 | 18 | 47 | 17 | 19 | 37           | G08S       | 800      | 630 | 630 | 400 |
|       | 10 | 7,0  | 32 | 17 | 49 | 19 | 22 | 44           | G10S       | 800      | 630 | 630 | 400 |
|       | 12 | 8,0  | 34 | 19 | 51 | 22 | 24 | 60           | G12S       | 630      | 630 | 630 | 400 |
|       | 14 | 10,0 | 38 | 22 | 57 | 24 | 27 | 77           | G14S       | 630      | 630 | 630 | 400 |
|       | 16 | 12,0 | 38 | 21 | 57 | 27 | 30 | 90           | G16S       | 630      | 400 | 400 | 250 |
|       | 20 | 16,0 | 44 | 23 | 66 | 32 | 36 | 143          | G20S       | 420      | 400 | 400 | 250 |
|       | 25 | 20,0 | 50 | 26 | 74 | 41 | 46 | 251          | G25S       | 420      | 400 | 400 | 250 |
|       | 30 | 25,0 | 54 | 27 | 80 | 46 | 50 | 330          | G30S       | 420      | 400 | 400 | 250 |
|       | 38 | 32,0 | 61 | 29 | 90 | 55 | 60 | 545          | G38S       | 420      | 315 | 315 | 200 |

## W - JOELHO 90° TUBO



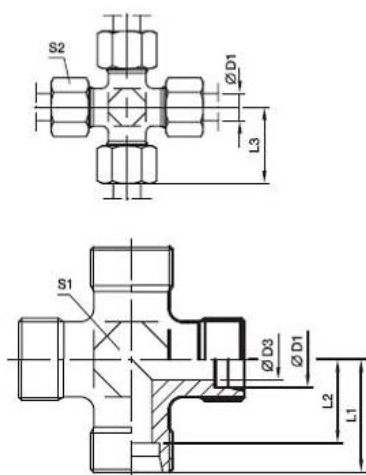
| Série | D1 | D3   | L1 | L2   | L3 | S1 | S2 | S3 | Peso<br>g/Pç | Referência | PN (bar) |     |     |     |
|-------|----|------|----|------|----|----|----|----|--------------|------------|----------|-----|-----|-----|
|       |    |      |    |      |    |    |    |    |              |            | CF       | A3C | 71  | MS  |
| LL    | 04 | 3,0  | 15 | 11,0 | 21 | 9  | 10 | 9  | 13           | W04LL      | 100      | 100 | 100 | 63  |
|       | 06 | 4,5  | 15 | 9,5  | 21 | 9  | 12 | 11 | 15           | W06LL      | 100      | 100 | 100 | 63  |
|       | 08 | 6,0  | 17 | 11,5 | 23 | 12 | 14 | 12 | 23           | W08LL      | 100      | 100 | 100 | 63  |
|       | 10 | 8,0  | 18 | 12,5 | 24 | 12 | 17 | 14 | 32           | W10LL      | 100      | 100 | 100 | 63  |
|       | 12 | 10,0 | 19 | 13,0 | 25 | 14 | 19 | 17 | 41           | W12LL      | 100      | 100 | 100 | 63  |
| L     | 06 | 4,0  | 19 | 12,0 | 27 | 12 | 14 | 12 | 29           | W06L       | 500      | 315 | 315 | 200 |
|       | 08 | 6,0  | 21 | 14,0 | 29 | 12 | 17 | 14 | 43           | W08L       | 500      | 315 | 315 | 200 |
|       | 10 | 8,0  | 22 | 15,0 | 30 | 14 | 19 | 17 | 54           | W10L       | 500      | 315 | 315 | 200 |
|       | 12 | 10,0 | 24 | 17,0 | 32 | 17 | 22 | 19 | 80           | W12L       | 400      | 315 | 315 | 200 |
|       | 15 | 12,0 | 28 | 21,0 | 36 | 19 | 27 |    | 81           | W15L       | 400      | 315 | 315 | 200 |
|       | 18 | 15,0 | 31 | 23,5 | 40 | 24 | 32 |    | 140          | W18L       | 400      | 315 | 315 | 200 |
|       | 22 | 19,0 | 35 | 27,5 | 44 | 27 | 36 |    | 178          | W22L       | 250      | 160 | 160 | 100 |
|       | 28 | 24,0 | 38 | 30,5 | 47 | 36 | 41 |    | 340          | W28L       | 250      | 160 | 160 | 100 |
|       | 35 | 30,0 | 45 | 34,5 | 56 | 41 | 50 |    | 458          | W35L       | 250      | 160 | 160 | 100 |
|       | 42 | 36,0 | 51 | 40,0 | 63 | 50 | 60 |    | 776          | W42L       | 250      | 160 | 160 | 100 |
| S     | 06 | 4,0  | 23 | 16,0 | 31 | 12 | 17 | 14 | 52           | W06S       | 800      | 630 | 630 | 400 |
|       | 08 | 5,0  | 24 | 17,0 | 32 | 14 | 19 | 17 | 74           | W08S       | 800      | 630 | 630 | 400 |
|       | 10 | 7,0  | 25 | 17,5 | 34 | 17 | 22 | 19 | 97           | W10S       | 800      | 630 | 630 | 400 |
|       | 12 | 8,0  | 29 | 21,5 | 38 | 17 | 24 | 22 | 137          | W12S       | 630      | 630 | 630 | 400 |
|       | 14 | 10,0 | 30 | 22,0 | 40 | 19 | 27 |    | 145          | W14S       | 630      | 630 | 630 | 400 |
|       | 16 | 12,0 | 33 | 24,5 | 43 | 24 | 30 |    | 162          | W16S       | 630      | 400 | 400 | 250 |
|       | 20 | 16,0 | 37 | 26,5 | 48 | 27 | 36 |    | 221          | W20S       | 420      | 400 | 400 | 250 |
|       | 25 | 20,0 | 42 | 30,0 | 54 | 36 | 46 |    | 424          | W25S       | 420      | 400 | 400 | 250 |
|       | 30 | 25,0 | 49 | 35,5 | 62 | 41 | 50 |    | 603          | W30S       | 420      | 400 | 400 | 250 |
|       | 38 | 32,0 | 57 | 41,0 | 72 | 50 | 60 |    | 1010         | W38S       | 420      | 315 | 315 | 200 |

## T - TÊ TUBO-TUBO-TUBO



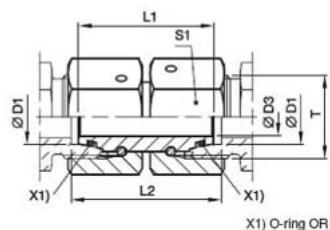
| Série | D1 | D3   | L1 | L2   | L3 | S1 | S2 | S3 | Peso<br>g/Pç | Referência | PN (bar) |     |     |     |
|-------|----|------|----|------|----|----|----|----|--------------|------------|----------|-----|-----|-----|
|       |    |      |    |      |    |    |    |    |              |            | CF       | A3C | 71  | MS  |
| LL    | 04 | 3,0  | 15 | 11,0 | 21 | 9  | 10 | 9  | 19           | T04LL      | 100      | 100 | 100 | 63  |
|       | 06 | 4,5  | 15 | 9,5  | 21 | 9  | 12 | 11 | 20           | T06LL      | 100      | 100 | 100 | 63  |
|       | 08 | 6,0  | 17 | 11,5 | 23 | 12 | 14 | 12 | 27           | T08LL      | 100      | 100 | 100 | 63  |
|       | 10 | 8,0  | 18 | 12,5 | 24 | 12 | 17 | 14 | 39           | T10LL      | 100      | 100 | 100 | 63  |
|       | 12 | 10,0 | 21 | 15,0 | 27 | 14 | 19 | 14 | 45           | T12LL      | 100      | 100 | 100 | 63  |
| L     | 06 | 4,0  | 19 | 12,0 | 27 | 12 | 14 | 12 | 37           | T06L       | 500      | 315 | 315 | 200 |
|       | 08 | 6,0  | 21 | 14,0 | 29 | 12 | 17 | 14 | 53           | T08L       | 500      | 315 | 315 | 200 |
|       | 10 | 8,0  | 22 | 15,0 | 30 | 14 | 19 | 14 | 48           | T10L       | 500      | 315 | 315 | 200 |
|       | 12 | 10,0 | 24 | 17,0 | 32 | 17 | 22 | 14 | 65           | T12L       | 400      | 315 | 315 | 200 |
|       | 15 | 12,0 | 28 | 21,0 | 36 | 19 | 27 | 14 | 106          | T15L       | 400      | 315 | 315 | 200 |
|       | 18 | 15,0 | 31 | 23,5 | 40 | 24 | 32 | 14 | 179          | T18L       | 400      | 315 | 315 | 200 |
|       | 22 | 19,0 | 35 | 27,5 | 44 | 27 | 36 | 14 | 225          | T22L       | 250      | 160 | 160 | 100 |
|       | 28 | 24,0 | 38 | 30,5 | 47 | 36 | 41 | 14 | 396          | T28L       | 250      | 160 | 160 | 100 |
|       | 35 | 30,0 | 45 | 34,5 | 56 | 41 | 50 | 14 | 567          | T35L       | 250      | 160 | 160 | 100 |
|       | 42 | 36,0 | 51 | 40,0 | 63 | 50 | 60 | 14 | 905          | T42L       | 250      | 160 | 160 | 100 |
| S     | 06 | 4,0  | 23 | 16,0 | 31 | 12 | 17 | 14 | 68           | T06S       | 800      | 630 | 630 | 400 |
|       | 08 | 5,0  | 24 | 17,0 | 32 | 14 | 19 | 14 | 70           | T08S       | 800      | 630 | 630 | 400 |
|       | 10 | 7,0  | 25 | 17,5 | 34 | 17 | 22 | 14 | 91           | T10S       | 800      | 630 | 630 | 400 |
|       | 12 | 8,0  | 29 | 21,5 | 38 | 17 | 24 | 14 | 117          | T12S       | 630      | 630 | 630 | 400 |
|       | 14 | 10,0 | 30 | 22,0 | 40 | 19 | 27 | 14 | 136          | T14S       | 630      | 630 | 630 | 400 |
|       | 16 | 12,0 | 33 | 24,5 | 43 | 24 | 30 | 14 | 202          | T16S       | 630      | 400 | 400 | 250 |
|       | 20 | 16,0 | 37 | 28,5 | 48 | 27 | 36 | 14 | 289          | T20S       | 420      | 400 | 400 | 250 |
|       | 25 | 20,0 | 42 | 30,0 | 54 | 36 | 46 | 14 | 545          | T25S       | 420      | 400 | 400 | 250 |
|       | 30 | 25,0 | 49 | 35,5 | 62 | 41 | 50 | 14 | 758          | T30S       | 420      | 400 | 400 | 250 |
|       | 38 | 32,0 | 57 | 41,0 | 72 | 50 | 60 | 14 | 1264         | T38S       | 420      | 315 | 315 | 200 |

## K- CRUZETA TUBO-TUBO-TUBO-TUBO



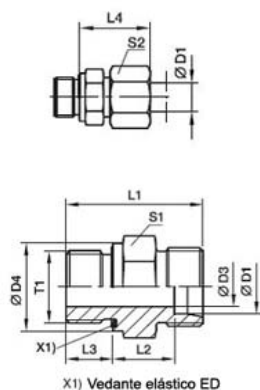
| Série | D1 | D3   | L1 | L2   | L3 | S1 | S2 | Peso<br>g/Pç | Referência | PN (bar) |     |     |     |
|-------|----|------|----|------|----|----|----|--------------|------------|----------|-----|-----|-----|
|       |    |      |    |      |    |    |    |              |            | CF       | A3C | 71  | MS  |
| LL    | 04 | 3,0  | 15 | 11,0 | 21 | 9  | 10 | 13           | K04LL      | 100      | 100 | 100 | 63  |
|       | 06 | 4,5  | 15 | 9,5  | 21 | 9  | 12 | 14           | K06LL      | 100      | 100 | 100 | 63  |
|       | 08 | 6,0  | 17 | 11,5 | 23 | 12 | 14 | 24           | K08LL      | 100      | 100 | 100 | 63  |
| L     | 06 | 4,0  | 19 | 12,0 | 27 | 12 | 14 | 35           | K06L       | 315      | 315 | 315 | 200 |
|       | 08 | 6,0  | 21 | 14,0 | 29 | 12 | 17 | 40           | K08L       | 315      | 315 | 315 | 200 |
|       | 10 | 8,0  | 22 | 15,0 | 30 | 14 | 19 | 52           | K10L       | 315      | 315 | 315 | 200 |
|       | 12 | 10,0 | 24 | 17,0 | 32 | 17 | 22 | 69           | K12L       | 315      | 315 | 315 | 200 |
|       | 15 | 12,0 | 28 | 21,0 | 36 | 19 | 27 | 130          | K15L       | 315      | 315 | 315 | 200 |
|       | 18 | 15,0 | 31 | 23,5 | 40 | 24 | 32 | 188          | K18L       | 315      | 315 | 315 | 200 |
|       | 22 | 19,0 | 35 | 27,5 | 44 | 27 | 36 | 251          | K22L       | 160      | 160 | 160 | 100 |
|       | 28 | 24,0 | 38 | 30,5 | 47 | 36 | 41 | 392          | K28L       | 160      | 160 | 160 | 100 |
|       | 35 | 30,0 | 45 | 34,5 | 56 | 41 | 50 | 618          | K35L       | 160      | 160 | 160 | 100 |
|       | 42 | 36,0 | 51 | 40,0 | 63 | 50 | 60 | 905          | K42L       | 160      | 160 | 160 | 100 |
| S     | 06 | 4,0  | 23 | 16,0 | 31 | 12 | 17 | 58           | K06S       | 630      | 630 | 630 | 400 |
|       | 08 | 5,0  | 24 | 17,0 | 32 | 14 | 19 | 82           | K08S       | 630      | 630 | 630 | 400 |
|       | 10 | 7,0  | 25 | 17,5 | 34 | 17 | 22 | 97           | K10S       | 630      | 630 | 630 | 400 |
|       | 12 | 8,0  | 29 | 21,5 | 38 | 17 | 24 | 146          | K12S       | 630      | 630 | 630 | 400 |
|       | 14 | 10,0 | 30 | 22,0 | 40 | 19 | 27 | 176          | K14S       | 400      | 400 | 400 | 250 |
|       | 16 | 12,0 | 33 | 24,5 | 43 | 24 | 30 | 220          | K16S       | 400      | 400 | 400 | 250 |
|       | 20 | 16,0 | 37 | 28,5 | 48 | 27 | 36 | 339          | K20S       | 315      | 315 | 315 | 200 |
|       | 25 | 20,0 | 42 | 30,0 | 54 | 36 | 46 | 576          | K25S       | 315      | 315 | 315 | 200 |
|       | 30 | 25,0 | 49 | 35,5 | 62 | 41 | 50 | 843          | K30S       | 315      | 315 | 315 | 200 |
|       | 38 | 32,0 | 57 | 41,0 | 72 | 50 | 60 | 1350         | K38S       | 315      | 315 | 315 | 200 |

## GZ - UNIÃO FÊMEA-FÊMEA COM PORCA LOUCA



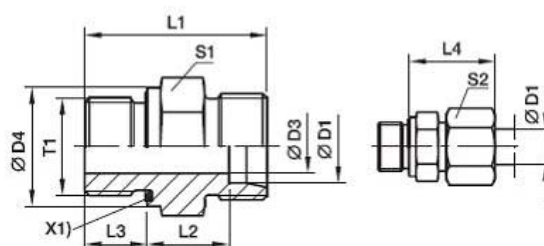
| Série | D1 | T        | D3   | L1 | L2 | S1 | Peso<br>g/Pç | Referência | PN (bar) |     |     |
|-------|----|----------|------|----|----|----|--------------|------------|----------|-----|-----|
|       |    |          |      |    |    |    |              |            | CF       | A3C | 71  |
| L     | 06 | M 14x1.5 | 2.5  | 32 | 33 | 14 | 28           | GZ06L      | 500      | 315 | 315 |
|       | 08 | M 14x1.5 | 4.0  | 32 | 33 | 17 | 41           | GZ08L      | 500      | 315 | 315 |
|       | 10 | M 16x1.5 | 6.0  | 33 | 34 | 19 | 53           | GZ10L      | 500      | 315 | 315 |
|       | 12 | M 18x1.5 | 8.0  | 33 | 34 | 22 | 71           | GZ12L      | 400      | 315 | 315 |
|       | 15 | M 22x1.5 | 10.0 | 38 | 39 | 27 | 129          | GZ15L      | 400      | 315 | 315 |
|       | 18 | M 26x1.5 | 13.0 | 36 | 38 | 32 | 165          | GZ18L      | 400      | 315 | 315 |
|       | 22 | M 30x2   | 17.0 | 42 | 44 | 36 | 243          | GZ22L      | 250      | 160 | 160 |
|       | 28 | M 36x2   | 22.0 | 46 | 48 | 41 | 319          | GZ28L      | 250      | 160 | 160 |
|       | 35 | M 45x2   | 28.0 | 48 | 52 | 50 | 449          | GZ35L      | 250      | 160 | 160 |
|       | 42 | M 52x2   | 34.0 | 52 | 57 | 60 | 737          | GZ42L      | 250      | 160 | 160 |
| S     | 06 | M 14x1.5 | 2.5  | 32 | 33 | 17 | 41           | GZ06S      | 800      | 630 | 630 |
|       | 08 | M 16x1.5 | 4.0  | 33 | 34 | 19 | 54           | GZ08S      | 800      | 630 | 630 |
|       | 10 | M 18x1.5 | 6.0  | 33 | 35 | 22 | 74           | GZ10S      | 800      | 630 | 630 |
|       | 12 | M 20x1.5 | 8.0  | 36 | 38 | 24 | 95           | GZ12S      | 630      | 630 | 630 |
|       | 14 | M 22x1.5 | 9.0  | 39 | 41 | 27 | 131          | GZ14S      | 630      | 630 | 630 |
|       | 16 | M 24x1.5 | 11.0 | 39 | 42 | 30 | 172          | GZ16S      | 630      | 400 | 400 |
|       | 20 | M 30x2   | 14.0 | 44 | 48 | 36 | 261          | GZ20S      | 420      | 400 | 400 |
|       | 25 | M 36x2   | 18.0 | 46 | 53 | 46 | 477          | GZ25S      | 420      | 400 | 400 |
|       | 30 | M 42x2   | 23.0 | 52 | 62 | 50 | 605          | GZ30S      | 420      | 400 | 400 |
|       | 38 | M 52x2   | 30.0 | 52 | 67 | 60 | 826          | GZ38S      | 420      | 315 | 315 |

## GE LR ED - JUNÇÃO TUBO-ROSCA BSPP SÉRIE LIGEIRA



| Série | D1 | T1     | D3 | D4 | L1   | L2   | L3   | L4 | S1 | S2 | peso<br>g/Pç | Referência   | PN (bar) |     |     |     |
|-------|----|--------|----|----|------|------|------|----|----|----|--------------|--------------|----------|-----|-----|-----|
|       |    |        |    |    |      |      |      |    |    |    |              |              | CF       | A3C | 71  | MS  |
| LL    | 04 | G1/8A  | 3  | 14 | 20.0 | 9.5  | 6.5  | 19 | 14 | 10 | 10           | GE04LLRED    | 100      | 100 | 100 | 63  |
|       | 06 | G1/8A  | 4  | 14 | 20.0 | 8.0  | 6.5  | 20 | 14 | 12 | 11           | GE06LLRED    | 100      | 100 | 100 | 63  |
| L     | 06 | G1/8A  | 4  | 14 | 23.5 | 8.5  | 8.0  | 23 | 14 | 14 | 13           | GE06LR1RED   | 500      | 315 | 315 | 200 |
|       | 06 | G1/4A  | 4  | 19 | 29.0 | 10.0 | 12.0 | 25 | 19 | 14 | 28           | GE06LR1/4ED  | 500      | 315 | 315 | 200 |
|       | 06 | G3/8A  | 4  | 22 | 30.5 | 11.5 | 12.0 | 26 | 22 | 14 | 44           | GE06LR3/8ED  | 400      | 315 | 315 | 200 |
|       | 06 | G1/2A  | 4  | 27 | 33.0 | 12.0 | 14.0 | 27 | 27 | 14 | 61           | GE06LR1/2ED  | 400      | 315 | 315 | 200 |
|       | 08 | G1/4A  | 6  | 19 | 29.0 | 10.0 | 12.0 | 25 | 19 | 17 | 27           | GE08LR1RED   | 500      | 315 | 315 | 200 |
|       | 08 | G1/8A  | 4  | 14 | 24.5 | 9.5  | 8.0  | 24 | 14 | 17 | 16           | GE08LR1/8ED  | 500      | 315 | 315 | 200 |
|       | 08 | G3/8A  | 6  | 22 | 30.5 | 11.5 | 12.0 | 26 | 22 | 17 | 45           | GE08LR3/8ED  | 400      | 315 | 315 | 200 |
|       | 08 | G1/2A  | 6  | 27 | 33.0 | 12.0 | 14.0 | 27 | 27 | 17 | 74           | GE08LR1/2ED  | 400      | 315 | 315 | 200 |
|       | 10 | G1/4A  | 6  | 19 | 30.0 | 11.0 | 12.0 | 26 | 19 | 19 | 29           | GE10LR1RED   | 500      | 315 | 315 | 200 |
|       | 10 | G1/8A  | 4  | 14 | 25.5 | 10.5 | 8.0  | 25 | 17 | 19 | 21           | GE10LR1/8ED  | 500      | 315 | 315 | 200 |
|       | 10 | G3/8A  | 8  | 22 | 31.5 | 12.5 | 12.0 | 27 | 22 | 19 | 43           | GE10LR3/8ED  | 400      | 315 | 315 | 200 |
|       | 10 | G1/2A  | 8  | 27 | 34.0 | 13.0 | 14.0 | 28 | 27 | 19 | 71           | GE10LR1/2ED  | 400      | 315 | 315 | 200 |
|       | 12 | G3/8A  | 9  | 22 | 31.5 | 12.5 | 12.0 | 27 | 22 | 22 | 41           | GE12LR1RED   | 400      | 315 | 315 | 200 |
|       | 12 | G1/8A  | 4  | 14 | 26.5 | 11.5 | 8.0  | 26 | 19 | 22 | 26           | GE12LR1/8ED  | 315      | 315 | 315 | 200 |
|       | 12 | G1/4A  | 6  | 19 | 31.0 | 12.0 | 12.0 | 27 | 19 | 22 | 31           | GE12LR1/4ED  | 400      | 315 | 315 | 200 |
|       | 12 | G1/2A  | 10 | 27 | 34.0 | 13.0 | 14.0 | 28 | 27 | 22 | 67           | GE12LR1/2ED  | 400      | 315 | 315 | 200 |
|       | 12 | G3/4A  | 10 | 32 | 37.0 | 14.0 | 16.0 | 29 | 32 | 22 | 118          | GE12LR3/4ED  | 250      | 160 | 160 | 100 |
|       | 15 | G1/2A  | 11 | 27 | 35.0 | 14.0 | 14.0 | 29 | 27 | 27 | 72           | GE15LR1RED   | 400      | 315 | 315 | 200 |
|       | 15 | G3/8A  | 9  | 22 | 32.5 | 13.5 | 12.0 | 29 | 24 | 27 | 54           | GE15LR3/8ED  | 400      | 315 | 315 | 200 |
|       | 15 | G3/4A  | 12 | 32 | 38.0 | 15.0 | 16.0 | 30 | 32 | 27 | 116          | GE15LR3/4ED  | 250      | 160 | 160 | 100 |
|       | 18 | G1/2A  | 14 | 27 | 36.0 | 14.5 | 14.0 | 31 | 27 | 32 | 71           | GE18LR1RED   | 400      | 315 | 315 | 200 |
|       | 18 | G3/8A  | 9  | 22 | 33.5 | 14.0 | 12.0 | 30 | 27 | 32 | 66           | GE18LR3/8ED  | 400      | 315 | 315 | 200 |
|       | 18 | G3/4A  | 15 | 32 | 38.0 | 14.5 | 16.0 | 31 | 32 | 32 | 110          | GE18LR3/4ED  | 250      | 160 | 160 | 100 |
|       | 22 | G3/4A  | 18 | 32 | 40.0 | 16.5 | 16.0 | 33 | 32 | 36 | 102          | GE22LR1RED   | 250      | 160 | 160 | 100 |
|       | 22 | G1/2A  | 14 | 27 | 38.0 | 16.5 | 14.0 | 33 | 32 | 36 | 91           | GE22LR1/2ED  | 250      | 160 | 160 | 100 |
|       | 22 | G1A    | 19 | 40 | 43.0 | 17.5 | 18.0 | 34 | 41 | 36 | 189          | GE22LR1ED    | 250      | 160 | 160 | 100 |
|       | 28 | G1A    | 23 | 40 | 43.0 | 17.5 | 18.0 | 34 | 41 | 41 | 170          | GE28LR1RED   | 250      | 160 | 160 | 100 |
|       | 28 | G3/4A  | 18 | 32 | 41.0 | 17.5 | 16.0 | 34 | 41 | 41 | 159          | GE28LR3/4ED  | 250      | 160 | 160 | 100 |
|       | 28 | G11/4A | 24 | 50 | 46.0 | 18.5 | 20.0 | 35 | 50 | 41 | 316          | GE28LR11/4ED | 250      | 160 | 160 | 100 |
|       | 35 | G11/4A | 30 | 50 | 48.0 | 17.5 | 20.0 | 39 | 50 | 50 | 272          | GE35LR1RED   | 250      | 160 | 160 | 100 |
|       | 35 | G1A    | 23 | 40 | 46.0 | 17.5 | 18.0 | 39 | 46 | 50 | 226          | GE35LR1ED    | 250      | 160 | 160 | 100 |
|       | 35 | G11/2A | 30 | 55 | 52.0 | 19.5 | 22.0 | 41 | 55 | 50 | 423          | GE35LR11/2ED | 250      | 160 | 160 | 100 |
|       | 42 | G11/2A | 36 | 55 | 52.0 | 19.0 | 22.0 | 42 | 55 | 60 | 343          | GE42LR1RED   | 250      | 160 | 160 | 100 |
|       | 42 | G1A    | 23 | 40 | 48.0 | 19.0 | 18.0 | 42 | 55 | 60 | 324          | GE42LR1ED    | 250      | 160 | 160 | 100 |
|       | 42 | G11/4A | 30 | 50 | 50.0 | 19.0 | 20.0 | 42 | 55 | 60 | 348          | GE42LR11/4ED | 250      | 160 | 160 | 100 |

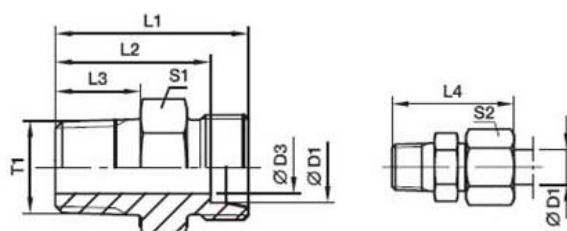
## GE SR ED - JUNÇÃO TUBO-ROSCA BSPP SÉRIE PESADA



X1) Vedação elástica com ED

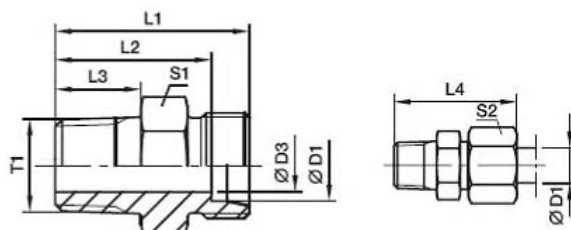
| Série | D1 | T1     | D3 | D4 | L1   | L2   | L3 | L4 | S1 | S2 | Peso<br>g/Pç | Referência   | PN (bar) <sup>1)</sup> |     |     |     |
|-------|----|--------|----|----|------|------|----|----|----|----|--------------|--------------|------------------------|-----|-----|-----|
|       |    |        |    |    |      |      |    |    |    |    |              |              | CF                     | A3C | 71  | MS  |
| S     | 06 | G1/4A  | 4  | 19 | 32.0 | 13.0 | 12 | 28 | 19 | 17 | 35           | GE06SRED     | 800                    | 630 | 630 | 400 |
|       | 06 | G1/8A  | 4  | 14 | 27.5 | 12.5 | 8  | 27 | 14 | 17 | 21           | GE06SR1/8ED  | 315                    | 315 | 315 |     |
|       | 06 | G3/8A  | 4  | 22 | 34.5 | 15.5 | 12 | 30 | 22 | 17 | 52           | GE06SR3/8ED  | 630                    | 630 | 630 |     |
|       | 06 | G1/2A  | 4  | 27 | 39.0 | 18.0 | 14 | 33 | 27 | 17 | 83           | GE06SR1/2ED  | 630                    | 630 | 630 |     |
|       | 08 | G1/4A  | 5  | 19 | 34.0 | 15.0 | 12 | 30 | 19 | 19 | 41           | GE08SRED     | 800                    | 630 | 630 | 400 |
|       | 08 | G3/8A  | 5  | 22 | 34.5 | 15.5 | 12 | 30 | 22 | 19 | 57           | GE08SR3/8ED  | 800                    | 630 | 630 |     |
|       | 08 | G1/2A  | 5  | 27 | 39.0 | 18.0 | 14 | 33 | 27 | 19 | 89           | GE08SR1/2ED  | 630                    | 400 | 400 |     |
|       | 10 | G3/8A  | 7  | 22 | 34.5 | 15.0 | 12 | 31 | 22 | 22 | 55           | GE10SRED     | 800                    | 630 | 630 | 400 |
|       | 10 | G1/4A  | 5  | 19 | 34.0 | 14.5 | 12 | 31 | 19 | 22 | 42           | GE10SR1/4ED  | 800                    | 630 | 630 |     |
|       | 10 | G1/2A  | 7  | 27 | 39.0 | 17.5 | 14 | 34 | 27 | 22 | 97           | GE10SR1/2ED  | 630                    | 630 | 630 |     |
|       | 12 | G3/8A  | 8  | 22 | 36.5 | 17.0 | 12 | 33 | 22 | 24 | 62           | GE12SRED     | 630                    | 630 | 630 | 400 |
|       | 12 | G1/4A  | 5  | 19 | 36.0 | 16.5 | 12 | 33 | 22 | 24 | 61           | GE12SR1/4ED  | 630                    | 630 | 630 |     |
|       | 12 | G1/2A  | 8  | 27 | 39.0 | 17.5 | 14 | 34 | 27 | 24 | 99           | GE12SR1/2ED  | 630                    | 630 | 630 |     |
|       | 14 | G1/2A  | 10 | 27 | 41.0 | 19.0 | 14 | 37 | 27 | 27 | 96           | GE14SRED     | 630                    | 630 | 630 | 400 |
|       | 14 | G3/8A  | 8  | 22 | 38.5 | 18.5 | 12 | 36 | 24 | 27 | 74           | GE14SR3/8ED  | 630                    | 630 | 630 |     |
|       | 14 | G3/4A  | 10 | 32 | 45.0 | 21.0 | 16 | 39 | 32 | 27 | 138          | GE14SR3/4ED  | 400                    | 400 | 400 |     |
|       | 16 | G1/2A  | 12 | 27 | 41.0 | 18.5 | 14 | 37 | 27 | 30 | 91           | GE16SRED     | 630                    | 400 | 400 | 250 |
|       | 16 | G3/8A  | 8  | 22 | 38.5 | 18.0 | 12 | 36 | 27 | 30 | 83           | GE16SR3/8ED  | 630                    | 400 | 400 |     |
|       | 16 | G3/4A  | 12 | 32 | 45.0 | 20.5 | 16 | 39 | 32 | 30 | 152          | GE16SR3/4ED  | 420                    | 400 | 400 |     |
|       | 20 | G3/4A  | 16 | 32 | 47.0 | 20.5 | 16 | 42 | 32 | 36 | 149          | GE20SRED     | 420                    | 400 | 400 | 250 |
|       | 20 | G1/2A  | 12 | 27 | 45.0 | 20.5 | 14 | 42 | 32 | 36 | 142          | GE20SR1/2ED  | 420                    | 400 | 400 |     |
|       | 20 | G1A    | 16 | 40 | 51.0 | 22.5 | 18 | 44 | 41 | 36 | 265          | GE20SR1ED    | 420                    | 400 | 400 |     |
|       | 20 | G11/4A | 16 | 50 | 53.0 | 22.5 | 20 | 44 | 50 | 36 | 404          | GE20SR11/4ED | 400                    | 400 | 400 |     |
|       | 25 | G1A    | 20 | 40 | 53.0 | 23.0 | 18 | 47 | 41 | 46 | 266          | GE25SRED     | 420                    | 400 | 400 | 250 |
|       | 25 | G1/2A  | 12 | 27 | 49.0 | 23.0 | 14 | 47 | 41 | 46 | 228          | GE25SR1/2ED  | 420                    | 400 | 400 |     |
|       | 25 | G3/4A  | 16 | 32 | 51.0 | 23.0 | 16 | 47 | 41 | 46 | 255          | GE25SR3/4ED  | 420                    | 400 | 400 |     |
|       | 25 | G11/4A | 20 | 50 | 55.0 | 23.0 | 20 | 47 | 50 | 46 | 411          | GE25SR11/4ED | 400                    | 400 | 400 |     |
|       | 25 | G11/2A | 20 | 55 | 60.0 | 26.0 | 22 | 50 | 55 | 46 | 549          | GE25SR11/2ED | 315                    | 315 | 315 |     |
|       | 30 | G11/4A | 25 | 50 | 57.0 | 23.5 | 20 | 50 | 50 | 50 | 418          | GE30SRED     | 420                    | 400 | 400 | 250 |
|       | 30 | G1A    | 20 | 40 | 55.0 | 23.5 | 18 | 50 | 46 | 50 | 344          | GE30SR1ED    | 420                    | 400 | 400 |     |
|       | 30 | G11/2A | 25 | 55 | 62.0 | 26.5 | 22 | 53 | 55 | 50 | 530          | GE30SR11/2ED | 315                    | 315 | 315 |     |
|       | 38 | G11/2A | 32 | 55 | 64.0 | 26.0 | 22 | 57 | 55 | 60 | 563          | GE38SRED     | 420                    | 315 | 315 | 200 |
|       | 38 | G11/4A | 25 | 50 | 62.0 | 26.0 | 20 | 57 | 55 | 60 | 575          | GE38SR11/4ED | 420                    | 315 | 315 |     |

## GE L NPT - JUNÇÃO TUBO-ROSCA NPT SÉRIE LIGEIRA



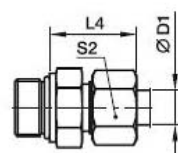
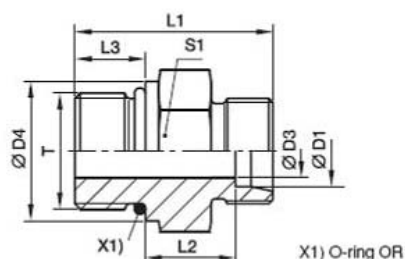
| Série | D1 | T1               | D3   | L1   | L2   | L3   | L4 | S1 | S2 | Peso<br>g/Pç | Referência   | PN (bar) |     |     |     |
|-------|----|------------------|------|------|------|------|----|----|----|--------------|--------------|----------|-----|-----|-----|
|       |    |                  |      |      |      |      |    |    |    |              |              | CF       | A3C | 71  | MS  |
| LL    | 04 | 1/8-27 NPT       | 3.0  | 22.0 | 18.0 | 10.0 | 28 | 11 | 10 | 9            | GE04LL1/8NPT | 100      | 100 | 100 |     |
|       | 06 | 1/8-27 NPT       | 4.5  | 22.0 | 16.5 | 10.0 | 28 | 11 | 12 | 9            | GE06LL1/8NPT | 100      | 100 | 100 | 63  |
|       | 08 | 1/8-27 NPT       | 5.0  | 24.0 | 18.5 | 10.0 | 30 | 12 | 14 | 11           | GE08LL1/8NPT | 100      | 100 | 100 | 63  |
| L     | 06 | 1/8-27 NPT       | 4.0  | 24.0 | 17.0 | 10.0 | 32 | 12 | 14 | 12           | GE06L1/8NPT  | 315      | 315 | 315 | 200 |
|       | 06 | 1/4-18 NPT       | 4.0  | 30.0 | 23.0 | 14.5 | 38 | 17 | 14 | 27           | GE06L1/4NPT  | 315      | 315 | 315 | 200 |
|       | 06 | 3/8-18 NPT       | 4.0  | 30.0 | 23.0 | 14.5 | 38 | 19 | 14 | 32           | GE06L3/8NPT  | 315      | 315 | 315 |     |
|       | 06 | 1/2-14 NPT       | 4.0  | 36.0 | 29.0 | 19.5 | 44 | 22 | 14 | 53           | GE06L1/2NPT  | 315      | 315 | 315 |     |
|       | 08 | 1/8-27 NPT       | 4.0  | 25.0 | 18.0 | 10.0 | 33 | 14 | 17 | 16           | GE08L1/8NPT  | 315      | 315 | 315 |     |
|       | 08 | 1/4-18 NPT       | 6.0  | 30.0 | 23.0 | 14.5 | 38 | 17 | 17 | 25           | GE08L1/4NPT  | 315      | 315 | 315 | 200 |
|       | 08 | 3/8-18 NPT       | 6.0  | 30.0 | 23.0 | 14.5 | 38 | 19 | 17 | 34           | GE08L3/8NPT  | 315      | 315 | 315 |     |
|       | 08 | 1/2-14 NPT       | 6.0  | 36.0 | 29.0 | 19.5 | 44 | 22 | 17 | 54           | GE08L1/2NPT  | 315      | 315 | 315 |     |
|       | 10 | 1/8-27 NPT       | 4.0  | 25.0 | 18.0 | 10.0 | 33 | 17 | 19 | 19           | GE10L1/8NPT  | 315      | 315 | 315 |     |
|       | 10 | 1/4-18 NPT       | 7.0  | 31.0 | 24.0 | 14.5 | 39 | 17 | 19 | 25           | GE10L1/4NPT  | 315      | 315 | 315 | 200 |
|       | 10 | 3/8-18 NPT       | 7.0  | 32.0 | 25.0 | 14.5 | 40 | 19 | 19 | 40           | GE10L3/8NPT  | 315      | 315 | 315 |     |
|       | 10 | 1/2-14 NPT       | 8.0  | 37.0 | 30.0 | 19.5 | 45 | 22 | 19 | 54           | GE10L1/2NPT  | 315      | 315 | 315 |     |
|       | 10 | 3/4-14 NPT       | 8.0  | 38.0 | 31.0 | 19.5 | 46 | 30 | 19 | 93           | GE10L3/4NPT  | 315      | 315 | 315 |     |
|       | 12 | 1/8-27NPT        | 4.0  | 26.0 | 19.0 | 10.0 | 34 | 19 | 22 | 52           | GE12L1/8NPT  | 315      | 315 | 315 |     |
|       | 12 | 1/4-18 NPT       | 7.0  | 32.0 | 25.0 | 14.5 | 40 | 19 | 22 | 31           | GE12L1/4NPT  | 315      | 315 | 315 | 200 |
|       | 12 | 3/8-18 NPT       | 8.0  | 32.0 | 25.0 | 14.5 | 40 | 19 | 22 | 37           | GE12L3/8NPT  | 315      | 315 | 315 | 200 |
|       | 12 | 1/2-14 NPT       | 10.0 | 37.0 | 30.0 | 19.5 | 45 | 22 | 22 | 62           | GE12L1/2NPT  | 315      | 315 | 315 | 200 |
|       | 15 | 3/8-18 NPT       | 8.0  | 33.0 | 26.0 | 14.5 | 41 | 24 | 27 | 53           | GE15L3/8NPT  | 315      | 315 | 315 |     |
|       | 15 | 1/2-14 NPT       | 12.0 | 38.0 | 31.0 | 19.5 | 46 | 24 | 27 | 63           | GE15L1/2NPT  | 315      | 315 | 315 | 200 |
|       | 15 | 3/4-14 NPT       | 12.0 | 39.0 | 32.0 | 19.5 | 47 | 30 | 27 | 112          | GE15L3/4NPT  | 315      | 315 | 315 |     |
|       | 15 | 1-11 1/2 NPT     | 12.0 | 45.0 | 38.0 | 24.5 | 53 | 36 | 27 | 158          | GE15L1NPT    | 315      | 315 | 315 |     |
|       | 18 | 3/8-18 NPT       | 8.0  | 34.0 | 26.5 | 14.5 | 43 | 27 | 32 | 69           | GE18L3/8NPT  | 315      | 315 | 315 |     |
|       | 18 | 1/2-14 NPT       | 12.0 | 39.0 | 31.5 | 19.5 | 48 | 27 | 32 | 79           | GE18L1/2NPT  | 315      | 315 | 315 | 200 |
|       | 18 | 3/4-14 NPT       | 15.0 | 39.0 | 31.5 | 19.5 | 48 | 30 | 32 | 104          | GE18L3/4NPT  | 315      | 315 | 315 |     |
|       | 18 | 1-11 1/2 NPT     | 15.0 | 45.0 | 37.5 | 24.5 | 54 | 36 | 32 | 159          | GE18L1NPT    | 315      | 315 | 315 |     |
|       | 22 | 3/8-18 NPT       | 8.0  | 36.5 | 29.0 | 14.5 | 45 | 32 | 36 | 91           | GE22L3/8NPT  | 160      | 160 | 160 |     |
|       | 22 | 1/2-14 NPT       | 12.0 | 41.0 | 33.5 | 19.5 | 50 | 32 | 36 | 96           | GE22L1/2NPT  | 160      | 160 | 160 |     |
|       | 22 | 3/4-14 NPT       | 16.0 | 41.0 | 33.5 | 19.5 | 50 | 32 | 36 | 108          | GE22L3/4NPT  | 160      | 160 | 160 | 100 |
|       | 22 | 1-11 1/2 NPT     | 19.0 | 47.0 | 39.5 | 24.5 | 56 | 36 | 36 | 174          | GE22L1NPT    | 160      | 160 | 160 |     |
|       | 28 | 3/4-14 NPT       | 16.0 | 42.0 | 34.5 | 19.5 | 51 | 41 | 41 | 157          | GE28L3/4NPT  | 160      | 160 | 160 |     |
|       | 28 | 1-11 1/2 NPT     | 21.0 | 47.0 | 39.5 | 24.5 | 56 | 41 | 41 | 197          | GE28L1NPT    | 160      | 160 | 160 | 100 |
|       | 28 | 11/4-1 11/2 NPT  | 24.0 | 49.0 | 41.5 | 25.0 | 58 | 46 | 41 | 266          | GE28L11/4NPT | 160      | 160 | 160 |     |
|       | 35 | 1-11 1/2NPT      | 22.0 | 50.0 | 39.5 | 24.5 | 61 | 46 | 50 | 280          | GE35L1NPT    | 160      | 160 | 160 |     |
|       | 35 | 11/4-11 1/2 NPT  | 28.0 | 51.0 | 40.5 | 25.0 | 62 | 46 | 50 | 285          | GE35L11/4NPT | 160      | 160 | 160 |     |
|       | 42 | 11/4- 11 1/2 NPT | 28.0 | 53.0 | 42.0 | 25.0 | 65 | 55 | 60 | 382          | GE42L11/4NPT | 160      | 160 | 160 |     |
|       | 42 | 11/2-11 1/2 NPT  | 36.0 | 53.0 | 42.0 | 26.0 | 65 | 55 | 60 | 377          | GE42L11/2NPT | 160      | 160 | 160 |     |

## GE S NPT - JUNÇÃO TUBO-ROSCA NPT SÉRIE PESADA



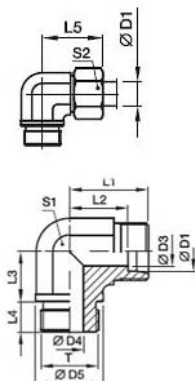
| Série | D1 | T1              | D3 | L1 | L2   | L3   | L4 | S1 | S2 | Peso<br>g/Pç | Referência   | PN (bar) |     |     |     |
|-------|----|-----------------|----|----|------|------|----|----|----|--------------|--------------|----------|-----|-----|-----|
|       |    |                 |    |    |      |      |    |    |    |              |              | CF       | A3C | 71  | MS  |
| S     | 06 | 1/8-27 NPT      | 4  | 28 | 21.0 | 10.0 | 36 | 14 | 17 | 21           | GE06S1/8NPT  | 630      | 630 | 630 | 400 |
|       | 06 | 1/4-18 NPT      | 4  | 35 | 28.0 | 14.5 | 43 | 17 | 17 | 37           | GE06S1/4NPT  | 630      | 630 | 630 |     |
|       | 06 | 3/8-18 NPT      | 4  | 33 | 26.0 | 14.5 | 41 | 19 | 17 | 40           | GE06S3/8NPT  | 630      | 630 | 630 |     |
|       | 06 | 1/2-14 NPT      | 4  | 42 | 35.0 | 19.5 | 50 | 22 | 17 | 71           | GE06S1/2NPT  | 630      | 630 | 630 |     |
|       | 08 | 1/4-18 NPT      | 5  | 35 | 28.0 | 14.5 | 43 | 17 | 19 | 38           | GE08S1/4NPT  | 630      | 630 | 630 | 400 |
|       | 08 | 3/8-18 NPT      | 5  | 35 | 28.0 | 14.5 | 43 | 19 | 19 | 46           | GE08S3/8NPT  | 630      | 630 | 630 |     |
|       | 08 | 1/2-14 NPT      | 5  | 42 | 35.0 | 19.5 | 50 | 22 | 19 | 73           | GE08S1/2NPT  | 630      | 630 | 630 |     |
|       | 10 | 1/4-18 NPT      | 5  | 35 | 27.5 | 14.5 | 44 | 19 | 22 | 45           | GE10S1/4NPT  | 630      | 630 | 630 |     |
|       | 10 | 3/8-18 NPT      | 7  | 35 | 27.5 | 14.5 | 44 | 19 | 22 | 49           | GE10S3/8NPT  | 630      | 630 | 630 | 400 |
|       | 10 | 1/2-14 NPT      | 7  | 42 | 34.5 | 19.5 | 51 | 22 | 22 | 73           | GE10S1/2NPT  | 630      | 630 | 630 |     |
|       | 10 | 3/4-14 NPT      | 7  | 44 | 36.5 | 19.5 | 53 | 30 | 22 | 125          | GE10S3/4NPT  | 630      | 630 | 630 | 400 |
|       | 12 | 1/4-18 NPT      | 5  | 37 | 29.5 | 14.5 | 46 | 22 | 24 | 57           | GE12S1/4NPT  | 630      | 630 | 630 |     |
|       | 12 | 3/8-18 NPT      | 8  | 37 | 29.5 | 14.5 | 46 | 22 | 24 | 62           | GE12S3/8NPT  | 630      | 630 | 630 |     |
|       | 12 | 1/2-14 NPT      | 8  | 42 | 34.5 | 19.5 | 51 | 22 | 24 | 83           | GE12S1/2NPT  | 630      | 630 | 630 |     |
|       | 12 | 3/4-14 NPT      | 8  | 44 | 36.5 | 19.5 | 53 | 30 | 24 | 126          | GE12S3/4NPT  | 630      | 630 | 630 | 400 |
|       | 14 | 3/8-18 NPT      | 8  | 39 | 31.0 | 14.5 | 49 | 24 | 27 | 77           | GE14S3/8NPT  | 630      | 630 | 630 |     |
|       | 14 | 1/2-14 NPT      | 10 | 44 | 36.0 | 19.5 | 54 | 24 | 27 | 89           | GE14S1/2NPT  | 630      | 630 | 630 |     |
|       | 14 | 3/4-14 NPT      | 10 | 46 | 38.0 | 19.5 | 56 | 30 | 27 | 130          | GE14S3/4NPT  | 630      | 630 | 630 |     |
|       | 14 | 1-11 1/2 NPT    | 10 | 51 | 43.0 | 24.5 | 61 | 36 | 27 | 180          | GE14S1NPT    | 630      | 630 | 630 | 400 |
|       | 16 | 3/8-18 NPT      | 8  | 39 | 30.5 | 14.5 | 49 | 27 | 30 | 84           | GE16S3/8NPT  | 400      | 400 | 400 |     |
|       | 16 | 1/2-14 NPT      | 12 | 48 | 39.5 | 19.5 | 58 | 32 | 30 | 97           | GE16S1/2NPT  | 400      | 400 | 400 |     |
|       | 16 | 3/4-14 NPT      | 12 | 46 | 37.5 | 19.5 | 56 | 30 | 30 | 130          | GE16S3/4NPT  | 400      | 400 | 400 |     |
|       | 16 | 1-11 1/2 NPT    | 12 | 51 | 42.5 | 24.5 | 61 | 36 | 30 | 178          | GE16S1NPT    | 400      | 400 | 400 | 250 |
|       | 20 | 1/2-14 NPT      | 12 | 48 | 37.5 | 19.5 | 59 | 32 | 36 | 144          | GE20S1/2NPT  | 400      | 400 | 400 |     |
|       | 20 | 3/4-14 NPT      | 16 | 48 | 37.5 | 19.5 | 59 | 32 | 36 | 149          | GE20S3/4NPT  | 400      | 400 | 400 |     |
|       | 20 | 1-11 1/2 NPT    | 16 | 55 | 44.5 | 24.5 | 66 | 36 | 36 | 243          | GE20S1NPT    | 400      | 400 | 400 |     |
|       | 25 | 3/4-14 NPT      | 16 | 52 | 40.0 | 19.5 | 64 | 41 | 46 | 240          | GE25S3/4NPT  | 400      | 400 | 400 | 400 |
|       | 25 | 1-11 1/2 NPT    | 20 | 57 | 45.0 | 24.5 | 69 | 41 | 46 | 278          | GE25S1NPT    | 400      | 400 | 400 |     |
|       | 25 | 11/4-11 1/2 NPT | 20 | 58 | 46.0 | 25.0 | 70 | 46 | 46 | 396          | GE25S11/4NPT | 400      | 400 | 400 |     |
|       | 25 | 11/2-11 1/2 NPT | 20 | 61 | 49.0 | 26.0 | 73 | 50 | 46 | 469          | GE25S11/2NPT | 400      | 400 | 400 |     |
|       | 30 | 3/4-14 NPT      | 16 | 54 | 40.5 | 19.5 | 67 | 46 | 50 | 307          | GE30S3/4NPT  | 400      | 400 | 400 | 400 |
|       | 30 | 1-11 1/2 NPT    | 20 | 59 | 45.5 | 24.5 | 72 | 46 | 50 | 343          | GE30S1NPT    | 400      | 400 | 400 |     |
|       | 30 | 11/4-11 1/2 NPT | 25 | 60 | 46.5 | 25.0 | 73 | 46 | 50 | 397          | GE30S11/4NPT | 400      | 400 | 400 |     |
|       | 30 | 11/2-11 1/2 NPT | 25 | 60 | 46.5 | 26.0 | 73 | 50 | 50 | 440          | GE30S11/2NPT | 400      | 400 | 400 |     |
|       | 38 | 1-11 1/2 NPT    | 22 | 64 | 48.0 | 24.5 | 79 | 55 | 60 | 510          | GE38S1NPT    | 315      | 315 | 315 | 400 |
|       | 38 | 11/4-11 1/2 NPT | 25 | 65 | 49.0 | 25.0 | 80 | 55 | 60 | 535          | GE38S11/4NPT | 315      | 315 | 315 |     |
|       | 38 | 11/2-11 1/2 NPT | 32 | 65 | 49.0 | 26.0 | 80 | 55 | 60 | 571          | GE38S11/2NPT | 315      | 315 | 315 |     |

## GE UNF/UN - JUNÇÃO TUBO-ROSCA UNF/UN SÉRIE LIGEIRA E PESADA



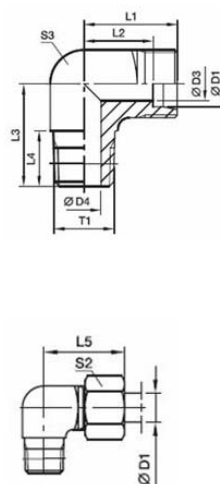
| Série | D1 | T             | D3   | D4   | L1 | L2   | L3   | L4 | S1 | S2 | Peso<br>g/Pç | Referência   | PN (bar) |     |     |
|-------|----|---------------|------|------|----|------|------|----|----|----|--------------|--------------|----------|-----|-----|
|       |    |               |      |      |    |      |      |    |    |    |              |              | CF       | A3C | 71  |
| L     | 08 | 7/16-20UNF-2A | 5.0  | 14.4 | 26 | 10.0 | 9.0  | 25 | 17 | 17 | 21           | GE08L7/16UNF | 315      | 315 | 315 |
|       | 10 | 7/16-20UNF-2A | 5.0  | 14.4 | 27 | 11.0 | 10.0 | 26 | 17 | 19 | 23           | GE10L7/16UNF | 315      | 315 | 315 |
|       | 12 | 9/16-18UNF-2A | 7.0  | 17.6 | 28 | 11.0 | 10.0 | 26 | 19 | 22 | 32           | GE12L9/16UNF | 315      | 315 | 315 |
|       | 12 | 3/4-16UNF-2A  | 10.0 | 22.3 | 31 | 13.0 | 11.0 | 28 | 24 | 22 | 52           | GE12L3/4UNF  | 315      | 315 | 315 |
|       | 12 | 7/8-14UNF-2A  | 10.0 | 25.5 | 34 | 14.3 | 12.7 | 29 | 27 | 22 | 77           | GE12L7/8UNF  | 315      | 315 | 315 |
|       | 15 | 3/4-16UNF-2A  | 11.0 | 22.3 | 32 | 14.0 | 11.0 | 29 | 24 | 27 | 57           | GE15L3/4UNF  | 315      | 315 | 315 |
|       | 15 | 7/8-14UNF-2A  | 12.0 | 25.5 | 35 | 15.3 | 12.7 | 30 | 27 | 27 | 81           | GE15L7/8UNF  | 315      | 315 | 315 |
|       | 18 | 3/4-16UNF-2A  | 11.0 | 22.3 | 33 | 14.5 | 11.0 | 31 | 27 | 32 | 68           | GE18L3/4UNF  | 315      | 315 | 315 |
|       | 18 | 7/8-14UNF-2A  | 14.0 | 25.5 | 35 | 14.8 | 12.7 | 31 | 27 | 32 | 72           | GE18L7/8UNF  | 315      | 315 | 315 |
|       | 22 | 7/8-14UNF-2A  | 14.0 | 25.5 | 37 | 16.8 | 12.7 | 33 | 32 | 36 | 94           | GE22L7/8UNF  | 160      | 160 | 160 |
|       | 22 | 11/16-12UN-2A | 18.0 | 31.9 | 39 | 16.5 | 15.0 | 33 | 32 | 36 | 103          | GE22L11/16UN | 160      | 160 | 160 |
|       | 22 | 15/16-12UN-2A | 19.0 | 38.2 | 40 | 17.5 | 15.0 | 34 | 41 | 36 | 163          | GE22L15/16UN | 160      | 160 | 160 |
|       | 28 | 11/16-12UN-2A | 18.0 | 31.9 | 40 | 17.5 | 15.0 | 34 | 41 | 41 | 152          | GE28L11/16UN | 160      | 160 | 160 |
|       | 28 | 15/16-12UN-2A | 23.0 | 38.2 | 40 | 17.5 | 15.0 | 34 | 41 | 41 | 163          | GE28L15/16UN | 160      | 160 | 160 |
|       | 35 | 15/16-12UN-2A | 23.0 | 38.2 | 43 | 17.5 | 15.0 | 39 | 46 | 50 | 222          | GE35L15/16UN | 160      | 160 | 160 |
|       | 35 | 15/8-12UN-2A  | 29.0 | 47.7 | 43 | 17.5 | 15.0 | 39 | 50 | 50 | 257          | GE35L15/8UN  | 160      | 160 | 160 |
|       | 42 | 15/8-12UN-2A  | 29.0 | 47.7 | 45 | 19.0 | 15.0 | 42 | 55 | 60 | 339          | GE42L15/8UN  | 160      | 160 | 160 |
| S     | 08 | 7/16-20UNF-2A | 4.0  | 16.0 | 31 | 15.0 | 9.0  | 30 | 17 | 19 | 33           | GE08S7/16UNF | 630      | 630 | 630 |
|       | 10 | 9/16-18UNF-2A | 6.0  | 17.6 | 32 | 14.5 | 10.0 | 31 | 19 | 22 | 42           | GE10S9/16UNF | 630      | 630 | 630 |
|       | 12 | 9/16-18UNF-2A | 6.0  | 17.6 | 32 | 14.5 | 10.0 | 31 | 22 | 24 | 50           | GE12S9/16UNF | 630      | 630 | 630 |
|       | 12 | 3/4-16UNF-2A  | 8.0  | 22.3 | 36 | 17.5 | 11.0 | 34 | 24 | 24 | 73           | GE12S3/4UNF  | 630      | 630 | 630 |
|       | 16 | 3/4-16UNF-2A  | 10.5 | 22.3 | 35 | 15.5 | 11.0 | 34 | 24 | 30 | 90           | GE16S3/4UNF  | 400      | 400 | 400 |
|       | 16 | 7/8-14UNF-2A  | 12.0 | 25.5 | 40 | 18.8 | 12.7 | 37 | 27 | 30 | 95           | GE16S7/8UNF  | 400      | 400 | 400 |
|       | 20 | 3/4-16UNF-2A  | 10.0 | 22.3 | 42 | 20.5 | 11.0 | 42 | 32 | 36 | 132          | GE20S3/4UNF  | 400      | 400 | 400 |
|       | 20 | 7/8-14UNF-2A  | 12.0 | 25.5 | 44 | 20.8 | 12.7 | 42 | 32 | 36 | 141          | GE20S7/8UNF  | 400      | 400 | 400 |
|       | 20 | 11/16-12UN-2A | 16.0 | 31.9 | 46 | 20.5 | 15.0 | 42 | 32 | 36 | 163          | GE20S11/16UN | 400      | 400 | 400 |
|       | 25 | 11/16-12UN-2A | 16.0 | 31.9 | 50 | 23.0 | 15.0 | 47 | 36 | 46 | 206          | GE25S11/16UN | 400      | 400 | 400 |
|       | 25 | 15/16-12UN-2A | 20.0 | 38.2 | 50 | 23.0 | 15.0 | 47 | 41 | 46 | 258          | GE25S15/16UN | 400      | 400 | 400 |
|       | 30 | 15/16-12UN-2A | 20.0 | 38.2 | 52 | 23.5 | 15.0 | 50 | 46 | 50 | 327          | GE30S15/16UN | 400      | 400 | 400 |
|       | 30 | 15/8-12UN-2A  | 24.0 | 47.7 | 52 | 23.5 | 15.0 | 50 | 50 | 50 | 422          | GE30S15/8UN  | 400      | 400 | 400 |
|       | 38 | 15/8-12UN-2A  | 24.0 | 47.7 | 57 | 26.0 | 15.0 | 57 | 55 | 60 | 554          | GE38S15/8UN  | 315      | 315 | 315 |

## WE LR - JOELHO TUBO-ROSCA BSP



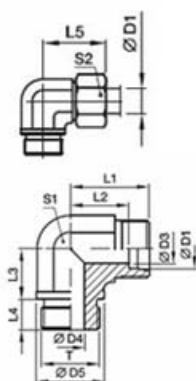
| Série | D1 | T       | D3 | D4 | D5 | L1 | L2   | L3 | L4 | L5 | S1 | S2 | Peso<br>g/Pç | Referência | PN (bar) |     |     |     |
|-------|----|---------|----|----|----|----|------|----|----|----|----|----|--------------|------------|----------|-----|-----|-----|
|       |    |         |    |    |    |    |      |    |    |    |    |    |              |            | CF       | A3C | 71  | MS  |
| L     | 22 | G3/4A   | 19 | 18 | 32 | 35 | 27.5 | 26 | 16 | 44 | 27 | 36 | 168          | WE22LR     | 160      | 160 | 160 | 100 |
|       | 28 | G1A     | 24 | 23 | 39 | 38 | 30.5 | 30 | 18 | 47 | 36 | 41 | 305          | WE28LR     | 160      | 160 | 160 | 100 |
|       | 35 | G1 1/4A | 30 | 30 | 49 | 45 | 34.5 | 34 | 20 | 56 | 41 | 50 | 465          | WE35LR     | 160      | 160 | 160 | 100 |
|       | 42 | G1 1/2A | 36 | 36 | 55 | 51 | 40.0 | 39 | 22 | 63 | 50 | 60 | 706          | WE42LR     | 160      | 160 | 160 | 100 |
| S     | 20 | G3/4A   | 16 | 16 | 32 | 37 | 26.5 | 26 | 16 | 48 | 27 | 36 | 210          | WE20SR     | 400      | 400 | 400 | 250 |
|       | 25 | G1A     | 20 | 20 | 39 | 42 | 30.0 | 30 | 18 | 54 | 36 | 46 | 388          | WE25SR     | 250      | 250 | 250 | 160 |
|       | 30 | G1 1/4A | 25 | 25 | 49 | 49 | 35.5 | 34 | 20 | 62 | 41 | 50 | 630          | WE30SR     | 160      | 160 | 160 | 100 |
|       | 38 | G1 1/2A | 32 | 32 | 55 | 57 | 41.0 | 39 | 22 | 72 | 50 | 60 | 888          | WE38SR     | 160      | 160 | 160 | 100 |

## WE NPT - JOELHO TUBO-ROSCA NPT



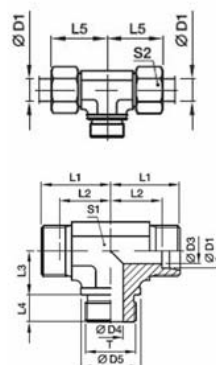
| Série | D1 | T1              | D3   | D4   | L1 | L2   | L3 | L4   | L5 | S1 | S2 | S3 | Peso<br>g/Pç | Referência    | PN (bar) |     |     |     |
|-------|----|-----------------|------|------|----|------|----|------|----|----|----|----|--------------|---------------|----------|-----|-----|-----|
|       |    |                 |      |      |    |      |    |      |    |    |    |    |              |               | CF       | A3C | 71  | MS  |
| LL    | 04 | 1/8-27NPT       | 3.0  | 4.0  | 15 | 11.0 | 17 | 10.0 | 21 | 9  | 10 | 11 | 18           | WE04LL1/8NPT  | 100      | 100 |     |     |
|       | 06 | 1/8-27NPT       | 4.5  | 4.5  | 15 | 9.5  | 17 | 10.0 | 21 | 9  | 12 | 11 | 17           | WE06LL1/8NPT  | 100      | 100 |     |     |
|       | 08 | 1/8-27NPT       | 6.0  | 5.0  | 17 | 11.5 | 20 | 10.0 | 23 | 12 | 14 | 12 | 25           | WE08LL1/8NPT  | 100      | 100 |     |     |
| L     | 06 | 1/8-27NPT       | 4.0  | 4.0  | 19 | 12.0 | 20 | 10.0 | 27 | 12 | 14 | 12 | 29           | WE06L1/8NPT   | 315      | 315 | 315 | 200 |
|       | 06 | 1/4-18NPT       | 4.0  | 7.0  | 21 | 14.0 | 26 | 14.5 | 29 | 12 | 14 | 14 | 44           | WE06L1/4NPT   | 315      | 315 | 315 | 200 |
|       | 06 | 3/8-18NPT       | 4.0  | 8.0  | 25 | 18.0 | 28 | 14.5 | 33 | 17 | 14 | 19 | 55           | WE06L3/8NPT   | 315      | 315 | 315 | 200 |
|       | 08 | 1/8-27NPT       | 6.0  | 4.0  | 21 | 14.0 | 26 | 10.0 | 29 | 12 | 17 | 14 | 48           | WE08L1/8NPT   | 315      | 315 | 315 | 200 |
|       | 08 | 1/4-18NPT       | 6.0  | 6.0  | 21 | 14.0 | 26 | 14.5 | 29 | 12 | 17 | 14 | 47           | WE08L1/4NPT   | 315      | 315 | 315 | 200 |
|       | 10 | 1/4-18NPT       | 8.0  | 7.0  | 22 | 15.0 | 27 | 14.5 | 30 | 14 | 19 | 17 | 61           | WE10L1/4NPT   | 315      | 315 | 315 | 200 |
|       | 10 | 3/8-18NPT       | 8.0  | 8.0  | 24 | 17.0 | 28 | 14.5 | 32 | 17 | 19 | 19 | 92           | WE10L3/8NPT   | 315      | 315 | 315 | 200 |
|       | 12 | 1/4-18NPT       | 10.0 | 7.0  | 24 | 17.0 | 28 | 14.5 | 32 | 17 | 22 | 19 | 82           | WE12L1/4NPT   | 315      | 315 | 315 | 200 |
|       | 12 | 3/8-18NPT       | 10.0 | 8.0  | 24 | 17.0 | 28 | 14.5 | 32 | 17 | 22 | 19 | 92           | WE12L3/8NPT   | 315      | 315 | 315 | 200 |
|       | 12 | 1/2-14NPT       | 10.0 | 11.0 | 28 | 21.0 | 34 | 19.5 | 36 | 19 | 22 |    | 90           | WE12L1/2NPT   | 315      | 315 | 315 | 200 |
|       | 15 | 1/2-14NPT       | 12.0 | 11.0 | 28 | 21.0 | 34 | 19.5 | 36 | 19 | 27 |    | 89           | WE15L1/2NPT   | 315      | 315 | 315 | 200 |
|       | 18 | 1/2-14NPT       | 15.0 | 12.0 | 31 | 23.5 | 36 | 19.5 | 40 | 24 | 32 |    | 150          | WE18L1/2NPT   | 315      | 315 | 315 | 200 |
|       | 22 | 3/4-14NPT       | 19.0 | 16.0 | 35 | 27.5 | 42 | 19.5 | 44 | 27 | 36 |    | 176          | WE22L3/4NPT   | 160      | 160 | 160 | 100 |
|       | 28 | 1-11 1/2NPT     | 24.0 | 21.0 | 38 | 30.5 | 48 | 24.5 | 47 | 36 | 41 |    | 314          | WE28L1NPT     | 160      | 160 | 160 | 100 |
|       | 35 | 1 1/4-11 1/2NPT | 30.0 | 28.0 | 45 | 34.5 | 54 | 25.0 | 56 | 41 | 50 |    | 465          | WE35L1 1/4NPT | 160      | 160 | 160 | 100 |
| S     | 42 | 1 1/2-11 1/2NPT | 36.0 | 34.0 | 51 | 40.0 | 61 | 26.0 | 63 | 50 | 60 |    | 849          | WE42L1 1/2NPT | 160      | 160 | 160 | 100 |
|       | 06 | 1/4-18NPT       | 4.0  | 4.0  | 23 | 16.0 | 26 | 14.5 | 31 | 12 | 17 | 14 | 56           | WE06S1/4NPT   | 630      | 630 | 630 | 400 |
|       | 08 | 1/4-18NPT       | 5.0  | 5.0  | 24 | 17.0 | 27 | 14.5 | 32 | 14 | 19 | 17 | 73           | WE08S1/4NPT   | 630      | 630 | 630 | 400 |
|       | 08 | 3/8-18NPT       | 5.0  | 8.0  | 25 | 18.0 | 28 | 14.5 | 33 | 17 | 19 | 19 | 77           | WE08S3/8NPT   | 630      | 630 | 630 | 400 |
|       | 08 | 1/2-14NPT       | 5.0  | 10.0 | 30 | 23.0 | 34 | 19.5 | 38 | 19 | 19 |    | 75           | WE08S1/2NPT   | 630      | 630 | 630 | 400 |
|       | 10 | 1/4-18NPT       | 7.0  | 5.0  | 25 | 17.5 | 28 | 14.5 | 34 | 17 | 22 | 19 | 96           | WE10S1/4NPT   | 630      | 630 | 630 | 400 |
|       | 10 | 3/8-18NPT       | 7.0  | 7.0  | 25 | 17.5 | 28 | 14.5 | 34 | 17 | 22 | 19 | 98           | WE10S3/8NPT   | 630      | 630 | 630 | 400 |
|       | 12 | 1/4-18NPT       | 8.0  | 5.0  | 29 | 21.5 | 29 | 14.5 | 38 | 17 | 24 | 22 | 73           | WE12S1/4NPT   | 630      | 630 | 630 | 400 |
|       | 12 | 3/8-18NPT       | 8.0  | 8.0  | 29 | 22.5 | 28 | 14.5 | 38 | 17 | 24 | 22 | 123          | WE12S3/8NPT   | 630      | 630 | 630 | 400 |
|       | 12 | 1/2-14NPT       | 8.0  | 10.0 | 30 | 22.5 | 34 | 19.5 | 39 | 19 | 24 |    | 107          | WE12S1/2NPT   | 630      | 630 | 630 | 400 |
|       | 14 | 1/2-14NPT       | 10.0 | 10.0 | 30 | 22.0 | 34 | 19.5 | 40 | 19 | 27 |    | 103          | WE14S1/2NPT   | 630      | 630 | 630 | 400 |
|       | 16 | 1/2-14NPT       | 12.0 | 12.0 | 33 | 24.5 | 36 | 19.5 | 43 | 24 | 30 |    | 157          | WE16S1/2NPT   | 400      | 400 | 400 | 250 |
|       | 20 | 3/4-14NPT       | 16.0 | 16.0 | 37 | 26.5 | 42 | 19.5 | 48 | 27 | 36 |    | 205          | WE20S3/4NPT   | 400      | 400 | 400 | 250 |
|       | 25 | 1-11 1/2NPT     | 20.0 | 20.0 | 42 | 30.0 | 48 | 24.5 | 54 | 36 | 46 |    | 381          | WE25S1NPT     | 400      | 400 | 400 | 250 |
|       | 30 | 1 1/4-11 1/2NPT | 25.0 | 25.0 | 49 | 35.5 | 54 | 25.0 | 62 | 41 | 50 |    | 598          | WE30S1 1/4NPT | 400      | 400 | 400 | 250 |
|       | 38 | 1 1/2-11 1/2NPT | 32.0 | 32.0 | 57 | 41.0 | 61 | 26.0 | 72 | 50 | 60 |    | 1029         | WE38S1 1/2NPT | 315      | 315 | 315 | 200 |

## WE M - JOELHO TUBO-ROSCA MÉTRICA



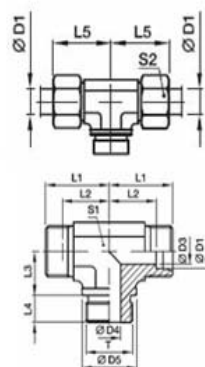
| Série | D1 | T       | D3 | D4 | D5 | L1 | L2   | L3 | L4 | L5 | S1 | S2 | Peso<br>g/Pç | Referência | PN (bar) |     |     |
|-------|----|---------|----|----|----|----|------|----|----|----|----|----|--------------|------------|----------|-----|-----|
|       |    |         |    |    |    |    |      |    |    |    |    |    |              |            | CF       | A3C | 71  |
| L     | 22 | M26×1.5 | 19 | 18 | 31 | 35 | 27.5 | 26 | 16 | 44 | 27 | 36 | 173          | WE22LM     | 160      | 160 | 160 |
|       | 28 | M33×2   | 24 | 23 | 39 | 38 | 30.5 | 30 | 18 | 47 | 36 | 41 | 303          | WE28LM     | 160      | 160 | 160 |
|       | 35 | M42×2   | 30 | 30 | 49 | 45 | 34.5 | 34 | 20 | 56 | 41 | 50 | 469          | WE35LM     | 160      | 160 | 160 |
|       | 42 | M48×2   | 36 | 36 | 55 | 51 | 40.0 | 39 | 22 | 63 | 50 | 60 | 661          | WE42LM     | 160      | 160 | 160 |
| S     | 20 | M27×2   | 16 | 16 | 32 | 37 | 26.5 | 26 | 16 | 48 | 27 | 36 | 208          | WE20SM     | 400      | 400 | 400 |
|       | 25 | M33×2   | 20 | 20 | 39 | 42 | 30.0 | 30 | 18 | 54 | 36 | 46 | 396          | WE25SM     | 250      | 250 | 250 |
|       | 30 | M42×2   | 25 | 25 | 49 | 49 | 35.5 | 34 | 20 | 62 | 41 | 50 | 632          | WE30SM     | 160      | 160 | 160 |
|       | 38 | M48×2   | 32 | 32 | 55 | 57 | 41.0 | 39 | 22 | 72 | 50 | 60 | 907          | WE38SM     | 160      | 160 | 160 |

## TE R - TÊ TUBO TUBO ROSCA BSP (TEE)



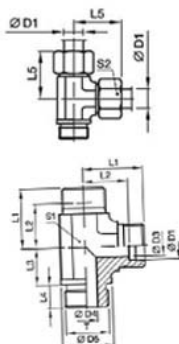
| Série | D1 | T        | D3 | D4 | D5 | L1 | L2   | L3 | L4 | L5 | S1 | S2 | Peso<br>g/Pç | Referência | PN (bar) |     |     |     |
|-------|----|----------|----|----|----|----|------|----|----|----|----|----|--------------|------------|----------|-----|-----|-----|
|       |    |          |    |    |    |    |      |    |    |    |    |    |              |            | CF       | A3C | 71  | MS  |
| L     | 22 | G3/4A    | 19 | 18 | 32 | 35 | 27.5 | 26 | 16 | 44 | 27 | 36 | 208          | TE22LR     | 160      | 160 | 160 | 100 |
|       | 28 | G1A      | 24 | 23 | 39 | 38 | 30.5 | 30 | 18 | 47 | 36 | 41 | 378          | TE28LR     | 160      | 160 | 160 | 100 |
|       | 35 | G1 1/4A  | 30 | 30 | 49 | 45 | 34.5 | 34 | 20 | 56 | 41 | 50 | 554          | TE35LR     | 160      | 160 | 160 | 100 |
|       | 42 | G1 1/2A  | 36 | 36 | 55 | 51 | 40.0 | 39 | 22 | 63 | 50 | 60 | 847          | TE42LR     | 160      | 160 | 160 | 100 |
| S     | 20 | G3/4 A   | 16 | 16 | 32 | 37 | 26.5 | 26 | 16 | 48 | 27 | 36 | 267          | TE20SR     | 400      | 400 | 400 | 250 |
|       | 25 | G1A      | 20 | 20 | 39 | 42 | 30.0 | 30 | 18 | 54 | 36 | 46 | 485          | TE25SR     | 250      | 250 | 250 |     |
|       | 30 | G1 1/4 A | 25 | 25 | 49 | 49 | 35.5 | 34 | 20 | 62 | 41 | 50 | 762          | TE30SR     | 160      | 160 | 160 |     |
|       | 38 | G1 1/2 A | 32 | 32 | 55 | 57 | 41.0 | 39 | 22 | 72 | 50 | 60 | 1121         | TE38SR     | 160      | 160 | 160 |     |

## TE M - TÊ TUBO TUBO ROSCA MÉTRICA (TEE)



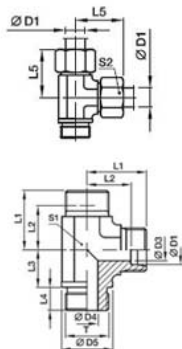
| Série | D1 | T       | D3 | D4 | D5 | L1 | L2   | L3 | L4 | L5 | S1 | S2 | Peso<br>g/Pç | Referência | PN (bar) <sup>1)</sup> |     |     |
|-------|----|---------|----|----|----|----|------|----|----|----|----|----|--------------|------------|------------------------|-----|-----|
|       |    |         |    |    |    |    |      |    |    |    |    |    |              |            | CF                     | A3C | 71  |
| L     | 22 | M26×1.5 | 19 | 18 | 31 | 35 | 27.5 | 26 | 16 | 44 | 27 | 36 | 208          | TE22LM     | 160                    | 160 | 160 |
|       | 28 | M33×2   | 24 | 23 | 39 | 38 | 30.5 | 30 | 18 | 47 | 36 | 41 | 352          | TE28LM     | 160                    | 160 | 160 |
|       | 35 | M42×2   | 30 | 30 | 49 | 45 | 34.5 | 34 | 20 | 56 | 41 | 50 | 554          | TE35LM     | 160                    | 160 | 160 |
|       | 42 | M48×2   | 36 | 36 | 55 | 51 | 40.0 | 39 | 22 | 63 | 50 | 60 | 847          | TE42LM     | 160                    | 160 | 160 |
| S     | 20 | M27×2   | 16 | 16 | 32 | 37 | 26.5 | 26 | 16 | 48 | 27 | 36 | 265          | TE20SM     | 400                    | 400 | 400 |
|       | 25 | M33×2   | 20 | 20 | 39 | 42 | 30.0 | 30 | 18 | 54 | 36 | 46 | 482          | TE25SM     | 250                    | 250 | 250 |
|       | 30 | M42×2   | 25 | 25 | 49 | 49 | 35.5 | 34 | 20 | 62 | 41 | 50 | 772          | TE30SM     | 160                    | 160 | 160 |
|       | 38 | M48×2   | 32 | 32 | 55 | 57 | 41.0 | 39 | 22 | 72 | 50 | 60 | 1121         | TE38SM     | 160                    | 160 | 160 |

## LE R - TÊ TUBO TUBO ROSCA BSPP "L"



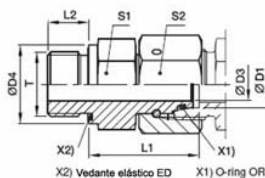
| Série | D1 | T       | D3 | D4 | D5 | L1 | L2   | L3 | L4 | L5 | S1 | S2 | Peso g/Pç | Referência | PN (bar) |     |     |
|-------|----|---------|----|----|----|----|------|----|----|----|----|----|-----------|------------|----------|-----|-----|
|       |    |         |    |    |    |    |      |    |    |    |    |    |           |            | CF       | A3C | 71  |
| L     | 22 | G3/4A   | 19 | 18 | 32 | 35 | 27.5 | 26 | 16 | 44 | 27 | 36 | 225       | LE22LR     | 160      | 160 | 160 |
|       | 28 | G1A     | 24 | 23 | 39 | 38 | 30.5 | 30 | 18 | 47 | 36 | 41 | 358       | LE28LR     | 160      | 160 | 160 |
|       | 35 | G1 1/4A | 30 | 30 | 49 | 45 | 34.5 | 34 | 20 | 56 | 41 | 50 | 583       | LE35LR     | 160      | 160 | 160 |
|       | 42 | G1 1/2A | 36 | 36 | 55 | 51 | 40.0 | 39 | 22 | 63 | 50 | 60 | 821       | LE42LR     | 160      | 160 | 160 |
| S     | 20 | G3/4A   | 16 | 16 | 32 | 37 | 26.5 | 26 | 16 | 48 | 27 | 36 | 259       | LE20SR     | 400      | 400 | 400 |
|       | 25 | G1A     | 20 | 20 | 39 | 42 | 30.0 | 30 | 18 | 54 | 36 | 46 | 495       | LE25SR     | 250      | 250 | 250 |
|       | 30 | G1 1/4A | 25 | 25 | 49 | 49 | 35.5 | 34 | 20 | 62 | 41 | 50 | 744       | LE30SR     | 160      | 160 | 160 |
|       | 38 | G1 1/2A | 32 | 32 | 55 | 57 | 41.0 | 39 | 22 | 72 | 50 | 60 | 1111      | LE38SR     | 160      | 160 | 160 |

## LE M - TÊ TUBO TUBO ROSCA MÉTRICA "L"



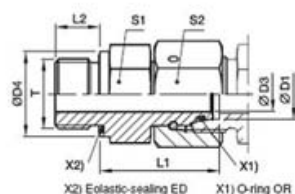
| Série | D1 | T       | D3 | D4 | D5 | L1 | L2   | L3 | L4 | L5 | S1 | S2 | Peso g/Pç | Referência | PN (bar) |     |     |
|-------|----|---------|----|----|----|----|------|----|----|----|----|----|-----------|------------|----------|-----|-----|
|       |    |         |    |    |    |    |      |    |    |    |    |    |           |            | CF       | A3C | 71  |
| L     | 22 | M26x1.5 | 19 | 18 | 31 | 35 | 27.5 | 26 | 16 | 44 | 27 | 36 | 225       | LE22LM     | 160      | 160 | 160 |
|       | 28 | M33x2   | 24 | 23 | 39 | 38 | 30.5 | 30 | 18 | 47 | 36 | 41 | 382       | LE28LM     | 160      | 160 | 160 |
|       | 35 | M42x2   | 30 | 30 | 49 | 45 | 34.5 | 34 | 20 | 56 | 41 | 50 | 583       | LE35LM     | 160      | 160 | 160 |
|       | 42 | M48x2   | 36 | 36 | 55 | 51 | 40.0 | 39 | 22 | 63 | 50 | 60 | 821       | LE42LM     | 160      | 160 | 160 |
| S     | 20 | M27x2   | 16 | 16 | 32 | 37 | 26.5 | 26 | 16 | 48 | 27 | 36 | 264       | LE20SM     | 400      | 400 | 400 |
|       | 25 | M33x2   | 20 | 20 | 39 | 42 | 30.0 | 30 | 18 | 54 | 36 | 46 | 497       | LE25SM     | 250      | 250 | 250 |
|       | 30 | M42x2   | 25 | 25 | 49 | 49 | 35.5 | 34 | 20 | 62 | 41 | 50 | 744       | LE30SM     | 160      | 160 | 160 |
|       | 38 | M48x2   | 32 | 32 | 55 | 57 | 41.0 | 39 | 22 | 72 | 50 | 60 | 1111      | LE38SM     | 160      | 160 | 160 |

## EGE R ED - JUNÇÃO COM PORCA LOUCA



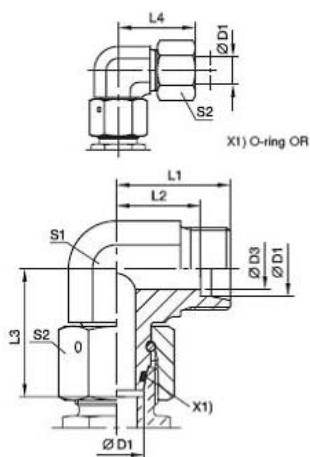
| Série | D1 | T         | D3   | D4 | L1   | L2 | S1 | S2 | Peso g/Pç | Referência   | PN (bar) |     |     |
|-------|----|-----------|------|----|------|----|----|----|-----------|--------------|----------|-----|-----|
|       |    |           |      |    |      |    |    |    |           |              | CF       | A3C | 71  |
| L     | 06 | G 1/8 A   | 2.5  | 14 | 24.5 | 8  | 14 | 14 | 27        | EGE06LRED    | 500      | 315 | 315 |
|       | 08 | G 1/4 A   | 4.0  | 19 | 29.5 | 12 | 19 | 17 | 28        | EGE08LRED    | 500      | 315 | 315 |
|       | 10 | G 1/4 A   | 6.0  | 19 | 27.5 | 12 | 19 | 19 | 54        | EGE10LRED    | 500      | 315 | 315 |
|       | 10 | G 3/8 A   | 6.0  | 22 | 29.0 | 12 | 22 | 19 | 70        | EGE10LR3/8ED | 400      | 315 |     |
|       | 12 | G 3/8 A   | 8.0  | 22 | 34.0 | 12 | 22 | 22 | 95        | EGE12LRED    | 400      | 315 | 315 |
|       | 12 | G 1/4 A   | 6.0  | 19 | 27.5 | 12 | 19 | 22 | 65        | EGE12LR1/4ED | 400      | 315 |     |
|       | 12 | G 1/2 A   | 8.0  | 27 | 29.5 | 14 | 27 | 22 | 114       | EGE12LR1/2ED | 400      | 315 |     |
|       | 15 | G 1/2 A   | 10.0 | 27 | 32.0 | 14 | 27 | 27 | 137       | EGE15LRED    | 400      | 315 | 315 |
|       | 18 | G 1/2 A   | 13.0 | 27 | 31.5 | 14 | 27 | 32 | 143       | EGE18LRED    | 400      | 315 | 315 |
|       | 18 | G 3/4 A   | 13.0 | 32 | 29.5 | 16 | 32 | 32 | 182       | EGE18LR3/4ED | 250      | 160 |     |
|       | 22 | G 3/4 A   | 17.0 | 32 | 32.5 | 16 | 32 | 36 | 200       | EGE22LRED    | 250      | 160 | 160 |
|       | 28 | G 1 A     | 22.0 | 40 | 35.0 | 18 | 41 | 41 | 289       | EGE28LRED    | 250      | 160 | 160 |
|       | 35 | G 1 1/4 A | 28.0 | 50 | 42.5 | 20 | 50 | 50 | 500       | EGE35LRED    | 250      | 160 | 160 |
|       | 42 | G 1 1/2 A | 34.0 | 55 | 46.5 | 22 | 55 | 60 | 718       | EGE42LRED    | 250      | 160 | 160 |
| S     | 06 | G 1/4 A   | 2.5  | 19 | 27.0 | 12 | 19 | 17 | 53        | EGE06SRED    | 800      | 630 | 630 |
|       | 08 | G 1/4 A   | 4.0  | 19 | 29.5 | 12 | 19 | 19 | 64        | EGE08SRED    | 800      | 630 | 630 |
|       | 10 | G 3/8 A   | 6.0  | 22 | 32.0 | 12 | 22 | 22 | 93        | EGE10SRED    | 800      | 630 | 630 |
|       | 12 | G 3/8 A   | 8.0  | 22 | 34.0 | 12 | 22 | 24 | 100       | EGE12SRED    | 630      | 630 | 630 |
|       | 12 | G 1/4 A   | 5.0  | 19 | 31.5 | 12 | 19 | 24 | 140       | EGE12SR1/4ED | 630      | 630 |     |
|       | 12 | G 1/2 A   | 8.0  | 27 | 35.0 | 14 | 27 | 24 | 140       | EGE12SR1/2ED | 630      | 630 | 630 |
|       | 14 | G 1/2 A   | 9.0  | 27 | 36.5 | 14 | 27 | 27 | 157       | EGE14SRED    | 630      | 630 | 630 |
|       | 16 | G 1/2 A   | 11.0 | 27 | 37.0 | 14 | 27 | 30 | 170       | EGE16SRED    | 630      | 400 | 400 |
|       | 20 | G 3/4 A   | 14.0 | 32 | 43.0 | 16 | 32 | 36 | 273       | EGE20SRED    | 420      | 400 | 400 |
|       | 25 | G 1 A     | 18.0 | 40 | 48.0 | 18 | 41 | 46 | 493       | EGE25SRED    | 420      | 400 | 400 |
|       | 30 | G 1 1/4 A | 23.0 | 50 | 51.0 | 20 | 50 | 50 | 691       | EGE30SRED    | 420      | 400 |     |
|       | 38 | G 1 1/2 A | 30.0 | 55 | 60.0 | 22 | 55 | 60 | 934       | EGE38SRED    | 420      | 315 | 315 |

## EGE M ED - JUNÇÃO MACHO MÉTRICA FÊMEA ORIENTÁVEL



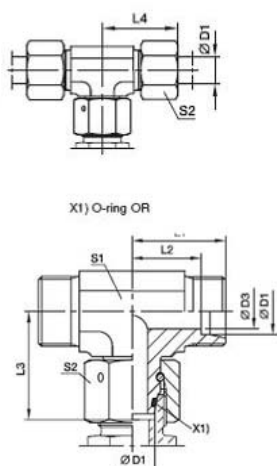
| Série | D1 | T          | D3   | D4 | L1   | L2 | S1 | S2 | Peso<br>g/Pç | Referência      | PN (bar) |     |     |
|-------|----|------------|------|----|------|----|----|----|--------------|-----------------|----------|-----|-----|
|       |    |            |      |    |      |    |    |    |              |                 | CF       | A3C | 71  |
| L     | 06 | M 10 x 1   | 2.5  | 14 | 24.5 | 8  | 14 | 14 | 27           | EGE06LMED       | 500      | 315 | 315 |
|       | 08 | M 12 x 1.5 | 4.0  | 17 | 26.5 | 12 | 17 | 17 | 45           | EGE08LMED       | 500      | 315 | 315 |
|       | 10 | M 14 x 1.5 | 6.0  | 19 | 27.5 | 12 | 19 | 19 | 57           | EGE10LMED       | 500      | 315 | 315 |
|       | 12 | M 16 x 1.5 | 8.0  | 22 | 30.5 | 12 | 22 | 22 | 82           | EGE12LMED       | 400      | 315 | 315 |
|       | 12 | M 22 x 1.5 | 8.0  | 27 | 27.0 | 14 | 27 | 22 | 92           | EGE12LM22X1.5ED | 400      | 315 | 315 |
|       | 15 | M 18 x 1.5 | 10.0 | 24 | 31.5 | 12 | 24 | 27 | 113          | EGE15LMED       | 400      | 315 | 315 |
|       | 15 | M 22 x 1.5 | 10.0 | 27 | 32.0 | 14 | 27 | 27 | 142          | EGE15LM22X1.5ED | 400      | 315 | 315 |
|       | 18 | M 22 x 1.5 | 13.0 | 27 | 31.5 | 14 | 27 | 32 | 148          | EGE18LMED       | 400      | 315 | 315 |
|       | 22 | M 26 x 1.5 | 17.0 | 32 | 32.5 | 16 | 32 | 36 | 203          | EGE22LMED       | 250      | 160 | 160 |
|       | 28 | M 33 x 2   | 22.0 | 40 | 35.0 | 18 | 41 | 41 | 289          | EGE28LMED       | 250      | 160 | 160 |
|       | 35 | M 42 x 2   | 28.0 | 50 | 42.5 | 20 | 50 | 50 | 511          | EGE35LMED       | 250      | 160 | 160 |
|       | 42 | M 48 x 2   | 34.0 | 55 | 46.5 | 22 | 55 | 60 | 711          | EGE42LMED       | 250      | 160 | 160 |
| S     | 06 | M 12 x 1.5 | 2.5  | 17 | 27.0 | 12 | 17 | 17 | 47           | EGE06SMED       | 800      | 630 | 630 |
|       | 08 | M 14 x 1.5 | 4.0  | 19 | 29.5 | 12 | 19 | 19 | 65           | EGE08SMED       | 800      | 630 | 630 |
|       | 10 | M 16 x 1.5 | 6.0  | 22 | 32.0 | 12 | 22 | 22 | 91           | EGE10SMED       | 800      | 630 | 630 |
|       | 12 | M 18 x 1.5 | 8.0  | 24 | 34.0 | 12 | 24 | 24 | 112          | EGE12SMED       | 630      | 630 | 630 |
|       | 14 | M 20 x 1.5 | 9.0  | 26 | 36.5 | 14 | 27 | 27 | 153          | EGE14SMED       | 630      | 630 | 630 |
|       | 16 | M 22 x 1.5 | 11.0 | 27 | 37.0 | 14 | 27 | 30 | 174          | EGE16SMED       | 630      | 400 | 400 |
|       | 20 | M 27 x 2   | 14.0 | 32 | 43.0 | 16 | 32 | 36 | 274          | EGE20SMED       | 420      | 400 | 400 |
|       | 25 | M 33 x 2   | 18.0 | 40 | 48.0 | 18 | 41 | 46 | 497          | EGE25SMED       | 420      | 400 | 400 |
|       | 30 | M 42 x 2   | 23.0 | 50 | 51.0 | 20 | 50 | 50 | 691          | EGE30SMED       | 420      | 400 | 400 |
|       | 38 | M 48 x 2   | 30.0 | 55 | 60.0 | 22 | 55 | 60 | 957          | EGE38SMED       | 420      | 315 | 315 |

## EW - JOELHO ORIENTÁVEL



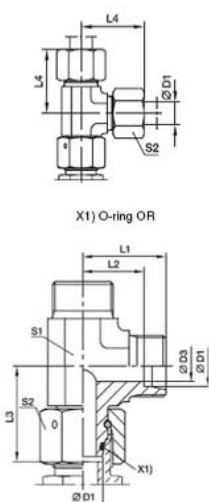
| Série | D1 | D3 | L1 | L2   | L3   | L4 | S1 | S2 | Peso<br>g/Pç | Referência | PN (bar) |     |     |
|-------|----|----|----|------|------|----|----|----|--------------|------------|----------|-----|-----|
|       |    |    |    |      |      |    |    |    |              |            | CF       | A3C | 71  |
| L     | 06 | 4  | 19 | 12.0 | 26.0 | 27 | 12 | 14 | 34           | EW06LOMD   | 500      | 315 | 315 |
|       | 08 | 6  | 21 | 14.0 | 27.5 | 29 | 12 | 17 | 43           | EW08LOMD   | 500      | 315 | 315 |
|       | 10 | 8  | 22 | 15.0 | 29.0 | 30 | 14 | 19 | 58           | EW10LOMD   | 500      | 315 | 315 |
|       | 12 | 10 | 24 | 17.0 | 29.5 | 32 | 17 | 22 | 81           | EW12LOMD   | 400      | 315 | 315 |
|       | 15 | 12 | 28 | 21.0 | 32.5 | 36 | 19 | 27 | 128          | EW15LOMD   | 400      | 315 | 315 |
|       | 18 | 15 | 31 | 23.5 | 35.5 | 40 | 24 | 32 | 197          | EW18LOMD   | 400      | 315 | 315 |
|       | 22 | 19 | 35 | 27.5 | 38.5 | 44 | 27 | 36 | 258          | EW22LOMD   | 250      | 160 | 160 |
|       | 28 | 24 | 38 | 30.5 | 41.5 | 47 | 36 | 41 | 370          | EW28LOMD   | 250      | 160 | 160 |
|       | 35 | 30 | 45 | 34.5 | 51.0 | 56 | 41 | 50 | 593          | EW35LOMD   | 250      | 160 | 160 |
|       | 42 | 36 | 51 | 40.0 | 56.0 | 63 | 50 | 60 | 993          | EW42LOMD   | 250      | 160 | 160 |
| S     | 06 | 4  | 23 | 16.0 | 27.0 | 31 | 12 | 17 | 48           | EW06SOMD   | 800      | 630 | 630 |
|       | 08 | 5  | 24 | 17.0 | 27.5 | 32 | 14 | 19 | 65           | EW08SOMD   | 800      | 630 | 630 |
|       | 10 | 6  | 25 | 17.5 | 30.0 | 34 | 17 | 22 | 92           | EW10SOMD   | 800      | 630 | 630 |
|       | 12 | 8  | 29 | 21.5 | 31.0 | 38 | 17 | 24 | 107          | EW12SOMD   | 630      | 630 | 630 |
|       | 14 | 9  | 30 | 22.0 | 35.0 | 40 | 19 | 27 | 146          | EW14SOMD   | 630      | 630 | 630 |
|       | 16 | 12 | 33 | 24.5 | 36.5 | 43 | 24 | 30 | 212          | EW16SOMD   | 630      | 400 | 400 |
|       | 20 | 16 | 37 | 26.5 | 44.5 | 48 | 27 | 36 | 309          | EW20SOMD   | 420      | 400 | 400 |
|       | 25 | 20 | 42 | 30.0 | 50.0 | 54 | 36 | 46 | 547          | EW25SOMD   | 420      | 400 | 400 |
|       | 30 | 25 | 49 | 35.5 | 55.0 | 62 | 41 | 50 | 744          | EW30SOMD   | 420      | 400 | 400 |
|       | 38 | 32 | 57 | 41.0 | 63.0 | 72 | 50 | 60 | 1222         | EW38SOMD   | 420      | 315 | 315 |

## ET - TÊ ORIENTÁVEL EM T



| Série | D1 | D3 | L1 | L2   | L3   | L4 | S1 | S2 | Peso g/Pç | Referência | PN (bar) |     |     |
|-------|----|----|----|------|------|----|----|----|-----------|------------|----------|-----|-----|
|       |    |    |    |      |      |    |    |    |           |            | CF       | A3C | 71  |
| L     | 06 | 4  | 19 | 12.0 | 26.0 | 27 | 12 | 14 | 42        | ET06LOMD   | 500      | 315 | 315 |
|       | 08 | 6  | 21 | 14.0 | 27.5 | 29 | 12 | 17 | 53        | ET08LOMD   | 500      | 315 | 315 |
|       | 10 | 8  | 22 | 15.0 | 29.0 | 30 | 14 | 19 | 71        | ET10LOMD   | 500      | 315 | 315 |
|       | 12 | 10 | 24 | 17.0 | 29.5 | 32 | 17 | 22 | 97        | ET12LOMD   | 400      | 315 | 315 |
|       | 15 | 12 | 28 | 21.0 | 32.5 | 36 | 19 | 27 | 159       | ET15LOMD   | 400      | 315 | 315 |
|       | 18 | 15 | 31 | 23.5 | 35.5 | 40 | 24 | 32 | 239       | ET18LOMD   | 400      | 315 | 315 |
|       | 22 | 19 | 35 | 27.5 | 38.5 | 44 | 27 | 36 | 308       | ET22LOMD   | 250      | 160 | 160 |
|       | 28 | 24 | 38 | 30.5 | 41.5 | 47 | 36 | 41 | 449       | ET28LOMD   | 250      | 160 | 160 |
|       | 35 | 30 | 45 | 34.5 | 51.0 | 56 | 41 | 50 | 679       | ET35LOMD   | 250      | 160 | 160 |
|       | 42 | 36 | 51 | 40.0 | 56.0 | 63 | 50 | 60 | 1131      | ET42LOMD   | 250      | 160 | 160 |
| S     | 06 | 4  | 23 | 16.0 | 27.0 | 31 | 12 | 17 | 63        | ET06SOMD   | 800      | 630 | 630 |
|       | 08 | 5  | 24 | 17.0 | 27.5 | 32 | 14 | 19 | 79        | ET08SOMD   | 800      | 630 | 630 |
|       | 10 | 6  | 25 | 17.5 | 30.0 | 34 | 17 | 22 | 113       | ET10SOMD   | 800      | 630 | 630 |
|       | 12 | 8  | 29 | 21.5 | 31.0 | 38 | 17 | 24 | 136       | ET12SOMD   | 630      | 630 | 630 |
|       | 14 | 9  | 30 | 22.0 | 35.0 | 40 | 19 | 27 | 173       | ET14SOMD   | 630      | 630 | 630 |
|       | 16 | 12 | 33 | 24.5 | 36.5 | 43 | 24 | 30 | 239       | ET16SOMD   | 630      | 400 | 400 |
|       | 20 | 16 | 37 | 26.5 | 44.5 | 48 | 27 | 36 | 388       | ET20SOMD   | 420      | 400 | 400 |
|       | 25 | 20 | 42 | 30.0 | 50.0 | 54 | 36 | 46 | 652       | ET25SOMD   | 420      | 400 | 400 |
|       | 30 | 25 | 49 | 35.5 | 55.0 | 62 | 41 | 50 | 905       | ET30SOMD   | 420      | 400 | 400 |
|       | 38 | 32 | 57 | 41.0 | 63.0 | 72 | 50 | 60 | 1462      | ET38SOMD   | 420      | 315 | 315 |

## EL - TÊ ORIENTÁVEL EM "L"



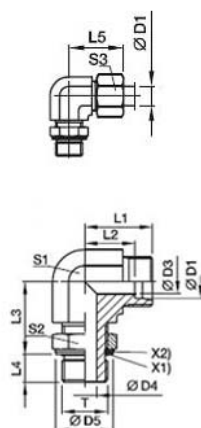
| Série | D1 | D3 | L1 | L2   | L3   | L4 | S1 | S2 | Peso g/Pç | Referência | PN (bar) |     |     |
|-------|----|----|----|------|------|----|----|----|-----------|------------|----------|-----|-----|
|       |    |    |    |      |      |    |    |    |           |            | CF       | A3C | 71  |
| L     | 06 | 4  | 19 | 12.0 | 26.0 | 27 | 12 | 14 | 44        | EL06LOMD   | 500      | 315 | 315 |
|       | 08 | 6  | 21 | 14.0 | 27.5 | 29 | 12 | 17 | 53        | EL08LOMD   | 500      | 315 | 315 |
|       | 10 | 8  | 22 | 15.0 | 29.0 | 30 | 14 | 19 | 68        | EL10LOMD   | 500      | 315 | 315 |
|       | 12 | 10 | 24 | 17.0 | 29.5 | 32 | 17 | 22 | 95        | EL12LOMD   | 400      | 315 | 315 |
|       | 15 | 12 | 28 | 21.0 | 32.5 | 36 | 19 | 27 | 151       | EL15LOMD   | 400      | 315 | 315 |
|       | 18 | 15 | 31 | 23.5 | 35.5 | 40 | 24 | 32 | 233       | EL18LOMD   | 400      | 315 | 315 |
|       | 22 | 19 | 35 | 27.5 | 38.5 | 44 | 27 | 36 | 309       | EL22LOMD   | 250      | 160 | 160 |
|       | 28 | 24 | 38 | 30.5 | 41.5 | 47 | 36 | 41 | 436       | EL28LOMD   | 250      | 160 | 160 |
|       | 35 | 30 | 45 | 34.5 | 51.0 | 56 | 41 | 50 | 666       | EL35LOMD   | 250      | 160 | 160 |
|       | 42 | 36 | 51 | 40.0 | 56.0 | 63 | 50 | 60 | 1163      | EL42LOMD   | 250      | 160 | 160 |
| S     | 06 | 4  | 23 | 16.0 | 27.0 | 31 | 12 | 17 | 65        | EL06SOMD   | 800      | 630 | 630 |
|       | 08 | 5  | 24 | 17.0 | 27.5 | 32 | 14 | 19 | 84        | EL08SOMD   | 800      | 630 | 630 |
|       | 10 | 6  | 25 | 17.5 | 30.0 | 34 | 17 | 22 | 118       | EL10SOMD   | 800      | 630 | 630 |
|       | 12 | 8  | 29 | 21.5 | 31.0 | 38 | 17 | 24 | 136       | EL12SOMD   | 630      | 630 | 630 |
|       | 14 | 9  | 30 | 22.0 | 35.0 | 40 | 19 | 27 | 173       | EL14SOMD   | 630      | 630 | 630 |
|       | 16 | 12 | 33 | 24.5 | 36.5 | 43 | 24 | 30 | 260       | EL16SOMD   | 630      | 400 | 400 |
|       | 20 | 16 | 37 | 26.5 | 44.5 | 48 | 27 | 36 | 375       | EL20SOMD   | 420      | 400 | 400 |
|       | 25 | 20 | 42 | 30.0 | 50.0 | 54 | 36 | 46 | 655       | EL25SOMD   | 420      | 400 | 400 |
|       | 30 | 25 | 49 | 35.5 | 55.0 | 62 | 41 | 50 | 906       | EL30SOMD   | 420      | 400 | 400 |
|       | 38 | 32 | 57 | 41.0 | 63.0 | 72 | 50 | 60 | 1472      | EL38SOMD   | 420      | 315 | 315 |

## EV - JUNÇÃO ORIENTÁVEL A 45°



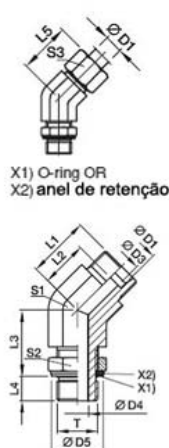
| Série | D1 | D3 | L1   | L2   | L3   | L4 | S1 | S2 | Peso g/Pç | Referência | PN (bar) |     |     |
|-------|----|----|------|------|------|----|----|----|-----------|------------|----------|-----|-----|
|       |    |    |      |      |      |    |    |    |           |            | CF       | A3C | 71  |
| L     | 06 | 4  | 16.0 | 9.0  | 26.0 | 24 | 14 | 14 | 37        | EV06LOMD   | 315      | 315 | 315 |
|       | 08 | 6  | 19.0 | 12.0 | 27.5 | 27 | 14 | 17 | 49        | EV08LOMD   | 315      | 315 | 315 |
|       | 10 | 8  | 19.0 | 12.0 | 29.0 | 27 | 19 | 19 | 77        | EV10LOMD   | 315      | 315 | 315 |
|       | 12 | 10 | 21.0 | 14.0 | 29.5 | 29 | 19 | 22 | 86        | EV12LOMD   | 315      | 315 | 315 |
|       | 15 | 12 | 24.0 | 17.0 | 32.5 | 32 | 22 | 27 | 144       | EV15LOMD   | 315      | 315 | 315 |
|       | 18 | 15 | 24.0 | 16.5 | 35.5 | 33 | 27 | 32 | 210       | EV18LOMD   | 315      | 315 | 315 |
|       | 22 | 19 | 26.0 | 18.5 | 38.5 | 35 | 30 | 36 | 270       | EV22LOMD   | 160      | 160 | 160 |
|       | 28 | 24 | 30.5 | 23.0 | 41.5 | 40 | 36 | 41 | 385       | EV28LOMD   | 160      | 160 | 160 |
|       | 35 | 30 | 37.0 | 26.5 | 51.0 | 48 | 50 | 50 | 805       | EV35LOMD   | 160      | 160 | 160 |
|       | 42 | 36 | 37.0 | 26.0 | 56.0 | 49 | 50 | 60 | 887       | EV42LOMD   | 160      | 160 | 160 |
| S     | 06 | 4  | 16.0 | 9.0  | 27.0 | 24 | 14 | 17 | 50        | EV06SOMD   | 630      | 630 | 630 |
|       | 08 | 5  | 19.0 | 12.0 | 27.5 | 27 | 19 | 19 | 80        | EV08SOMD   | 630      | 630 | 630 |
|       | 10 | 7  | 21.0 | 13.5 | 30.0 | 30 | 19 | 22 | 95        | EV10SOMD   | 630      | 630 | 630 |
|       | 12 | 8  | 24.0 | 16.5 | 31.0 | 33 | 22 | 24 | 137       | EV12SOMD   | 630      | 630 | 630 |
|       | 16 | 12 | 24.0 | 15.5 | 36.5 | 34 | 27 | 30 | 217       | EV16SOMD   | 400      | 400 | 400 |
|       | 20 | 16 | 26.5 | 16.0 | 44.5 | 38 | 30 | 36 | 313       | EV20SOMD   | 400      | 400 | 400 |
|       | 25 | 20 | 30.5 | 18.5 | 50.0 | 43 | 36 | 46 | 529       | EV25SOMD   | 400      | 400 | 400 |
|       | 30 | 25 | 37.0 | 23.5 | 55.0 | 50 | 50 | 50 | 940       | EV30SOMD   | 400      | 400 | 400 |
|       | 38 | 32 | 37.0 | 21.0 | 63.0 | 52 | 50 | 60 | 1055      | EV38SOMD   | 315      | 315 | 315 |

## WEE R - JOELHO ORIENTÁVEL COM PORCA DE FIXAÇÃO



|    | D1 | T        | D3   | D4   | Aço D5 | Aço Inox D5 | L1 | L2   | L3 | L4   | L5 | S1 | S2 | S3 | Peso g/Pç | Referência | PN (bar) |     |     |
|----|----|----------|------|------|--------|-------------|----|------|----|------|----|----|----|----|-----------|------------|----------|-----|-----|
|    |    |          |      |      |        |             |    |      |    |      |    |    |    |    |           |            | CF       | A3C | 71  |
| LL | 04 | G 1/8A   | 3.0  | 4.5  | 15     |             | 15 | 11.3 | 20 | 7.1  | 21 | 11 | 14 | 10 | 27        | WEE04LLR   | 250      | 250 |     |
|    | 06 | G 1/8A   | 4.5  | 4.5  | 15     |             | 15 | 11.3 | 20 | 7.1  | 21 | 11 | 14 | 12 | 27        | WEE06LLR   | 250      | 250 |     |
| L  | 06 | G 1/8A   | 4.0  | 4.5  | 15     | 15.0        | 21 | 14.0 | 19 | 7.0  | 29 | 14 | 14 | 14 | 40        | WEE06LR    | 315      | 315 | 315 |
|    | 08 | G 1/4A   | 6.0  | 7.5  | 20     | 20.0        | 23 | 16.0 | 23 | 9.0  | 31 | 14 | 19 | 17 | 59        | WEE08LR    | 315      | 315 | 315 |
|    | 10 | G 1/4A   | 8.0  | 7.5  | 20     | 20.0        | 24 | 17.0 | 25 | 9.0  | 32 | 19 | 19 | 19 | 82        | WEE10LR    | 315      | 315 | 315 |
|    | 12 | G 3/8A   | 10.0 | 10.0 | 23     | 23.5        | 26 | 19.0 | 28 | 9.0  | 34 | 19 | 22 | 22 | 96        | WEE12LR    | 250      | 250 | 250 |
|    | 15 | G 1/2A   | 12.0 | 12.5 | 28     | 28.5        | 28 | 21.0 | 30 | 13.0 | 36 | 22 | 27 | 27 | 149       | WEE15LR    | 250      | 250 | 250 |
|    | 18 | G 1/2A   | 15.0 | 12.5 | 28     | 28.5        | 31 | 24.0 | 36 | 13.0 | 40 | 27 | 27 | 32 | 221       | WEE18LR    | 250      | 250 | 250 |
|    | 22 | G 3/4A   | 19.0 | 15.5 | 33     | 34.5        | 35 | 28.0 | 36 | 13.0 | 44 | 30 | 36 | 36 | 310       | WEE22LR    | 160      | 160 | 160 |
|    | 28 | G 1A     | 24.0 | 21.5 | 41     | 43.5        | 38 | 31.0 | 44 | 15.0 | 47 | 36 | 41 | 41 | 455       | WEE28LR    | 160      | 160 | 160 |
|    | 35 | G 1 1/4A | 30.0 | 27.5 | 51     | 52.5        | 48 | 38.0 | 50 | 15.0 | 59 | 50 | 50 | 50 | 1043      | WEE35LR    | 160      | 160 | 160 |
|    | 42 | G 1 1/2A | 36.0 | 33.0 | 56     | 60.0        | 49 | 38.0 | 52 | 15.0 | 61 | 50 | 55 | 60 | 994       | WEE42LR    | 160      | 160 | 160 |
| S  | 06 | G 1/4A   | 4.0  | 7.5  | 20     | 20.0        | 22 | 15.0 | 23 | 9.0  | 30 | 14 | 19 | 17 | 56        | WEE06SR    | 315      | 315 | 315 |
|    | 08 | G 1/4A   | 5.0  | 7.5  | 20     | 20.0        | 24 | 17.0 | 27 | 9.0  | 32 | 19 | 19 | 19 | 88        | WEE08SR    | 315      | 315 | 315 |
|    | 10 | G 3/8A   | 7.0  | 10.0 | 23     | 23.5        | 25 | 18.0 | 29 | 9.0  | 34 | 19 | 22 | 22 | 98        | WEE10SR    | 250      | 250 | 250 |
|    | 12 | G 3/8A   | 8.0  | 10.0 | 23     | 23.5        | 29 | 22.0 | 29 | 9.0  | 38 | 22 | 22 | 24 | 128       | WEE12SR    | 250      | 250 | 250 |
|    | 16 | G 1/2A   | 12.0 | 12.5 | 28     | 28.5        | 33 | 25.0 | 36 | 13.0 | 43 | 27 | 27 | 30 | 234       | WEE16SR    | 250      | 250 | 250 |
|    | 20 | G 3/4A   | 16.0 | 15.5 | 33     | 34.5        | 38 | 28.0 | 39 | 12.0 | 49 | 30 | 36 | 36 | 344       | WEE20SR    | 250      | 250 | 250 |
|    | 25 | G 1A     | 20.0 | 21.5 | 41     | 43.5        | 42 | 30.0 | 44 | 14.0 | 54 | 36 | 41 | 46 | 533       | WEE25SR    | 250      | 250 | 250 |
|    | 30 | G 1 1/4A | 25.0 | 27.5 | 51     | 52.5        | 49 | 36.0 | 49 | 15.0 | 62 | 50 | 50 | 50 | 1085      | WEE30SR    | 160      | 160 | 160 |
|    | 38 | G 1 1/2A | 32.0 | 33.0 | 56     | 60.0        | 50 | 34.0 | 55 | 15.0 | 65 | 50 | 55 | 60 | 1116      | WEE38SR    | 160      | 160 | 160 |

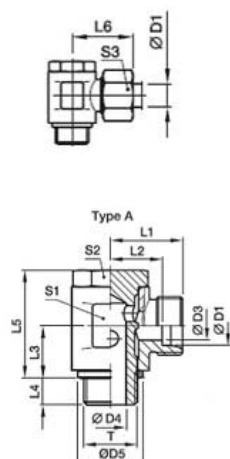
## VEE R - JOELHO 45° ORIENTÁVEL COM PORCA DE FIXAÇÃO



X1) O-ring OR  
X2) anel de retenção

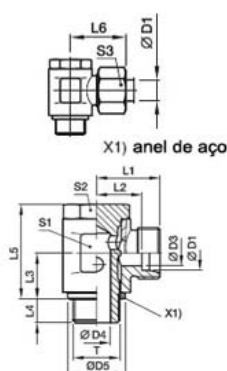
| Série | D1 | T        | D3 | D4   | D5 <sup>9)</sup> | D5 <sup>6)</sup> | L1 | L2 | L3 | L4 | L5 | S1 | S2 | S3 | Peso g/pç | Referência | PN (bar) |     |     |
|-------|----|----------|----|------|------------------|------------------|----|----|----|----|----|----|----|----|-----------|------------|----------|-----|-----|
|       |    |          |    |      |                  |                  |    |    |    |    |    |    |    |    |           |            | CF       | A3C | 71  |
| L     | 06 | G 1/8A   | 4  | 4.5  | 15               | 15.0             | 16 | 9  | 21 | 7  | 24 | 14 | 14 | 14 | 39        | VEE06LR    | 315      | 315 | 315 |
|       | 08 | G 1/4A   | 6  | 7.5  | 20               | 20.0             | 19 | 12 | 20 | 9  | 27 | 14 | 19 | 17 | 46        | VEE08LR    | 315      | 315 | 315 |
|       | 10 | G 1/4A   | 8  | 7.5  | 20               | 20.0             | 19 | 12 | 25 | 9  | 27 | 19 | 19 | 19 | 74        | VEE10LR    | 315      | 315 | 315 |
|       | 12 | G 3/8A   | 10 | 10.0 | 23               | 23.5             | 21 | 14 | 28 | 9  | 28 | 19 | 22 | 22 | 85        | VEE12LR    | 250      | 250 | 250 |
|       | 15 | G 1/2A   | 12 | 12.5 | 28               | 28.5             | 24 | 17 | 26 | 13 | 32 | 22 | 27 | 27 | 134       | VEE15LR    | 250      | 250 | 250 |
|       | 18 | G 1/2A   | 15 | 12.5 | 28               | 28.5             | 24 | 17 | 32 | 13 | 33 | 27 | 27 | 32 | 189       | VEE18LR    | 250      | 250 | 250 |
|       | 22 | G 3/4A   | 19 | 15.5 | 33               | 34.5             | 26 | 19 | 37 | 13 | 35 | 30 | 36 | 36 | 283       | VEE22LR    | 160      | 160 | 160 |
|       | 28 | G 1A     | 24 | 21.5 | 41               | 43.5             | 31 | 23 | 37 | 15 | 40 | 36 | 41 | 41 | 410       | VEE28LR    | 160      | 160 | 160 |
|       | 35 | G 1 1/4A | 30 | 27.5 | 51               | 52.5             | 37 | 27 | 39 | 15 | 48 | 50 | 50 | 50 | 807       | VEE35LR    | 160      | 160 | 160 |
|       | 42 | G 1 1/2A | 36 | 33.0 | 56               | 60.0             | 37 | 26 | 39 | 15 | 49 | 50 | 55 | 60 | 762       | VEE42LR    | 160      | 160 | 160 |
| S     | 06 | G 1/4A   | 4  | 7.5  | 20               | 20.0             | 16 | 9  | 19 | 9  | 24 | 14 | 19 | 17 | 45        | VEE06SR    | 315      | 315 | 315 |
|       | 08 | G 1/4A   | 5  | 7.5  | 20               | 20.0             | 19 | 12 | 23 | 9  | 27 | 19 | 19 | 19 | 76        | VEE08SR    | 315      | 315 | 315 |
|       | 10 | G 3/8A   | 7  | 10.0 | 23               | 23.5             | 21 | 13 | 25 | 9  | 29 | 19 | 22 | 22 | 86        | VEE10SR    | 250      | 250 | 250 |
|       | 12 | G 3/8A   | 8  | 10.0 | 23               | 23.5             | 24 | 17 | 25 | 9  | 33 | 22 | 22 | 24 | 115       | VEE12SR    | 250      | 250 | 250 |
|       | 16 | G 1/2A   | 12 | 12.5 | 28               | 28.5             | 24 | 16 | 31 | 13 | 34 | 27 | 27 | 30 | 186       | VEE16SR    | 250      | 250 | 250 |
|       | 20 | G 3/4A   | 16 | 15.5 | 33               | 34.5             | 27 | 16 | 34 | 12 | 38 | 30 | 36 | 36 | 286       | VEE20SR    | 250      | 250 | 250 |
|       | 25 | G 1A     | 20 | 21.5 | 41               | 43.5             | 31 | 19 | 37 | 14 | 43 | 36 | 41 | 46 | 425       | VEE25SR    | 250      | 250 | 250 |
|       | 30 | G 1 1/4A | 25 | 27.5 | 51               | 52.5             | 37 | 24 | 38 | 15 | 50 | 50 | 50 | 50 | 793       | VEE30SR    | 160      | 160 | 160 |
|       | 38 | G 1 1/2A | 32 | 33.0 | 56               | 60.0             | 37 | 21 | 38 | 15 | 52 | 50 | 55 | 60 | 791       | VEE38SR    | 160      | 160 | 160 |

## WSVE R - JOELHO ORIENTÁVEL TIPO BANJO COM ROSCA BSP



| Série | D1 | Type | T      | D3   | D4   | D5 | L1   | L2   | L3   | L4 | L5   | L6 | S1 | S2 | S3 | Peso<br>g/Pç | Referência | PN (bar) |     |
|-------|----|------|--------|------|------|----|------|------|------|----|------|----|----|----|----|--------------|------------|----------|-----|
| LL    | 04 | B    | G 1/8A | 3.0  | 5.0  | 15 | 15.5 | 11.5 | 10.0 | 6  | 21.5 | 21 | 14 | 14 | 10 | 29           | SWVE04LLR  | 250      | 250 |
|       | 06 | B    | G 1/8A | 4.5  | 5.0  | 15 | 15.5 | 10.0 | 10.0 | 6  | 21.5 | 22 | 14 | 14 | 12 | 30           | SWVE06LLR  | 250      | 250 |
| LL    | 04 | A    | G 1/8A | 3.0  | 5.0  | 14 | 15.5 | 11.5 | 10.0 | 6  | 21.0 | 21 | 14 | 14 | 10 | 28           | SWVE04LLR  | 63       | 63  |
|       | 06 | A    | G 1/8A | 4.5  | 5.0  | 14 | 15.5 | 10.0 | 10.0 | 6  | 21.5 | 22 | 14 | 14 | 12 | 28           | SWVE06LLR  | 63       | 63  |
|       | 08 | A    | G 1/8A | 6.0  | 5.0  | 14 | 16.5 | 11.0 | 10.0 | 6  | 21.0 | 23 | 14 | 14 | 14 | 30           | SWVE08LLR  | 63       | 63  |
| L     | 06 | A    | G 1/8A | 4.0  | 5.0  | 14 | 17.5 | 10.5 | 10.0 | 6  | 21.0 | 25 | 14 | 14 | 14 | 31           | SWVE06LR   | 160      | 160 |
|       | 08 | A    | G 1/4A | 6.0  | 6.5  | 18 | 20.0 | 13.0 | 13.0 | 9  | 27.0 | 28 | 19 | 19 | 17 | 65           | SWVE08LR   | 160      | 160 |
|       | 10 | A    | G 1/4A | 8.0  | 6.5  | 18 | 21.0 | 14.0 | 13.0 | 9  | 27.0 | 29 | 19 | 19 | 19 | 66           | SWVE10LR   | 160      | 160 |
|       | 12 | A    | G 3/8A | 10.0 | 8.5  | 22 | 22.5 | 15.5 | 15.0 | 9  | 32.0 | 30 | 22 | 22 | 22 | 102          | SWVE12LR   | 100      | 100 |
|       | 15 | A    | G 1/2A | 12.0 | 11.0 | 26 | 26.0 | 19.0 | 18.0 | 11 | 37.5 | 34 | 27 | 27 | 27 | 171          | SWVE15LR   | 100      | 100 |
|       | 18 | A    | G 1/2A | 15.0 | 12.0 | 26 | 28.0 | 20.5 | 21.5 | 11 | 44.0 | 37 | 30 | 27 | 32 | 249          | SWVE18LR   | 100      | 100 |
| S     | 22 | A    | G 3/4A | 19.0 | 18.0 | 32 | 33.0 | 25.5 | 24.0 | 13 | 49.0 | 42 | 36 | 32 | 36 | 349          | SWVE22LR   | 100      | 100 |
|       | 06 | A    | G 1/4A | 4.0  | 6.5  | 18 | 22.0 | 15.0 | 13.0 | 9  | 27.0 | 30 | 19 | 19 | 17 | 69           | SWVE06SR   | 160      | 160 |
|       | 08 | A    | G 1/4A | 5.0  | 6.5  | 18 | 22.0 | 15.0 | 13.0 | 9  | 27.0 | 30 | 19 | 19 | 19 | 73           | SWVE08SR   | 160      | 160 |
|       | 10 | A    | G 3/8A | 7.0  | 8.5  | 22 | 23.5 | 16.0 | 15.0 | 9  | 32.0 | 32 | 22 | 22 | 22 | 108          | SWVE10SR   | 100      | 100 |
|       | 12 | A    | G 3/8A | 8.0  | 8.0  | 22 | 24.5 | 17.0 | 18.0 | 9  | 37.0 | 33 | 24 | 24 | 24 | 147          | SWVE12SR   | 100      | 100 |
|       | 14 | A    | G 1/2A | 10.0 | 11.0 | 26 | 28.0 | 20.0 | 18.0 | 11 | 37.0 | 38 | 27 | 27 | 27 | 177          | SWVE14SR   | 100      | 100 |
|       | 16 | A    | G 1/2A | 12.0 | 12.0 | 26 | 30.0 | 21.5 | 21.5 | 11 | 44.0 | 40 | 30 | 27 | 30 | 249          | SWVE16SR   | 100      | 100 |
|       | 20 | A    | G 3/4A | 16.0 | 18.0 | 32 | 35.0 | 24.5 | 24.0 | 13 | 49.0 | 46 | 36 | 32 | 36 | 359          | SWVE20SR   | 100      | 100 |

## WSVE M - JOELHO ORIENTÁVEL TIPO BANJO COM ROSCA MÉTRICA

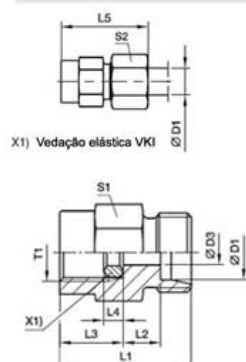


| Série | D1 | T       | D3   | D4   | D5   | L1   | L2   | L3   | L4 | L5   | L6 | S1 | S2 | S3 | Peso<br>g/Pç | Referência | PN (bar) |     |
|-------|----|---------|------|------|------|------|------|------|----|------|----|----|----|----|--------------|------------|----------|-----|
| LL    | 04 | M08×1   | 3.0  | 3.0  | 12.5 | 14.5 | 10.5 | 8.0  | 6  | 17.0 | 20 | 12 | 12 | 10 | 18           | SWVE04LLM  | 63       | 63  |
|       | 06 | M10×1   | 4.5  | 5.0  | 14.0 | 15.5 | 10.0 | 10.0 | 6  | 21.0 | 22 | 14 | 14 | 12 | 29           | SWVE06LLM  | 63       | 63  |
|       | 08 | M10×1   | 6.0  | 5.0  | 14.0 | 16.5 | 11.0 | 10.0 | 6  | 21.0 | 23 | 14 | 14 | 14 | 31           | SWVE08LLM  | 63       | 63  |
| L     | 06 | M10×1   | 4.5  | 5.0  | 14.0 | 15.5 | 10.5 | 10.0 | 6  | 21.5 | 25 | 14 | 14 | 14 | 31           | SWVE06LM   | 160      | 160 |
|       | 08 | M12×1.5 | 6.0  | 6.0  | 17.0 | 19.0 | 12.0 | 12.0 | 9  | 25.0 | 27 | 17 | 17 | 17 | 51           | SWVE08LM   | 160      | 160 |
|       | 10 | M14×1.5 | 8.0  | 6.5  | 19.0 | 21.0 | 14.0 | 13.0 | 9  | 27.0 | 29 | 19 | 19 | 19 | 68           | SWVE10LM   | 160      | 160 |
|       | 12 | M16×1.5 | 10.0 | 8.5  | 21.0 | 22.5 | 15.5 | 15.0 | 9  | 32.0 | 30 | 22 | 21 | 22 | 100          | SWVE12LM   | 100      | 100 |
|       | 15 | M18×1.5 | 12.0 | 11.0 | 23.0 | 24.5 | 17.5 | 18.0 | 9  | 37.5 | 33 | 24 | 24 | 27 | 138          | SWVE15LM   | 100      | 100 |
|       | 18 | M22×1.5 | 15.0 | 13.0 | 27.0 | 28.0 | 20.5 | 21.5 | 11 | 44.0 | 37 | 30 | 27 | 32 | 241          | SWVE18LM   | 100      | 100 |
| S     | 22 | M26×1.5 | 19.0 | 18.0 | 31.0 | 33.0 | 25.5 | 24.0 | 13 | 49.0 | 42 | 36 | 32 | 36 | 351          | SWVE22LM   | 100      | 100 |
|       | 06 | M12×1.5 | 4.0  | 6.0  | 17.0 | 21.0 | 14.0 | 12.0 | 9  | 25.0 | 29 | 17 | 17 | 17 | 55           | SWVE06SM   | 160      | 160 |
|       | 08 | M14×1.5 | 5.0  | 6.5  | 19.0 | 22.0 | 15.0 | 13.0 | 9  | 27.0 | 30 | 19 | 19 | 19 | 75           | SWVE08SM   | 160      | 160 |
|       | 10 | M16×1.5 | 7.0  | 8.5  | 21.0 | 23.5 | 16.0 | 15.0 | 9  | 32.0 | 32 | 22 | 22 | 22 | 106          | SWVE10SM   | 100      | 100 |
|       | 12 | M18×1.5 | 8.0  | 11.0 | 23.0 | 24.5 | 17.0 | 18.0 | 9  | 37.0 | 33 | 24 | 24 | 24 | 134          | SWVE12SM   | 100      | 100 |
|       | 14 | M20×1.5 | 10.0 | 10.0 | 25.0 | 28.0 | 20.0 | 18.0 | 11 | 37.0 | 38 | 27 | 27 | 27 | 179          | SWVE14SM   | 100      | 100 |
|       | 16 | M22×1.5 | 12.0 | 13.0 | 27.0 | 30.0 | 21.5 | 21.5 | 11 | 44.0 | 40 | 30 | 27 | 30 | 252          | SWVE16SM   | 100      | 100 |
|       | 20 | M27×2   | 16.0 | 18.0 | 32.0 | 35.0 | 24.5 | 24.0 | 13 | 49.0 | 46 | 36 | 32 | 36 | 363          | SWVE20SM   | 100      | 100 |

## GAI - JUNÇÃO FÊMEA

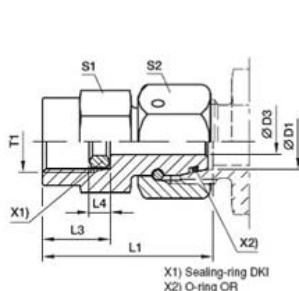
| Série | D1 | T1    | D3 | L1   | L2   | L3   | L4 | S1 | S2 | Peso<br>g/Pç | Referência | PN (bar) |     |     |     |
|-------|----|-------|----|------|------|------|----|----|----|--------------|------------|----------|-----|-----|-----|
|       |    |       |    |      |      |      |    |    |    |              |            | CF       | A3C | 71  | MS  |
| L     | 06 | G1/8  | 4  | 26.0 | 19.0 | 12.0 | 34 | 14 | 14 | 18           | GAI06LR    | 315      | 315 | 315 | 200 |
|       | 06 | G1/4  | 4  | 31.0 | 24.0 | 17.0 | 39 | 19 | 14 | 39           | GAI06LR1/4 | 315      | 315 | 315 | 200 |
|       | 08 | G1/4  | 6  | 31.0 | 24.0 | 17.0 | 39 | 19 | 17 | 39           | GAI08LR    | 315      | 315 | 315 | 200 |
|       | 08 | G3/8  | 6  | 32.0 | 25.0 | 17.0 | 40 | 24 | 17 | 61           | GAI08LR3/8 | 315      | 315 | 315 | 200 |
|       | 08 | G1/2  | 6  | 36.0 | 29.0 | 20.0 | 44 | 27 | 17 | 80           | GAI08LR1/2 | 315      | 315 | 315 | 200 |
|       | 10 | G1/4  | 8  | 32.0 | 25.0 | 17.0 | 40 | 19 | 19 | 40           | GAI10LR    | 315      | 315 | 315 | 200 |
|       | 10 | G3/8  | 8  | 33.0 | 26.0 | 17.0 | 41 | 24 | 19 | 63           | GAI10LR3/8 | 315      | 315 | 315 | 200 |
|       | 10 | G1/2  | 8  | 37.0 | 30.0 | 20.0 | 45 | 27 | 19 | 81           | GAI10LR1/2 | 315      | 315 | 315 | 200 |
|       | 12 | G3/8  | 10 | 33.0 | 26.0 | 17.0 | 41 | 24 | 22 | 64           | GAI12LR    | 315      | 315 | 315 | 200 |
|       | 12 | G1/2  | 10 | 37.0 | 30.0 | 20.0 | 45 | 27 | 22 | 83           | GAI12LR1/2 | 315      | 315 | 315 | 200 |
|       | 15 | G1/2  | 12 | 38.0 | 31.0 | 20.0 | 46 | 27 | 27 | 87           | GAI15LR    | 315      | 315 | 315 | 200 |
|       | 18 | G1/2  | 15 | 38.0 | 30.5 | 20.0 | 47 | 27 | 32 | 89           | GAI18LR    | 315      | 315 | 315 | 200 |
|       | 18 | G3/8  | 15 | 34.0 | 26.5 | 17.0 | 43 | 27 | 32 | 95           | GAI18LR3/8 | 315      | 315 | 315 | 200 |
|       | 22 | G3/4  | 19 | 43.0 | 35.5 | 22.0 | 52 | 36 | 36 | 173          | GAI22LR    | 160      | 160 | 160 | 100 |
|       | 28 | G1    | 24 | 45.5 | 38.0 | 24.5 | 55 | 41 | 41 | 211          | GAI28LR    | 160      | 160 | 160 | 100 |
|       | 35 | G11/4 | 30 | 51.5 | 41.0 | 26.5 | 63 | 55 | 50 | 469          | GAI35LR    | 160      | 160 | 160 | 100 |
|       | 42 | G11/2 | 36 | 53.5 | 42.5 | 28.5 | 65 | 60 | 60 | 540          | GAI42LR    | 160      | 160 | 160 | 100 |
|       | 06 | G1/4  | 4  | 33.0 | 26.0 | 17.0 | 41 | 19 | 17 | 43           | GAI06SR    | 400      | 400 | 400 |     |
|       | 08 | G1/4  | 5  | 33.0 | 26.0 | 17.0 | 41 | 19 | 19 | 47           | GAI08SR    | 400      | 400 | 400 |     |
|       | 10 | G3/8  | 7  | 34.0 | 26.5 | 17.0 | 43 | 24 | 22 | 68           | GAI10SR    | 400      | 400 | 400 |     |
|       | 12 | G3/8  | 8  | 34.0 | 26.5 | 17.0 | 43 | 24 | 24 | 71           | GAI12SR    | 400      | 400 | 400 |     |
|       | 12 | G1/2  | 8  | 38.0 | 30.5 | 20.0 | 47 | 30 | 24 | 121          | GAI12SR1/2 | 400      | 400 | 400 |     |
|       | 14 | G1/2  | 10 | 40.0 | 32.0 | 20.0 | 50 | 30 | 27 | 125          | GAI14SR    | 400      | 400 | 400 |     |
|       | 16 | G1/2  | 12 | 40.0 | 31.5 | 20.0 | 50 | 30 | 30 | 126          | GAI16SR    | 400      | 400 | 400 |     |
|       | 20 | G3/4  | 16 | 45.0 | 34.5 | 22.0 | 56 | 36 | 36 | 196          | GAI20SR    | 315      | 315 | 315 |     |
|       | 25 | G1    | 20 | 49.5 | 37.5 | 24.5 | 62 | 41 | 46 | 246          | GAI25SR    | 315      | 315 | 315 |     |
|       | 30 | G11/4 | 25 | 55.5 | 42.0 | 26.5 | 69 | 55 | 50 | 537          | GAI30SR    | 315      | 315 | 315 |     |
|       | 38 | G11/2 | 32 | 59.5 | 43.5 | 28.5 | 74 | 60 | 60 | 649          | GAI38SR    | 250      | 250 | 250 |     |

## MAV - TOMADA DE PRESSÃO PARA MANÓMETRO



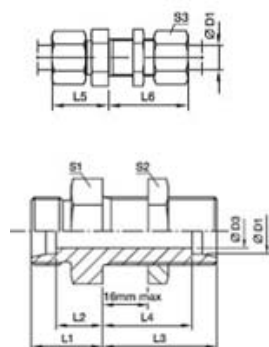
| Série | D1 | T1   | D3  | L1 | L2   | L3   | L4  | L5 | S1 | S2 | Peso<br>g/Pç | Referência | PN (bar) |     |     |     |
|-------|----|------|-----|----|------|------|-----|----|----|----|--------------|------------|----------|-----|-----|-----|
|       |    |      |     |    |      |      |     |    |    |    |              |            | CF       | A3C | 71  | MS  |
| LL    | 04 | G1/4 | 2.5 | 27 | 8.5  | 14.5 | 4.5 | 33 | 19 | 10 | 33           | MAV04LLR   | 100      | 100 |     |     |
| L     | 06 | G1/4 | 2.5 | 29 | 7.5  | 14.5 | 4.5 | 37 | 19 | 14 | 37           | MAV06LR    | 315      | 315 | 315 | 200 |
|       | 08 | G1/4 | 5.5 | 29 | 7.5  | 14.5 | 4.5 | 37 | 19 | 17 | 38           | MAV08LR    | 315      | 315 | 315 | 200 |
|       | 10 | G1/4 | 5.5 | 30 | 8.5  | 14.5 | 4.5 | 38 | 19 | 19 | 41           | MAV10LR    | 315      | 315 | 315 | 200 |
|       | 12 | G1/4 | 5.5 | 30 | 8.5  | 14.5 | 4.5 | 38 | 19 | 22 | 43           | MAV12LR    | 315      | 315 | 315 | 200 |
| S     | 06 | G1/2 | 3.5 | 38 | 11.0 | 20.0 | 5.0 | 46 | 27 | 17 | 86           | MAV06SR    | 630      | 630 | 630 | 400 |
|       | 08 | G1/2 | 3.5 | 38 | 11.0 | 20.0 | 5.0 | 46 | 27 | 19 | 86           | MAV08SR    | 630      | 630 | 630 | 400 |
|       | 10 | G1/2 | 7.5 | 38 | 10.5 | 20.0 | 5.0 | 47 | 27 | 22 | 88           | MAV10SR    | 630      | 630 | 630 | 400 |
|       | 12 | G1/2 | 7.5 | 38 | 10.5 | 20.0 | 5.0 | 47 | 27 | 24 | 93           | MAV12SR    | 630      | 630 | 630 | 400 |

## MAVE - TOMADA DE PRESSÃO PARA MANÓMETRO COM PORCA LOUCA



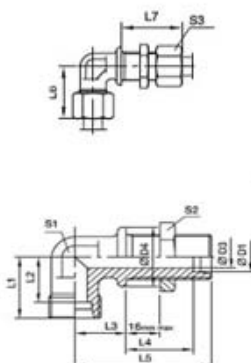
| Série | D1 | T1   | D3  | L1   | L3   | L4  | S1 | S2 | Peso<br>g/Pç | Referência  | PN (bar) |     |     |
|-------|----|------|-----|------|------|-----|----|----|--------------|-------------|----------|-----|-----|
|       |    |      |     |      |      |     |    |    |              |             | CF       | A3C | 71  |
| L     | 06 | G1/4 | 2.5 | 35.5 | 14.5 | 4.5 | 19 | 14 | 46           | MAVE06LR    | 315      | 315 | 315 |
|       | 08 | G1/4 | 4.0 | 35.5 | 14.5 | 4.5 | 19 | 17 | 52           | MAVE08LR    | 315      | 315 | 315 |
|       | 10 | G1/4 | 5.5 | 36.0 | 14.5 | 4.5 | 19 | 19 | 59           | MAVE10LR    | 315      | 315 | 315 |
|       | 12 | G1/4 | 5.5 | 36.0 | 14.5 | 4.5 | 19 | 22 | 70           | MAVE12LR    | 315      | 315 | 315 |
| S     | 06 | G1/2 | 2.5 | 42.5 | 20.0 | 5.0 | 27 | 17 | 95           | MAVE06SR    | 630      | 630 | 630 |
|       | 06 | G1/4 | 2.5 | 35.5 | 14.5 | 4.5 | 19 | 17 | 52           | MAVE06SR1/4 | 630      | 630 | 630 |
|       | 08 | G1/2 | 4.0 | 43.0 | 20.0 | 5.0 | 27 | 19 | 100          | MAVE08SR    | 630      | 630 | 630 |
|       | 08 | G1/4 | 4.0 | 35.5 | 14.5 | 4.5 | 19 | 19 | 58           | MAVE08SR1/4 | 630      | 630 | 630 |
|       | 10 | G1/2 | 6.0 | 43.5 | 20.0 | 5.0 | 27 | 22 | 109          | MAVE10SR    | 630      | 630 | 630 |
|       | 10 | G1/4 | 7.0 | 39.0 | 14.5 | 4.5 | 19 | 22 | 67           | MAVE10SR1/4 | 630      | 630 | 630 |
|       | 12 | G1/2 | 7.0 | 45.0 | 20.0 | 5.0 | 27 | 24 | 125          | MAVE12SR    | 630      | 630 | 630 |
|       | 12 | G1/4 | 7.0 | 39.0 | 14.5 | 4.5 | 19 | 24 | 83           | MAVE12SR1/4 | 630      | 630 | 630 |

## SV - UNIÃO TUBO TUBO



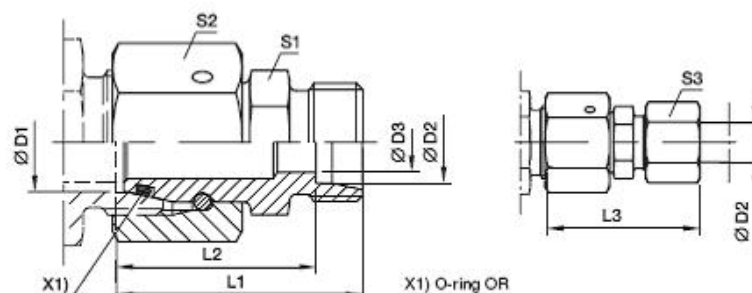
| Série | D1 | D3 | L1 | L2   | L3 | L4   | L5 | L6 | S1 | S2 | S3 | Peso<br>g/Pç | Referência | PN (bar) |     |     |     |
|-------|----|----|----|------|----|------|----|----|----|----|----|--------------|------------|----------|-----|-----|-----|
|       |    |    |    |      |    |      |    |    |    |    |    |              |            | CF       | A3C | 71  | MS  |
| L     | 06 | 4  | 14 | 7.0  | 34 | 27.0 | 22 | 42 | 17 | 17 | 14 | 39           | SV06L      | 500      | 315 | 315 | 200 |
|       | 08 | 6  | 15 | 8.0  | 34 | 27.0 | 23 | 42 | 19 | 19 | 17 | 50           | SV08L      | 500      | 315 | 315 | 200 |
|       | 10 | 8  | 17 | 10.0 | 35 | 28.0 | 25 | 43 | 22 | 22 | 19 | 67           | SV10L      | 500      | 315 | 315 | 200 |
|       | 12 | 10 | 17 | 10.0 | 36 | 29.0 | 25 | 44 | 24 | 24 | 22 | 78           | SV12L      | 400      | 315 | 315 | 200 |
|       | 15 | 12 | 19 | 12.0 | 38 | 31.0 | 27 | 46 | 27 | 30 | 27 | 128          | SV15L      | 400      | 315 | 315 | 200 |
|       | 18 | 15 | 21 | 13.5 | 40 | 32.5 | 30 | 49 | 32 | 36 | 32 | 198          | SV18L      | 400      | 315 | 315 | 200 |
|       | 22 | 19 | 24 | 16.5 | 42 | 34.5 | 33 | 51 | 36 | 41 | 36 | 254          | SV22L      | 250      | 160 | 160 | 100 |
|       | 28 | 24 | 26 | 18.5 | 43 | 35.5 | 35 | 52 | 41 | 46 | 41 | 335          | SV28L      | 250      | 160 | 160 | 100 |
|       | 35 | 30 | 29 | 18.5 | 47 | 36.5 | 40 | 58 | 50 | 55 | 50 | 546          | SV35L      | 250      | 160 | 160 |     |
|       | 42 | 36 | 30 | 19.0 | 47 | 36.0 | 42 | 59 | 60 | 65 | 60 | 758          | SV42L      | 250      | 160 | 160 |     |
| S     | 06 | 4  | 19 | 12.0 | 36 | 29.0 | 27 | 44 | 19 | 19 | 17 | 65           | SV06S      | 800      | 630 | 630 | 400 |
|       | 08 | 5  | 20 | 13.0 | 36 | 29.0 | 28 | 44 | 22 | 22 | 19 | 87           | SV08S      | 800      | 630 | 630 | 400 |
|       | 10 | 7  | 22 | 14.5 | 37 | 29.5 | 31 | 46 | 24 | 24 | 22 | 112          | SV10S      | 800      | 630 | 630 | 400 |
|       | 12 | 8  | 22 | 14.5 | 38 | 30.5 | 31 | 47 | 27 | 27 | 24 | 141          | SV12S      | 630      | 630 | 630 | 400 |
|       | 14 | 10 | 25 | 17.0 | 40 | 32.0 | 35 | 50 | 30 | 30 | 27 | 180          | SV14S      | 630      | 630 | 630 |     |
|       | 16 | 12 | 25 | 16.5 | 40 | 31.5 | 35 | 50 | 32 | 32 | 30 | 201          | SV16S      | 630      | 400 | 400 | 250 |
|       | 20 | 16 | 28 | 17.5 | 44 | 33.5 | 39 | 55 | 41 | 41 | 36 | 462          | SV20S      | 420      | 400 | 400 | 250 |
|       | 25 | 20 | 32 | 20.0 | 47 | 35.0 | 44 | 59 | 46 | 46 | 46 | 492          | SV25S      | 420      | 400 | 400 | 250 |
|       | 30 | 25 | 35 | 21.5 | 51 | 37.5 | 48 | 64 | 50 | 50 | 50 | 631          | SV30S      | 420      | 400 | 400 | 250 |
|       | 38 | 32 | 38 | 22.0 | 53 | 37.0 | 53 | 68 | 65 | 65 | 60 | 1083         | SV38S      | 420      | 315 | 315 |     |

## WSV - JOELHO DE ANTEPARA



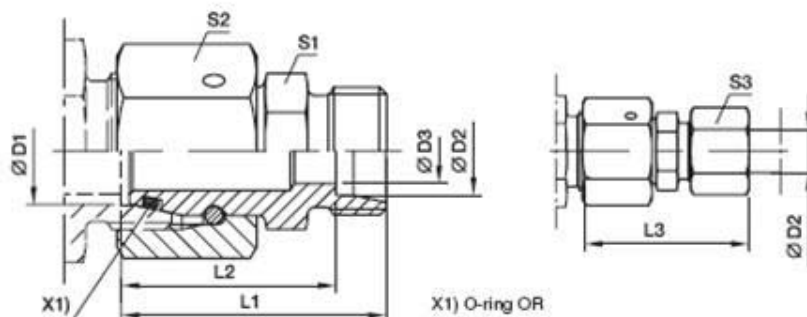
| Série | D1 | D3 | D4 | L1 | L2   | L3 | L4   | L5 | L6 | L7 | S1 | S2 | S3 | Peso<br>g/Pç | Referência | PN (bar) |     |     |     |
|-------|----|----|----|----|------|----|------|----|----|----|----|----|----|--------------|------------|----------|-----|-----|-----|
|       |    |    |    |    |      |    |      |    |    |    |    |    |    |              |            | CF       | A3C | 71  | MS  |
| L     | 06 | 4  | 17 | 19 | 12.0 | 14 | 27.0 | 48 | 27 | 42 | 12 | 17 | 14 | 51           | WSV06L     | 315      | 315 | 315 | 200 |
|       | 08 | 6  | 19 | 21 | 14.0 | 17 | 27.0 | 51 | 29 | 42 | 12 | 19 | 17 | 61           | WSV08L     | 315      | 315 | 315 | 200 |
|       | 10 | 8  | 22 | 22 | 15.0 | 18 | 28.0 | 53 | 30 | 43 | 14 | 22 | 19 | 78           | WSV10L     | 315      | 315 | 315 | 200 |
|       | 12 | 10 | 24 | 24 | 17.0 | 20 | 29.0 | 56 | 32 | 44 | 17 | 24 | 22 | 85           | WSV12L     | 315      | 315 | 315 | 200 |
|       | 15 | 12 | 27 | 28 | 21.0 | 23 | 31.0 | 61 | 36 | 46 | 19 | 30 | 27 | 150          | WSV15L     | 315      | 315 | 315 | 200 |
|       | 18 | 15 | 32 | 31 | 23.5 | 24 | 32.5 | 64 | 40 | 49 | 24 | 36 | 32 | 238          | WSV18L     | 315      | 315 | 315 | 200 |
|       | 22 | 19 | 36 | 35 | 27.5 | 30 | 34.5 | 72 | 44 | 51 | 27 | 41 | 36 | 327          | WSV22L     | 160      | 160 | 160 |     |
|       | 28 | 24 | 42 | 38 | 30.5 | 34 | 35.5 | 77 | 47 | 52 | 36 | 46 | 41 | 482          | WSV28L     | 160      | 160 | 160 |     |
|       | 35 | 30 | 50 | 45 | 34.5 | 39 | 36.5 | 86 | 56 | 58 | 41 | 55 | 50 | 729          | WSV35L     | 160      | 160 | 160 |     |
|       | 42 | 36 | 60 | 51 | 40.0 | 43 | 36.0 | 90 | 63 | 59 | 50 | 65 | 60 | 1091         | WSV42L     | 160      | 160 | 160 |     |
| S     | 06 | 4  | 19 | 23 | 16.0 | 17 | 29.0 | 53 | 31 | 44 | 12 | 19 | 17 | 72           | WSV06S     | 630      | 630 | 630 |     |
|       | 08 | 5  | 22 | 24 | 17.0 | 18 | 29.0 | 54 | 32 | 44 | 14 | 22 | 19 | 99           | WSV08S     | 630      | 630 | 630 |     |
|       | 10 | 7  | 24 | 25 | 17.5 | 20 | 29.5 | 57 | 34 | 46 | 17 | 24 | 22 | 128          | WSV10S     | 630      | 630 | 630 |     |
|       | 12 | 8  | 27 | 29 | 21.5 | 21 | 30.5 | 59 | 38 | 47 | 17 | 27 | 24 | 168          | WSV12S     | 630      | 630 | 630 |     |
|       | 14 | 10 | 27 | 30 | 22.0 | 23 | 32.0 | 63 | 40 | 50 | 19 | 30 | 27 | 194          | WSV14S     | 630      | 630 | 630 |     |
|       | 16 | 12 | 30 | 33 | 24.5 | 24 | 31.5 | 64 | 43 | 50 | 24 | 32 | 30 | 249          | WSV16S     | 400      | 400 | 400 |     |
|       | 20 | 16 | 36 | 37 | 26.5 | 30 | 33.5 | 74 | 48 | 55 | 27 | 41 | 36 | 390          | WSV20S     | 400      | 400 | 400 |     |
|       | 25 | 20 | 42 | 42 | 30.0 | 34 | 35.0 | 81 | 54 | 59 | 36 | 46 | 46 | 618          | WSV25S     | 400      | 400 | 400 |     |
|       | 30 | 25 | 50 | 49 | 35.5 | 39 | 37.5 | 90 | 62 | 64 | 41 | 50 | 50 | 889          | WSV30S     | 400      | 400 | 400 |     |
|       | 38 | 32 | 60 | 57 | 41.0 | 43 | 37.0 | 96 | 72 | 68 | 50 | 65 | 60 | 1337         | WSV38S     | 315      | 315 | 315 |     |

## RED - REDUÇÃO MACHO-FÊMEA



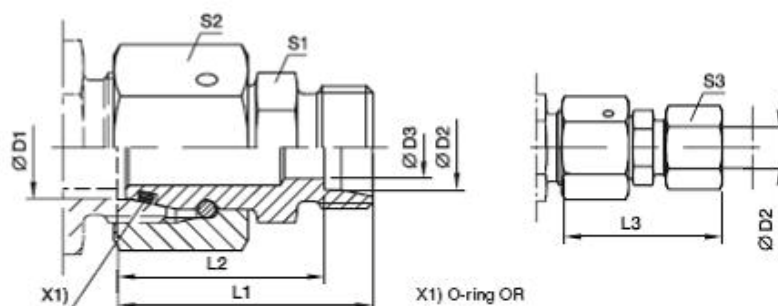
| Série | D1 | D2 | D3   | L1   | L2   | L3   | S1 | S2 | S3 | Peso g/Pç | Referência  | PN (bar) |     |     |
|-------|----|----|------|------|------|------|----|----|----|-----------|-------------|----------|-----|-----|
|       |    |    |      |      |      |      |    |    |    |           |             | CF       | A3C | 71  |
| L/L   | 06 | 04 | 2.5  | 28.5 | 24.5 | 34.0 | 9  | 14 | 10 | 17        | RED06L/04LL | 100      | 100 | 100 |
| L     | 08 | 06 | 4.0  | 30.5 | 23.5 | 38.0 | 12 | 17 | 14 | 29        | RED08/06L   | 500      | 315 | 315 |
| L     | 10 | 06 | 4.0  | 32.0 | 25.0 | 40.0 | 14 | 19 | 14 | 36        | RED10/06L   | 500      | 315 | 315 |
| L     | 10 | 08 | 6.0  | 32.0 | 25.0 | 40.0 | 14 | 19 | 17 | 38        | RED10/08L   | 500      | 315 | 315 |
| L     | 12 | 06 | 4.0  | 32.0 | 25.0 | 40.0 | 17 | 22 | 14 | 49        | RED12/06L   | 400      | 315 | 315 |
| L     | 12 | 08 | 6.0  | 32.0 | 25.0 | 40.0 | 17 | 22 | 17 | 49        | RED12/08L   | 400      | 315 | 315 |
| L     | 12 | 10 | 8.0  | 33.0 | 26.0 | 41.0 | 17 | 22 | 19 | 51        | RED12/10L   | 400      | 315 | 315 |
| L     | 15 | 06 | 4.0  | 35.5 | 28.5 | 43.0 | 19 | 27 | 14 | 81        | RED15/06L   | 400      | 315 | 315 |
| L     | 15 | 08 | 6.0  | 35.5 | 28.5 | 43.0 | 19 | 27 | 17 | 85        | RED15/08L   | 400      | 315 | 315 |
| L     | 15 | 10 | 8.0  | 36.5 | 29.5 | 44.0 | 19 | 27 | 19 | 83        | RED15/10L   | 400      | 315 | 315 |
| L     | 15 | 12 | 10.0 | 36.5 | 29.5 | 44.0 | 19 | 27 | 22 | 83        | RED15/12L   | 400      | 315 | 315 |
| L     | 18 | 06 | 4.0  | 35.0 | 28.0 | 43.0 | 24 | 32 | 14 | 109       | RED18/06L   | 400      | 315 | 315 |
| L     | 18 | 08 | 6.0  | 35.0 | 28.0 | 43.0 | 24 | 32 | 17 | 111       | RED18/08L   | 400      | 315 | 315 |
| L     | 18 | 10 | 8.0  | 36.0 | 29.0 | 44.0 | 24 | 32 | 19 | 110       | RED18/10L   | 400      | 315 | 315 |
| L     | 18 | 12 | 10.0 | 36.0 | 29.0 | 44.0 | 24 | 32 | 22 | 110       | RED18/12L   | 400      | 315 | 315 |
| L     | 18 | 15 | 12.0 | 37.0 | 30.0 | 45.0 | 24 | 32 | 27 | 115       | RED18/15L   | 400      | 315 | 315 |
| L/S   | 18 | 16 | 12.0 | 40.0 | 31.5 | 49.5 | 27 | 32 | 30 | 138       | RED18L/16S  | 400      | 315 | 315 |
| L     | 22 | 06 | 4.0  | 39.0 | 32.0 | 47.0 | 27 | 36 | 14 | 158       | RED22/06L   | 250      | 160 | 160 |
| L     | 22 | 08 | 6.0  | 39.0 | 32.0 | 47.0 | 27 | 36 | 17 | 158       | RED22/08L   | 250      | 160 | 160 |
| L     | 22 | 10 | 8.0  | 40.0 | 33.0 | 48.0 | 27 | 36 | 19 | 159       | RED22/10L   | 250      | 160 | 160 |
| L     | 22 | 12 | 10.0 | 40.0 | 33.0 | 48.0 | 27 | 36 | 22 | 157       | RED22/12L   | 250      | 160 | 160 |
| L     | 22 | 15 | 12.0 | 41.0 | 34.0 | 49.0 | 27 | 36 | 27 | 164       | RED22/15L   | 250      | 160 | 160 |
| L/S   | 22 | 16 | 12.0 | 43.0 | 34.5 | 52.5 | 27 | 36 | 30 | 173       | RED22L/16S  | 250      | 160 | 160 |
| L     | 22 | 18 | 15.0 | 41.0 | 33.5 | 50.0 | 27 | 36 | 32 | 167       | RED22/18L   | 250      | 160 | 160 |
| L/S   | 22 | 20 | 16.0 | 45.0 | 34.5 | 56.0 | 32 | 36 | 36 | 203       | RED22L/20S  | 250      | 160 | 160 |
| L     | 28 | 06 | 4.0  | 41.0 | 34.0 | 49.0 | 32 | 41 | 14 | 219       | RED28/06L   | 250      | 160 | 160 |
| L     | 28 | 08 | 6.0  | 41.0 | 34.0 | 49.0 | 32 | 41 | 17 | 221       | RED28/08L   | 250      | 160 | 160 |
| L     | 28 | 10 | 8.0  | 42.0 | 35.0 | 50.0 | 32 | 41 | 19 | 213       | RED28/10L   | 250      | 160 | 160 |
| L     | 28 | 12 | 10.0 | 42.0 | 35.0 | 50.0 | 32 | 41 | 22 | 213       | RED28/12L   | 250      | 160 | 160 |
| L     | 28 | 15 | 12.0 | 43.0 | 36.0 | 51.0 | 32 | 41 | 27 | 218       | RED28/15L   | 250      | 160 | 160 |
| L/S   | 28 | 16 | 12.0 | 45.0 | 36.5 | 54.5 | 32 | 41 | 30 | 227       | RED28L/16S  | 250      | 160 | 160 |
| L     | 28 | 18 | 15.0 | 43.0 | 35.5 | 52.0 | 32 | 41 | 32 | 220       | RED28/18L   | 250      | 160 | 160 |
| L     | 28 | 22 | 19.0 | 45.0 | 37.5 | 54.0 | 32 | 41 | 36 | 222       | RED28/22L   | 250      | 160 | 160 |
| L/S   | 28 | 25 | 20.0 | 50.0 | 38.0 | 62.0 | 41 | 41 | 46 | 300       | RED28L/25S  | 250      | 160 | 160 |
| L     | 35 | 06 | 4.0  | 44.0 | 37.0 | 52.0 | 41 | 50 | 14 | 318       | RED35/06L   | 250      | 160 | 160 |
| L     | 35 | 08 | 6.0  | 44.0 | 37.0 | 52.0 | 41 | 50 | 17 | 318       | RED35/08L   | 250      | 160 | 160 |
| L     | 35 | 10 | 8.0  | 45.0 | 38.0 | 53.0 | 41 | 50 | 19 | 318       | RED35/10L   | 250      | 160 | 160 |
| L     | 35 | 12 | 10.0 | 45.0 | 38.0 | 53.0 | 41 | 50 | 22 | 324       | RED35/12L   | 250      | 160 | 160 |
| L     | 35 | 15 | 12.0 | 46.0 | 39.0 | 54.0 | 41 | 50 | 27 | 328       | RED35/15L   | 250      | 160 | 160 |
| L     | 35 | 18 | 15.0 | 46.0 | 38.5 | 55.0 | 41 | 50 | 32 | 328       | RED35/18L   | 250      | 160 | 160 |
| L     | 35 | 22 | 19.0 | 48.0 | 40.5 | 57.0 | 41 | 50 | 36 | 331       | RED35/22L   | 250      | 160 | 160 |

## RED - REDUÇÃO MACHO FÊMEA



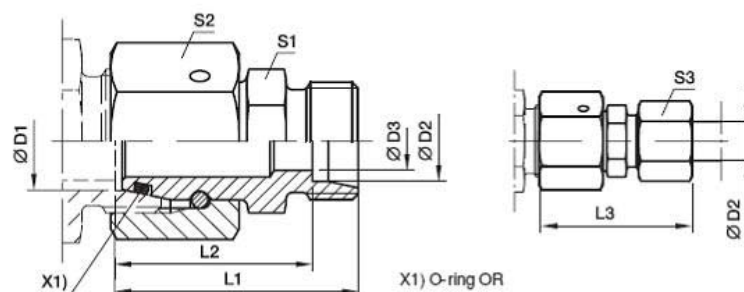
| Série | D1 | D2 | D3   | L1   | L2   | L3   | S1 | S2 | S3 | Peso<br>g/Pç | Referência | PN (bar) |     |     |
|-------|----|----|------|------|------|------|----|----|----|--------------|------------|----------|-----|-----|
|       |    |    |      |      |      |      |    |    |    |              |            | CF       | A3C | 71  |
| L/S   | 35 | 25 | 20.0 | 52.0 | 40.0 | 64.0 | 41 | 50 | 46 | 366          | RED35L/25S | 250      | 160 | 160 |
| L     | 35 | 28 | 24.0 | 48.0 | 40.5 | 57.0 | 41 | 50 | 41 | 327          | RED35/28L  | 250      | 160 | 160 |
| L/S   | 35 | 30 | 25.0 | 55.0 | 41.5 | 68.0 | 46 | 50 | 50 | 435          | RED35L/30S | 250      | 160 | 160 |
| L     | 42 | 10 | 8.0  | 48.5 | 41.5 | 56.0 | 50 | 60 | 19 | 537          | RED42/10L  | 250      | 160 | 160 |
| L     | 42 | 12 | 10.0 | 48.5 | 41.5 | 56.0 | 50 | 60 | 22 | 538          | RED42/12L  | 250      | 160 | 160 |
| L     | 42 | 15 | 12.0 | 49.5 | 42.5 | 58.0 | 50 | 60 | 27 | 534          | RED42/15L  | 250      | 160 | 160 |
| L     | 42 | 18 | 15.0 | 49.5 | 42.0 | 58.0 | 50 | 60 | 32 | 544          | RED42/18L  | 250      | 160 | 160 |
| L     | 42 | 22 | 19.0 | 51.5 | 44.0 | 60.0 | 50 | 60 | 36 | 543          | RED42/22L  | 250      | 160 | 160 |
| L     | 42 | 28 | 24.0 | 51.5 | 44.0 | 61.0 | 50 | 60 | 41 | 539          | RED42/28L  | 250      | 160 | 160 |
| L/S   | 42 | 30 | 25.0 | 57.5 | 44.0 | 70.5 | 50 | 60 | 50 | 588          | RED42L/30S | 250      | 160 | 160 |
| L     | 42 | 35 | 30.0 | 53.5 | 43.0 | 65.0 | 50 | 60 | 50 | 541          | RED42/35L  | 250      | 160 | 160 |
| L/S   | 42 | 38 | 32.0 | 61.5 | 45.5 | 76.0 | 55 | 60 | 60 | 701          | RED42L/38S | 250      | 160 | 160 |

## RED - REDUÇÃO



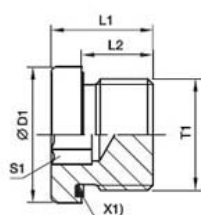
| Série | D1 | D2 | D3 | L1   | L2   | L3 | S1 | S2 | S3 | Peso<br>g/Pç | Referência | PN (bar) |     |     |
|-------|----|----|----|------|------|----|----|----|----|--------------|------------|----------|-----|-----|
|       |    |    |    |      |      |    |    |    |    |              |            | CF       | A3C | 71  |
| S     | 08 | 06 | 4  | 34,0 | 27,0 | 42 | 14 | 19 | 17 | 42           | RED08/06S  | 800      | 630 | 630 |
| S     | 10 | 06 | 4  | 34,5 | 27,5 | 42 | 17 | 22 | 17 | 55           | RED10/06S  | 800      | 630 | 630 |
| S     | 10 | 08 | 5  | 34,5 | 27,5 | 42 | 17 | 22 | 19 | 58           | RED10/08S  | 800      | 630 | 630 |
| S     | 12 | 06 | 4  | 36,0 | 29,0 | 44 | 17 | 24 | 17 | 66           | RED12/06S  | 630      | 630 | 630 |
| S     | 12 | 08 | 5  | 36,0 | 29,0 | 44 | 17 | 24 | 19 | 68           | RED12/08S  | 630      | 630 | 630 |
| S     | 12 | 10 | 7  | 37,0 | 29,5 | 46 | 19 | 24 | 22 | 75           | RED12/10S  | 630      | 630 | 630 |
| S     | 14 | 06 | 4  | 38,5 | 31,5 | 46 | 19 | 27 | 17 | 88           | RED14/06S  | 630      | 630 | 630 |
| S     | 14 | 08 | 5  | 38,5 | 31,5 | 46 | 19 | 27 | 19 | 90           | RED14/08S  | 630      | 630 | 630 |
| S     | 14 | 10 | 7  | 38,5 | 31,0 | 47 | 19 | 27 | 22 | 91           | RED14/10S  | 630      | 630 | 630 |
| S     | 14 | 12 | 8  | 38,5 | 31,0 | 47 | 22 | 27 | 24 | 100          | RED14/12S  | 630      | 630 | 630 |
| S     | 16 | 06 | 4  | 39,0 | 32,0 | 47 | 22 | 30 | 17 | 112          | RED16/06S  | 630      | 400 | 400 |
| S     | 16 | 08 | 5  | 39,0 | 32,0 | 47 | 22 | 30 | 19 | 114          | RED16/08S  | 630      | 400 | 400 |
| S     | 16 | 10 | 7  | 39,0 | 31,5 | 48 | 22 | 30 | 22 | 115          | RED16/10S  | 630      | 400 | 400 |
| S     | 16 | 12 | 8  | 39,0 | 31,5 | 48 | 22 | 30 | 24 | 118          | RED16/12S  | 630      | 400 | 400 |
| S     | 16 | 14 | 10 | 41,0 | 33,0 | 51 | 24 | 30 | 27 | 128          | RED16/14S  | 630      | 400 | 400 |
| S/L   | 16 | 15 | 11 | 39,0 | 32,0 | 47 | 24 | 30 | 27 | 120          | RED16S/15L | 400      | 315 | 315 |
| S     | 20 | 06 | 4  | 43,0 | 36,0 | 51 | 27 | 36 | 17 | 172          | RED20/06S  | 420      | 400 | 400 |
| S     | 20 | 08 | 5  | 43,0 | 36,0 | 51 | 27 | 36 | 19 | 174          | RED20/08S  | 420      | 400 | 400 |
| S     | 20 | 10 | 7  | 43,0 | 35,5 | 52 | 27 | 36 | 22 | 174          | RED20/10S  | 420      | 400 | 400 |
| S     | 20 | 12 | 8  | 43,0 | 35,5 | 52 | 27 | 36 | 24 | 177          | RED20/12S  | 420      | 400 | 400 |
| S     | 20 | 14 | 10 | 45,0 | 37,0 | 55 | 27 | 36 | 27 | 182          | RED20/14S  | 420      | 400 | 400 |
| S/L   | 20 | 15 | 12 | 43,0 | 36,0 | 51 | 27 | 36 | 27 | 173          | RED20S/15L | 400      | 315 | 315 |
| S     | 20 | 16 | 12 | 45,0 | 36,5 | 55 | 27 | 36 | 30 | 182          | RED20/16S  | 420      | 400 | 400 |
| S/L   | 20 | 18 | 14 | 43,0 | 35,5 | 51 | 27 | 36 | 32 | 178          | RED20S/18L | 400      | 315 | 315 |
| S     | 25 | 06 | 4  | 45,5 | 38,5 | 53 | 32 | 46 | 17 | 294          | RED25/06S  | 420      | 400 | 400 |
| S     | 25 | 08 | 5  | 45,5 | 38,5 | 53 | 32 | 46 | 19 | 295          | RED25/08S  | 420      | 400 | 400 |
| S     | 25 | 10 | 7  | 45,5 | 38,0 | 54 | 32 | 46 | 22 | 296          | RED25/10S  | 420      | 400 | 400 |
| S     | 25 | 12 | 8  | 45,5 | 38,0 | 54 | 32 | 46 | 24 | 299          | RED25/12S  | 420      | 400 | 400 |
| S     | 25 | 14 | 10 | 47,5 | 39,5 | 57 | 32 | 46 | 27 | 303          | RED25/14S  | 420      | 400 | 400 |
| S     | 25 | 16 | 12 | 47,5 | 39,0 | 57 | 32 | 46 | 30 | 304          | RED25/16S  | 420      | 400 | 400 |
| S/L   | 25 | 18 | 15 | 45,5 | 38,0 | 54 | 32 | 46 | 32 | 299          | RED25S/18L | 400      | 315 | 315 |
| S     | 25 | 20 | 16 | 49,5 | 39,0 | 61 | 32 | 46 | 36 | 315          | RED25/20S  | 420      | 400 | 400 |
| S/L   | 25 | 22 | 18 | 47,5 | 40,0 | 56 | 32 | 46 | 36 | 304          | RED25S/22L | 250      | 160 | 160 |
| S     | 30 | 06 | 4  | 51,0 | 44,0 | 59 | 41 | 50 | 17 | 412          | RED30/06S  | 420      | 400 | 400 |
| S     | 30 | 08 | 5  | 51,0 | 44,0 | 59 | 41 | 50 | 19 | 404          | RED30/08S  | 420      | 400 | 400 |
| S     | 30 | 10 | 7  | 51,0 | 43,5 | 60 | 41 | 50 | 22 | 405          | RED30/10S  | 420      | 400 | 400 |
| S     | 30 | 12 | 8  | 51,0 | 43,5 | 60 | 41 | 50 | 24 | 405          | RED30/12S  | 420      | 400 | 400 |
| S     | 30 | 14 | 10 | 53,0 | 45,0 | 63 | 41 | 50 | 27 | 408          | RED30/14S  | 420      | 400 | 400 |
| S     | 30 | 16 | 12 | 53,0 | 44,5 | 63 | 41 | 50 | 30 | 412          | RED30/16S  | 420      | 400 | 400 |
| S     | 30 | 20 | 16 | 55,0 | 44,5 | 66 | 41 | 50 | 36 | 421          | RED30/20S  | 420      | 400 | 400 |

## RED - REDUÇÃO MACHO FÊMEA



| Série | D1 | D2 | D3 | L1   | L2   | L3 | S1 | S2 | S3 | Peso g/Pç | Referência | PN (bar) |     |     |
|-------|----|----|----|------|------|----|----|----|----|-----------|------------|----------|-----|-----|
|       |    |    |    |      |      |    |    |    |    |           |            | CF       | A3C | 71  |
| S/L   | 30 | 22 | 19 | 53.0 | 45.5 | 61 | 41 | 50 | 36 | 406       | RED30S/22L | 250      | 160 | 160 |
| S     | 30 | 25 | 20 | 57.0 | 45.0 | 69 | 41 | 50 | 46 | 439       | RED30/25S  | 420      | 400 | 400 |
| S/L   | 30 | 28 | 23 | 53.0 | 45.5 | 62 | 41 | 50 | 41 | 406       | RED30S/28L | 250      | 160 | 160 |
| S     | 38 | 06 | 4  | 54.5 | 47.5 | 62 | 50 | 60 | 17 | 556       | RED38/06S  | 420      | 315 | 315 |
| S     | 38 | 08 | 5  | 54.5 | 47.5 | 62 | 50 | 60 | 19 | 581       | RED38/08S  | 420      | 315 | 315 |
| S     | 38 | 10 | 7  | 54.5 | 47.0 | 63 | 50 | 60 | 22 | 579       | RED38/10S  | 420      | 315 | 315 |
| S     | 38 | 12 | 8  | 54.5 | 47.0 | 63 | 50 | 60 | 24 | 577       | RED38/12S  | 420      | 315 | 315 |
| S     | 38 | 14 | 10 | 56.5 | 48.5 | 66 | 50 | 60 | 27 | 579       | RED38/14S  | 420      | 315 | 315 |
| S     | 38 | 16 | 12 | 56.5 | 48.0 | 66 | 50 | 60 | 30 | 580       | RED38/16S  | 420      | 315 | 315 |
| S     | 38 | 20 | 16 | 58.5 | 48.0 | 70 | 50 | 60 | 36 | 601       | RED38/20S  | 420      | 315 | 315 |
| S     | 38 | 25 | 20 | 60.5 | 48.5 | 73 | 50 | 60 | 46 | 615       | RED38/25S  | 420      | 315 | 315 |
| S/L   | 38 | 28 | 24 | 56.5 | 49.0 | 65 | 50 | 60 | 41 | 573       | RED38S/28L | 250      | 160 | 160 |
| S     | 38 | 30 | 25 | 62.5 | 49.0 | 76 | 50 | 60 | 50 | 625       | RED38/30S  | 420      | 315 | 315 |
| S/L   | 38 | 35 | 30 | 58.5 | 48.0 | 69 | 50 | 60 | 50 | 588       | RED38S/35L | 250      | 160 | 160 |

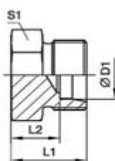
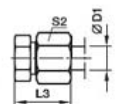
## VSTI - M / R - TAMPÃO COM ROSCA MACHO MÉTRICO/ BSP



X1) Vedante elástico EO

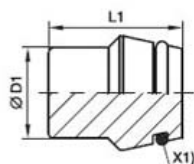
| Rosca macho métrica T1 | Rosca macho BSP T1 | D1   | L1   | L2 | S1 | Peso g/Pç | Referência   | Referência  | PN (bar) |     |     |
|------------------------|--------------------|------|------|----|----|-----------|--------------|-------------|----------|-----|-----|
|                        |                    |      |      |    |    |           |              |             | CF       | A3C | 71  |
| M 10x1                 | G 1/8 A            | 14.0 | 12.0 | 8  | 5  | 8         | VSTI10X1ED   | VSTI1/8ED   | 400      | 400 | 400 |
| M 12x1.5               |                    | 17.0 | 17.0 | 12 | 6  | 14        | VSTI12X1.5ED |             | 400      | 400 | 400 |
| M 14x1.5               | G 1/4 A            | 19.0 | 17.0 | 12 | 6  | 20        | VSTI14X1.5ED | VSTI1/4ED   | 400      | 400 | 400 |
| M 16x1.5               | G 3/8 A            | 22.0 | 17.0 | 12 | 8  | 25        | VSTI16X1.5ED | VSTI3/8ED   | 400      | 400 | 400 |
| M 18x1.5               |                    | 23.9 | 17.0 | 12 | 8  | 32        | VSTI18X1.5ED |             | 400      | 400 | 400 |
| M 20x1.5               |                    | 25.9 | 19.0 | 14 | 10 | 42        | VSTI20X1.5ED |             | 400      | 400 | 400 |
| M 22x1.5               | G 1/2 A            | 27.0 | 19.0 | 14 | 10 | 51        | VSTI22X1.5ED | VSTI1/2ED   | 400      | 400 | 400 |
| M 26x1.5               |                    | 31.9 | 21.0 | 16 | 12 | 78        | VSTI26X1.5ED |             | 400      | 400 | 400 |
| M 27x2                 | G 3/4 A            | 32.0 | 21.0 | 16 | 12 | 79        | VSTI27X2ED   | VSTI3/4ED   | 400      | 400 | 400 |
| M 33x2                 | G 1 A              | 39.9 | 22.5 | 16 | 17 | 130       | VSTI33X2ED   | VSTI1ED     | 400      | 400 | 400 |
| M 42x2                 | G 1 1/4 A          | 49.9 | 22.5 | 16 | 22 | 198       | VSTI42X2ED   | VSTI1 1/4ED | 315      | 315 | 315 |
| M 48x2                 | G 1 1/2 A          | 55.0 | 22.5 | 16 | 24 | 263       | VSTI48X2ED   | VSTI1 1/2ED | 315      | 315 | 315 |

## ROV - TAMPÃO PARA EXTERMIDADE DE TUBO



| Série | D1 | L1 | L2   | L3 | S1 | S2 | Peso<br>g/Pç | Referência | PN (bar) |     |     |
|-------|----|----|------|----|----|----|--------------|------------|----------|-----|-----|
|       |    |    |      |    |    |    |              |            | CF       | A3C | 71  |
| L     | 06 | 14 | 7.0  | 22 | 12 | 14 | 8            | ROV06L     | 315      | 315 | 315 |
|       | 08 | 15 | 8.0  | 23 | 14 | 17 | 13           | ROV08L     | 315      | 315 | 315 |
|       | 10 | 16 | 9.0  | 24 | 17 | 19 | 17           | ROV10L     | 315      | 315 | 315 |
|       | 12 | 17 | 10.0 | 25 | 19 | 22 | 24           | ROV12L     | 315      | 315 | 315 |
|       | 15 | 18 | 11.0 | 26 | 24 | 27 | 41           | ROV15L     | 315      | 315 | 315 |
|       | 18 | 19 | 11.5 | 28 | 27 | 32 | 56           | ROV18L     | 315      | 315 | 315 |
|       | 22 | 21 | 13.5 | 30 | 32 | 36 | 84           | ROV22L     | 160      | 160 | 160 |
|       | 28 | 22 | 14.5 | 31 | 41 | 41 | 138          | ROV28L     | 160      | 160 | 160 |
|       | 35 | 25 | 14.5 | 36 | 46 | 50 | 203          | ROV35L     | 160      | 160 | 160 |
|       | 42 | 27 | 16.0 | 39 | 55 | 60 | 318          | ROV42L     | 160      | 160 | 160 |
|       | 06 | 18 | 11.0 | 26 | 14 | 17 | 17           | ROV06S     | 630      | 630 | 630 |
|       | 08 | 20 | 13.0 | 28 | 17 | 19 | 28           | ROV08S     | 630      | 630 | 630 |
| S     | 10 | 20 | 12.5 | 29 | 19 | 22 | 33           | ROV10S     | 630      | 630 | 630 |
|       | 12 | 22 | 14.5 | 31 | 22 | 24 | 50           | ROV12S     | 630      | 630 | 630 |
|       | 14 | 24 | 16.0 | 34 | 24 | 27 | 62           | ROV14S     | 630      | 630 | 630 |
|       | 16 | 24 | 15.5 | 34 | 27 | 30 | 75           | ROV16S     | 400      | 400 | 400 |
|       | 20 | 28 | 17.5 | 39 | 32 | 36 | 125          | ROV20S     | 400      | 400 | 400 |
|       | 25 | 32 | 20.0 | 44 | 41 | 46 | 229          | ROV25S     | 400      | 400 | 400 |
|       | 30 | 34 | 20.5 | 47 | 46 | 50 | 310          | ROV30S     | 400      | 400 | 400 |
|       | 38 | 39 | 23.0 | 54 | 55 | 60 | 508          | ROV38S     | 315      | 315 | 315 |

## VKA - TAMPÃO PARA FÊMEA



X1) O-ring OR

| Série | D1 | L1   | Peso<br>g/Pç | Referência | PN (bar) |     |     |     |
|-------|----|------|--------------|------------|----------|-----|-----|-----|
|       |    |      |              |            | CF       | A3C | 71  | MS  |
| L     | 06 | 18.5 | 6            | VKA06      | 500      | 315 | 315 | 200 |
|       | 08 | 18.5 | 9            | VKA08      | 500      | 315 | 315 | 200 |
|       | 10 | 20.0 | 15           | VKA10      | 500      | 315 | 315 | 200 |
|       | 12 | 20.5 | 21           | VKA12      | 400      | 315 | 315 | 200 |
|       | 15 | 20.5 | 32           | VKA15      | 400      | 315 | 315 | 200 |
|       | 18 | 22.5 | 49           | VKA18      | 400      | 315 | 315 | 200 |
|       | 22 | 25.0 | 80           | VKA22      | 250      | 160 | 160 | 100 |
|       | 28 | 25.5 | 131          | VKA28      | 250      | 160 | 160 | 100 |
|       | 35 | 30.0 | 240          | VKA35      | 250      | 160 | 160 | 100 |
|       | 42 | 30.0 | 343          | VKA42      | 250      | 160 | 160 | 100 |
|       | 06 | 18.5 | 6            | VKA06      | 800      | 630 | 630 | 400 |
|       | 08 | 18.5 | 9            | VKA08      | 800      | 630 | 630 | 400 |
| S     | 10 | 20.0 | 15           | VKA10      | 800      | 630 | 630 | 400 |
|       | 12 | 20.5 | 21           | VKA12      | 630      | 630 | 630 | 400 |
|       | 14 | 22.5 | 30           | VKA14      | 630      | 630 | 630 | 400 |
|       | 16 | 23.5 | 40           | VKA16      | 630      | 400 | 400 | 250 |
|       | 20 | 28.5 | 78           | VKA20      | 420      | 400 | 400 | 250 |
|       | 25 | 29.0 | 120          | VKA25      | 420      | 400 | 400 | 250 |
|       | 30 | 30.5 | 180          | VKA30      | 420      | 400 | 400 | 250 |
|       | 38 | 33.0 | 309          | VKA38      | 420      | 315 | 315 | 200 |