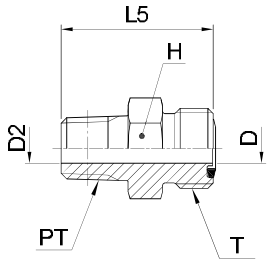
## FLO Male stud connector

ORFS tube end / Male NPTF* thread (SAE J476)

*Stainless Steel = NPT to prevent galling




| Tube O.D. mm | Tube O.D. in. | Thread NPTF PT | Thread UN/UNF-2A T | D mm | D2 mm | L5 mm | H mm | Weight (steel) g/1 piece | Steel | Stainless Steel | PN (bar) S | PN (bar) SS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 1/4 | 1/8-27 | 9/16-18 | 4.5 | 4.5 | 27 | 16 | 26 | **4 FLO-S** | **4 FLO-SS** | 420 | 420 |
| 6 | 1/4 | 1/4-18 | 9/16-18 | 4.5 | 4.5 | 32 | 16 | 34 | **4-4 FLO-S** | **4-4 FLO-SS** | 420 | 420 |
| 6 | 1/4 | 3/8-18 | 9/16-18 | 4.5 | 4.5 | 34 | 19 | 47 | **4-6 FLO-S** | **4-6 FLO-SS** | 420 | 420 |
| 8, 10 | 5/16, 3/8 | 1/4-18 | 11/16-16 | 6.5 | 6.5 | 32 | 19 | 39 | **6 FLO-S** | **6 FLO-SS** | 420 | 420 |
| 8, 10 | 5/16, 3/8 | 3/8-18 | 11/16-16 | 6.5 | 6.5 | 34 | 19 | 52 | **6-6 FLO-S** | **6-6 FLO-SS** | 420 | 420 |
| 8, 10 | 5/16, 3/8 | 1/2-14 | 11/16-16 | 6.5 | 6.5 | 39 | 22 | 82 | **6-8 FLO-S** | **6-8 FLO-SS** | 420 | 420 |
| 12 | 1/2 | 3/8-18 | 13/16-16 | 9.5 | 9.5 | 38 | 22 | 83 | **8 FLO-S** | **8 FLO-SS** | 420 | 420 |
| 12 | 1/2 | 1/2-14 | 13/16-16 | 9.5 | 6.5 | 42 | 22 | 84 | **8-8 FLO-S** | **8-8 FLO-SS** | 420 | 420 |
| 12 | 1/2 | 3/4-14 | 13/16-16 | 9.5 | 9.5 | 43 | 29 | 166 | **8-12 FLO-S** | **8-12 FLO-SS** | 380 | 350 |
| 14, 15, 16 | 5/8 | 1/2-14 | 1-14 | 12.5 | 12.5 | 46 | 27 | 115 | **10 FLO-S** | **10 FLO-SS** | 420 | 420 |
| 14, 15, 16 | 5/8 | 3/4-14 | 1-14 | 12.5 | 12.5 | 46 | 29 | 138 | **10-12 FLO-S** | **10-12 FLO-SS** | 380 | 350 |
| 18, 20 | 3/4 | 3/4-14 | 1 3/16-12 | 15.5 | 15.5 | 49 | 32 | 179 | **12 FLO-S** | **12 FLO-SS** | 380 | 350 |
| 18, 20 | 3/4 | 1/2-14 | 1 3/16-12 | 15.5 | 13.5 | 49 | 32 | 165 | **12-8 FLO-S** | **12-8 FLO-SS** | 420 | 420 |
| 18, 20 | 3/4 | 1-11.5 | 1 3/16-12 | 15.5 | 15.5 | 54 | 35 | 225 | **12-16 FLO-S** | **12-16 FLO-SS** | 310 | 210 |
| 22, 25 | 1 | 1-11.5 | 1 7/16-12 | 20.5 | 20.5 | 56 | 38 | 271 | **16 FLO-S** | **16 FLO-SS** | 310 | 210 |
| 22, 25 | 1 | 3/4-14 | 1 7/16-12 | 20.5 | 18.3 | 51 | 38 | 238 | **16-12 FLO-S** | **16-12 FLO-SS** | 380 | 350 |
| 28, 30, 32 | 1 1/4 | 1 1/4-11.5 | 1 11/16-12 | 26 | 26 | 58 | 48 | 424 | **20 FLO-S** | **20 FLO-SS** | 210 | 210 |
| 35, 38 | 1 1/2 | 1 1/2-11.5 | 2-12 | 32 | 32 | 61 | 54 | 534 | **24 FLO-S** | **24 FLO-SS** | 200 | 175 |

Product delivered with NBR TRAP seal. Replacement of TRAP seal is with a standard NBR O-ring – see page J74–J75.

Part numbers shown are part of our current manufacturing programme.

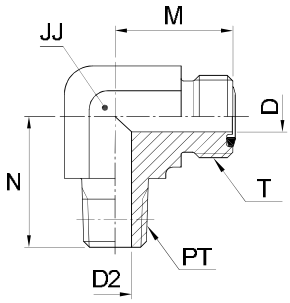
Imperial and metric parts may vary in hexagon dimensions.

$\frac{\text{PN (bar)}}{10}$ = PN (MPa)

Do not create drawings from these dimensions, they are subject to change and ISO manufacturing allowances.

## CLO Male stud elbow

O-Lok® ORFS tube end / Male NPTF* thread (SAE J476)
*Stainless Steel = NPT to prevent galling




| Tube O.D. | | Thread NPTF | Thread UN/UNF-2A | D | D2 | JJ* | M | N | Weight (steel) | | | PN (bar) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| mm | in. | PT | T | mm | mm | mm | mm | mm | g/1 piece | Steel | Stainless Steel | S | SS |
| 6 | 1/4 | 1/8-27 | 9/16-18 | 4.5 | 4.8 | 14 | 22 | 20 | 39 | **4 CLO-S** | **4 CLO-SS** | 420 | 420 |
| 6 | 1/4 | 1/4-18 | 9/16-18 | 4.5 | 7.1 | 14 | 22 | 28 | 50 | **4-4 CLO-S** | **4-4 CLO-SS** | 420 | 420 |
| 8, 10 | 3/8 | 1/4-18 | 11/16-16 | 6.5 | 7.1 | 19 | 25 | 28 | 75 | **6 CLO-S** | **6 CLO-SS** | 420 | 420 |
| 8, 10 | 3/8 | 3/8-18 | 11/16-16 | 6.5 | 10.3 | 19 | 25 | 31 | 81 | **6-6 CLO-S** | **6-6 CLO-SS** | 420 | 420 |
| 8, 10 | 3/8 | 1/2-14 | 11/16-16 | 6.5 | 13.5 | 22 | 29 | 37 | 84 | **6-8 CLO-S** | **6-8 CLO-SS** | 420 | 420 |
| 12 | 1/2 | 3/8-18 | 13/16-16 | 9.5 | 10.3 | 19 | 28 | 31 | 89 | **8 CLO-S** | **8 CLO-SS** | 420 | 420 |
| 12 | 1/2 | 1/2-14 | 13/16-16 | 9.5 | 13.5 | 22 | 28 | 37 | 125 | **8-8 CLO-S** | **8-8 CLO-SS** | 420 | 420 |
| 12 | 1/2 | 3/4-14 | 13/16-16 | 9.5 | 18.3 | 27 | 34 | 40 | 168 | **8-12 CLO-S** | **8-12 CLO-SS** | 280 | 280 |
| 14, 15, 16 | 5/8 | 1/2-14 | 1-14 | 12.5 | 13.5 | 27 | 33 | 37 | 154 | **10 CLO-S** | **10 CLO-SS** | 420 | 420 |
| 14, 15, 16 | 5/8 | 3/4-14 | 1-14 | 12.5 | 18.3 | 27 | 36 | 40 | 237 | **10-12 CLO-S** | **10-12 CLO-SS** | 280 | 280 |
| 18, 20 | 3/4 | 3/4-14 | 1 3/16-12 | 15.5 | 18.3 | 30 | 37 | 40 | 246 | **12 CLO-S** | **12 CLO-SS** | 280 | 280 |
| 18, 20 | 3/4 | 1/2-14 | 1 3/16-12 | 15.5 | 13.5 | 30 | 37 | 40 | 257 | **12-8 CLO-S** | **12-8 CLO-SS** | 420 | 420 |
| 18, 20 | 3/4 | 1-11.5 | 1 3/16-12 | 15.5 | 23.8 | 33 | 41 | 50 | 363 | **12-16 CLO-S** | **12-16 CLO-SS** | 210 | 210 |
| 25 | 1 | 1-11.5 | 1 7/16-12 | 20.5 | 23.8 | 36 | 42 | 50 | 387 | **16 CLO-S** | **16 CLO-SS** | 210 | 210 |
| 25 | 1 | 3/4-14 | 1 7/16-12 | 20.5 | 18.3 | 36 | 42 | 45 | 401 | **16-12 CLO-S** | **16-12 CLO-SS** | 280 | 280 |
| 28, 30, 32 | 1 1/4 | 1 1/4-11.5 | 1 11/16-12 | 26 | 31.8 | 41 | 45 | 61 | 469 | **20 CLO-S** | **20 CLO-SS** | 175 | 175 |
| 35, 38 | 1 1/2 | 1 1/2-11.5 | 2-12 | 32 | 38.1 | 48 | 49 | 67 | 603 | **24 CLO-S** | **24 CLO-SS** | 175 | 175 |

Product delivered with NBR TRAP seal. Replacement of TRAP seal is with a standard NBR O-ring – see page J74–J75.

Part numbers shown are part of our current manufacturing programme.

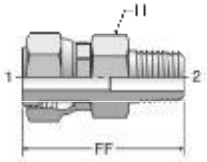
Imperial and metric parts may vary in hexagon dimensions.

$\frac{\text{PN (bar)}}{10} = \text{PN (MPa)}$

Do not create drawings from these dimensions, they are subject to change and ISO manufacturing allowances.
*JJ may vary in stainless steel

# F6L

Pipe Thread Swivel
Connector
ORFS Swivel / NPTF

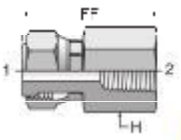



| TUBE FITTING PART # | END SIZE 1 (in.) | END SIZE 2 NPTF | FF (in.) | H HEX (in.) | Dynamic Pressure (x 1,000 PSI) -S | Dynamic Pressure (x 1,000 PSI) -SS |
|---|---|---|---|---|---|---|
| 4 F6L | 1/4 | 1/8 - 27 | 1.33 | 5/8 | 6.0 | 6.0 |
| 4-4 F6L | 1/4 | 1/4 - 18 | 1.52 | 5/8 | 6.0 | 6.0 |
| 6 F6L | 3/8 | 1/4 - 18 | 1.69 | 3/4 | 6.0 | 6.0 |
| 6-6 F6L | 3/8 | 3/8 - 18 | 1.67 | 3/4 | 6.0 | 6.0 |
| 8 F6L | 1/2 | 3/8 - 18 | 1.95 | 3/4 | 6.0 | 6.0 |
| 8-8 F6L | 1/2 | 1/2 - 14 | 2.14 | 7/8 | 6.0 | 6.0 |
| 10 F6L | 5/8 | 1/2 - 14 | 2.29 | 1 1/16 | 6.0 | 6.0 |
| 12 F6L | 3/4 | 3/4 - 14 | 2.37 | 1 1/4 | 5.5 | 5.5 |
| 16 F6L | 1 | 1 - 11 1/2 | 2.87 | 1 1/2 | 4.5 | 4.5 |

**WARNING:** This product can expose you to chemicals including Lead and Lead Compounds which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# G6L

Female Pipe Thread Swivel
Connector
ORFS Swivel / NPTF

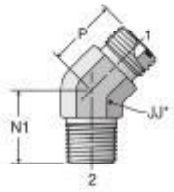



| TUBE FITTING PART # | END SIZE 1 (in.) | END SIZE 2 NPTF | FF (in.) | H (in.) | Dynamic Pressure (x 1,000 PSI) -S | Dynamic Pressure (x 1,000 PSI) -SS |
|---|---|---|---|---|---|---|
| 4-4 G6L | 1/4 | 1/4 - 18 | 1.48 | 3/4 | 6.0 | 6.0 |
| 6 G6L | 3/8 | 1/4 - 18 | 1.60 | 7/8 | 6.0 | 6.0 |
| 8-4 G6L | 1/2 | 1/4 - 18 | 1.75 | 7/8 | 6.0 | 6.0 |

**WARNING:** This product can expose you to chemicals including Lead and Lead Compounds which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# VLO

45° Male Elbow
ORFS / NPTF



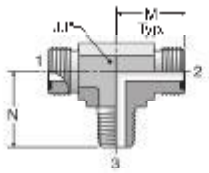

* JJ – Across Wrench Flats

| TUBE FITTING PART # | END SIZE 1 (in.) | END SIZE 2 NPTF | JJ (in.) | N1 (in.) | P (in.) | Dynamic Pressure (x 1,000 PSI) -S | Dynamic Pressure (x 1,000 PSI) -SS |
|---|---|---|---|---|---|---|---|
| **4 VLO** | 1/4 | 1/8 - 27 | 9/16 | 0.64 | 0.63 | 6.0 | 6.0 |
| **4-4 VLO** | 1/4 | 1/4 - 18 | 9/16 | 0.86 | 0.68 | 6.0 | 6.0 |
| **6 VLO** | 3/8 | 1/4 - 18 | 3/4 | 0.87 | 0.74 | 6.0 | 6.0 |
| **6-6 VLO** | 3/8 | 3/8 - 18 | 3/4 | 0.87 | 0.74 | 6.0 | 6.0 |
| **8 VLO** | 1/2 | 3/8 - 18 | 3/4 | 0.95 | 0.80 | 6.0 | 6.0 |
| **8-8 VLO** | 1/2 | 1/2 - 14 | 7/8 | 1.17 | 0.86 | 6.0 | 6.0 |
| **10 VLO** | 5/8 | 1/2 - 14 | 1 1/16 | 1.17 | 0.92 | 6.0 | 6.0 |
| **12 VLO** | 3/4 | 3/4 - 14 | 1 5/16 | 1.30 | 1.02 | 4.0 | 4.0 |
| **16 VLO** | 1 | 1 - 11 1/2 | 1 7/16 | 1.48 | 1.18 | 3.0 | 3.0 |
| **20 VLO** | 1 1/4 | 1 1/4 - 11 1/2 | 1 5/8 | 1.67 | 1.26 | 2.5 | 2.5 |

# SLO

Male Pipe Tee
ORFS / ORFS / NPTF

SAE 520425




* JJ – Across Wrench Flats

| TUBE FITTING PART # | END SIZE 1 & 2 (in.) | END SIZE 3 NPTF | JJ (in.) | M (in.) | N (in.) | Dynamic Pressure (x 1,000 PSI) -S | Dynamic Pressure (x 1,000 PSI) -SS |
|---|---|---|---|---|---|---|---|
| **4-4-4 SLO** | 1/4 | 1/4 - 18 | 9/16 | 0.85 | 1.12 | 6.0 | 6.0 |
| **6 SLO** | 3/8 | 1/4 - 18 | 3/4 | 0.98 | 1.09 | 6.0 | 6.0 |
| **6-6-6 SLO** | 3/8 | 3/8 - 18 | 3/4 | 0.98 | 1.22 | 6.0 | 6.0 |
| **8 SLO** | 1/2 | 3/8 - 18 | 3/4 | 1.10 | 1.22 | 6.0 | 6.0 |
| **8-8-8 SLO** | 1/2 | 1/2 - 14 | 7/8 | 1.10 | 1.47 | 6.0 | 6.0 |
| **10 SLO** | 5/8 | 1/2 - 14 | 1 1/16 | 1.31 | 1.47 | 6.0 | 6.0 |
| **12 SLO** | 3/4 | 3/4 - 14 | 1 3/16 | 1.47 | 1.59 | 4.0 | 4.0 |
| **16 SLO** | 1 | 1 - 11 1/2 | 1 7/16 | 1.64 | 1.97 | 3.0 | 3.0 |
| **20 SLO** | 1 1/4 | 1 1/4 - 11 1/2 | 1 5/8 | 1.76 | 2.38 | 2.5 | 2.5 |