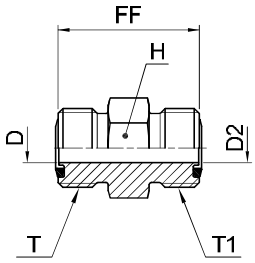
## HMLO Union

ORFS tube ends
SAE 520101




| Tube 1 O.D. | | Tube 2 O.D. | | Thread UN/UNF-2A | Thread UN/UNF-2A | D | D2 | FF | H | Weight (steel) | | | PN (bar) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| mm | in. | mm | in. | T | T1 | mm | mm | mm | mm | g/1 piece | Steel | Stainless Steel | S | SS |
| 6 | 1/4 | 6 | 1/4 | 9/16-18 | 9/16-18 | 4.5 | 4.5 | 28 | 17 | 31 | **4HMLOS** | **4HMLOSS** | 630 | 630 |
| 8, 10 | 5/16, 3/8 | 8, 10 | 5/16, 3/8 | 11/16-16 | 11/16-16 | 6.5 | 6.5 | 31 | 19 | 49 | **6HMLOS** | **6HMLOSS** | 630 | 630 |
| 10 | 3/8 | 6 | 1/4 | 11/16-16 | 9/16-18 | 6.5 | 4.5 | 30 | 19 | 45 | **6-4HMLOS** | **6-4HMLOSS** | 630 | 630 |
| 12 | 1/2 | 12 | 1/2 | 13/16-16 | 13/16-16 | 9.5 | 9.5 | 36 | 22 | 77 | **8HMLOS** | **8HMLOSS** | 630 | 630 |
| 12 | 1/2 | 10 | 3/8 | 13/16-16 | 11/16-16 | 9.5 | 6.5 | 34 | 22 | 67 | **8-6 HLO-S** | **8-6HMLOSS** | 630 | 630 |
| 14, 15, 16 | 5/8 | 10 | 3/8 | 1-14 | 11/16-16 | 12.5 | 6.5 | 38 | 27 | 113 | **10-6HMLOS** | **10-6HMLOSS** | 420 | 420 |
| 14, 15, 16 | 5/8 | 14, 15, 16 | 5/8 | 1-14 | 1-14 | 12.5 | 12.5 | 43 | 27 | 129 | **10HMLOS** | **10HMLOSS** | 420 | 420 |
| 16 | 5/8 | 12 | 1/2 | 1-14 | 13/16-16 | 12.5 | 9.5 | 40 | 27 | 112 | **10-8 HLO-S** | **10-8HMLOSS** | 420 | 420 |
| 18, 20 | 3/4 | 12 | 1/2 | 1 3/16-12 | 13/16-16 | 15.5 | 9.5 | 43 | 32 | 160 | **12-8HMLOS** | **12-8HMLOSS** | 420 | 420 |
| 18, 20 | 3/4 | 18, 20 | 3/4 | 1 3/16-12 | 1 3/16-12 | 15.5 | 15.5 | 47 | 32 | 204 | **12HMLOS** | **12HMLOSS** | 420 | 420 |
| 20 | 3/4 | 16 | 5/8 | 1 3/16-12 | 1-14 | 15.5 | 12.5 | 46 | 32 | 186 | **12-10HMLOS** | **12-10HMLOSS** | 420 | 420 |
| 22, 25 | 1 | 22, 25 | 1 | 1 7/16-12 | 1 7/16-12 | 20.5 | 20.5 | 49 | 41 | 291 | **16HMLOS** | **16HMLOSS** | 420 | 420 |
| 25 | 1 | 18, 20 | 3/4 | 1 7/16-12 | 1 3/16-12 | 20.5 | 15.5 | 49 | 41 | 285 | **16-12HMLOS** | **16-12HMLOSS** | 420 | 420 |
| 28, 30, 32 | 1 1/4 | 28, 30, 32 | 1 1/4 | 1 11/16-12 | 1 11/16-12 | 26 | 26 | 51 | 45 | 299 | **20 HLO-S** | **20HMLOSS** | 420 | 280 |
| 28, 30, 32 | 1 1/4 | 22, 25 | 1 | 1 11/16-12 | 1 7/16-12 | 26 | 20.5 | 52 | 46 | 280 | **20-16HMLOS** | **20-16HMLOSS** | 420 | 280 |
| 35, 38 | 1 1/2 | 35, 38 | 1 1/2 | 2-12 | 2-12 | 32 | 32 | 53 | 54 | 552 | **24 HLO-S** | **24HMLOSS** | 350 | 280 |
| 35, 38 | 1 1/2 | 28, 30, 32 | 1 1/4 | 2-12 | 1 11/16-12 | 32 | 26 | 53 | 55 | 530 | **24-20HMLOS** | **24-20HMLOSS** | 350 | 280 |
| 50 | 2 | 50 | 2 | 2 1/2-12 | 2 1/2-12 | 45 | 45 | 63 | 70 | 990 | **32 HLO-S** | **32HMLOSS** | 200 | 200 |

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.

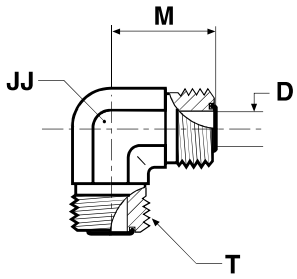
Imperial and metric parts may vary in hexagon dimensions.

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

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

## EMLO Union elbow

ORFS tube ends
SAE 520201




| Tube O.D. mm | Tube O.D. in. | Thread UN/UNF-2A T | D mm | JJ* mm | M mm | Weight (steel) g/1 piece | Steel | Stainless Steel | PN (bar) S | PN (bar) SS |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 1/4 | 9/16-18 | 4.5 | 14 | 22 | 47 | **4 ELO-S** | **4EMLOSS** | 630 | 630 |
| 8, 10 | 5/16, 3/8 | 11/16-16 | 6.5 | 19 | 25 | 109 | **6 ELO-S** | **6EMLOSS** | 630 | 630 |
| 12 | 1/2 | 13/16-16 | 9.5 | 19 | 28 | 123 | **8 ELO-S** | **8EMLOSS** | 630 | 630 |
| 14, 15, 16 | 5/8 | 1-14 | 12.5 | 27 | 34 | 183 | **10 ELO-S** | **10EMLOSS** | 420 | 420 |
| 18, 20 | 3/4 | 1 3/16-12 | 15.5 | 30 | 38 | 255 | **12 ELO-S** | **12EMLOSS** | 420 | 420 |
| 22, 25 | 1 | 1 7/16-12 | 20.5 | 36 | 42 | 457 | **16 ELO-S** | **16EMLOSS** | 420 | 420 |
| 28, 30, 32 | 1 1/4 | 1 11/16-12 | 26 | 41 | 45 | 530 | **20 ELO-S** | **20EMLOSS** | 350 | 280 |
| 35, 38 | 1 1/2 | 2-12 | 32 | 48 | 49 | 687 | **24 ELO-S** | **24EMLOSS** | 280 | 280 |
| 50 | 2 | 2 1/2-12 | 45 | 64 | 70 | 1500 | **32 ELO-S** | | 200 | — |

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.

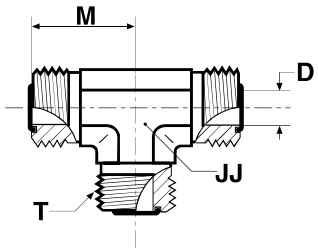
Imperial and metric parts may vary in hexagon dimensions.

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

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

## JMLO Union tee

ORFS tube ends
SAE 520401




| Tube O.D. mm | Tube O.D. in. | Thread UN/UNF-2A T | D mm | JJ* mm | M mm | Weight (steel) g/1 piece | Steel | Stainless Steel | PN (bar) S | PN (bar) SS |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 1/4 | 9/16-18 | 4.5 | 14 | 22 | 66 | **4JMLOS** | **4JMLOSS** | 630 | 630 |
| 8, 10 | 5/16, 3/8 | 11/16-16 | 6.5 | 19 | 25 | 114 | **6JMLOS** | **6JMLOSS** | 630 | 630 |
| 12 | 1/2 | 13/16-16 | 9.5 | 19 | 28 | 199 | **8JMLOS** | **8JMLOSS** | 630 | 630 |
| 14, 15, 16 | 5/8 | 1-14 | 12.5 | 27 | 34 | 239 | **10 JLO-S** | **10JMLOSS** | 420 | 420 |
| 18, 20 | 3/4 | 1 3/16-12 | 15.5 | 30 | 38 | 321 | **12 JLO-S** | **12JMLOSS** | 420 | 420 |
| 22, 25 | 1 | 1 7/16-12 | 20.5 | 36 | 42 | 488 | **16 JLO-S** | **16JMLOSS** | 420 | 420 |
| 28, 30, 32 | 1 1/4 | 1 11/16-12 | 26 | 41 | 45 | 768 | **20 JLO-S** | **20JMLOSS** | 350 | 280 |
| 35, 38 | 1 1/2 | 2-12 | 32 | 48 | 49 | 866 | **24 JLO-S** | **24JMLOSS** | 280 | 280 |
| 50 | 2 | 2 1/2-12 | 45 | 64 | 70 | 2250 | **32 JLO-S** | **32JMLOSS** | 200 | 200 |

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.

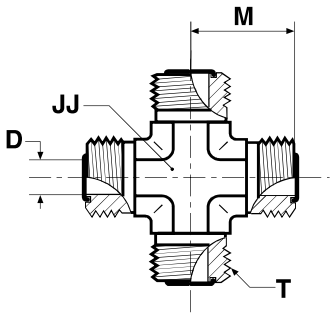
Imperial and metric parts may vary in hexagon dimensions.

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

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

## KLO Union cross

ORFS tube ends
SAE 520501




| Tube O.D. mm | Tube O.D. in. | Thread UN/UNF-2A T | D mm | JJ* mm | M mm | Weight (steel) g/1 piece | Steel | Stainless Steel | PN (bar) S | PN (bar) SS |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 1/4 | 9/16-18 | 4.5 | 14 | 22 | 72 | **4 KLO-S** | **4 KLO-SS** | 630 | 630 |
| 8, 10 | 5/16, 3/8 | 11/16-16 | 6.5 | 19 | 25 | 140 | **6 KLO-S** | **6 KLO-SS** | 630 | 630 |
| 12 | 1/2 | 13/16-16 | 9.5 | 19 | 28 | 225 | **8 KLO-S** | **8 KLO-SS** | 630 | 630 |
| 14, 15, 16 | 5/8 | 1-14 | 12.5 | 27 | 33 | 288 | **10 KLO-S** | **10 KLO-SS** | 420 | 420 |
| 18, 20 | 3/4 | 1 3/16-12 | 15.5 | 30 | 37 | 415 | **12 KLO-S** | **12 KLO-SS** | 420 | 420 |
| 22, 25 | 1 | 1 7/16-12 | 20.5 | 41 | 42 | 967 | **16 KLO-S** | **16 KLO-SS** | 420 | 420 |
| 28, 30, 32 | 1 1/4 | 1 11/16-12 | 26 | 41 | 45 | 1247 | **20 KLO-S** | **20 KLO-SS** | 350 | 280 |
| 35, 38 | 1 1/2 | 2-12 | 32 | 48 | 49 | 1592 | **24 KLO-S** | **24 KLO-SS** | 280 | 280 |

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.

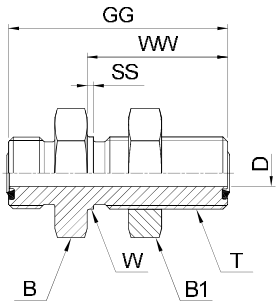
Imperial and metric parts may vary in hexagon dimensions.

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

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

## WMLO Bulkhead union

ORFS tube ends
SAE 520601 ISO 8434-3 BHS




| Tube O.D. mm | Tube O.D. in. | Thread UN/UNF-2A T | B1 mm | B mm | D mm | GG mm | SS mm | W mm | WW mm | Weight (steel) g/1 piece | Steel | Stainless Steel | PN (bar) S | PN (bar) SS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 1/4 | 9/16-18 | 20.6 | 21 | 4.5 | 48 | 2 | 14 | 32 | 65 | **4 WLO-WLNL-S** | **4WMLOWLNMLSS** | 630 | 630 |
| 8, 10 | 5/16, 3/8 | 11/16-16 | 27 | 27 | 6.5 | 53 | 2 | 17 | 34 | 104 | **6WMLOWLNMLS** | **6WMLOWLNMLSS** | 630 | 630 |
| 12 | 1/2 | 13/16-16 | 30 | 30 | 9.5 | 59 | 3 | 21 | 37 | 141 | **8WMLOWLNMLS** | **8WMLOWLNMLSS** | 630 | 630 |
| 14, 15, 16 | 5/8 | 1-14 | 36 | 32 | 12.5 | 67 | 3 | 25 | 41 | 285 | **10WMLOWLNMLS** | **10WMLOWLNMLSS** | 420 | 420 |
| 18, 20 | 3/4 | 1 3/16-12 | 41 | 41 | 15.5 | 69 | 3 | 30 | 42 | 322 | **12WMLOWLNMLS** | **12WMLOWLNMLSS** | 420 | 420 |
| 22, 25 | 1 | 1 7/16-12 | 44.5 | 45 | 20.5 | 70 | 2 | 36 | 42 | 480 | **16 WLO-WLNL-S** | **16WMLOWLNMLSS** | 420 | 420 |
| 28, 30, 32 | 1 1/4 | 1 11/16-12 | 50.4 | 51 | 26 | 70 | 2 | 43 | 42 | 510 | **20 WLO-WLNL-S** | **20WMLOWLNMLSS** | 420 | 280 |
| 35, 38 | 1 1/2 | 2-12 | 60.3 | 60 | 32 | 70 | 2 | 51 | 42 | 674 | **24 WLO-WLNL-S** | **24WMLOWLNMLSS** | 350 | 280 |

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.

For the version without the locknut remove “WLNML” (e.g. 16WMLO)

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

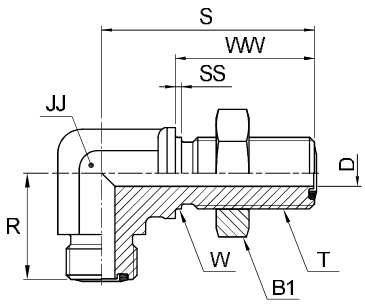
Do not create drawings from these dimensions, they are subject to change and ISO manufacturing allowances.

### Maximum bulkhead wallthickness

| Size | Tube O.D. inch | Tube O.D. metric | Straight bulkhead union Max. thickness mm | Shape bulkhead union Max. thickness mm |
|---|---|---|---|---|
| 4 | 1/4 | 6 | 13.5 | 13.5 |
| 6 | 3/8 | 10 | 13.5 | 13.5 |
| 8 | 1/2 | 12 | 13.5 | 13.5 |
| 10 | 5/8 | 14–16 | 13.2 | 13.2 |
| 12 | 3/4 | 18–20 | 12.7 | 12.7 |
| 16 | 1 | 22–25 | 13.0 | 13.0 |
| 20 | 1 1/4 | 28–32 | 13.0 | 13.0 |
| 24 | 1 1/2 | 35–38 | 13.0 | 13.0 |

## WEMLO Bulkhead union elbow

ORFS tube end/ ORFS tube end
SAE520701/SAE 520701 ISO 8434-3 BHE




| Tube O.D. mm | Tube O.D. in. | Thread UN/UNF-2A T | B1 mm | D mm | JJ* mm | R mm | S mm | SS mm | W mm | WW mm | Weight (steel) g/1 piece | Steel | Stainless Steel | PN (bar) S | PN (bar) SS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 1/4 | 9/16-18 | 20.6 | 4.5 | 14 | 23 | 47 | 2 | 14 | 32 | 78 | **4 WELO-WLNL-S** | **4 WELO-WLNL-SS** | 630 | 630 |
| 8, 10 | 5/16, 3/8 | 11/16-16 | 27 | 6.5 | 19 | 26 | 52 | 2 | 17 | 34 | 146 | **6WEMLOWLNMLS** | **6 WELO-WLNL-SS** | 630 | 630 |
| 12 | 1/2 | 13/16-16 | 30 | 9.5 | 19 | 29 | 56 | 3 | 21 | 37 | 252 | **8WEMLOWLNMLS** | **8 WELO-WLNL-SS** | 630 | 630 |
| 14, 15, 16 | 5/8 | 1-14 | 36 | 12.5 | 27 | 35 | 63 | 3 | 25 | 41 | 287 | **10WEMLOWLNMLS** | **10 WELO-WLNL-SS** | 420 | 420 |
| 18, 20 | 3/4 | 1 3/16-12 | 38 | 15.5 | 30 | 39 | 67 | 2 | 30 | 42 | 445 | **12 WELO-WLNL-S** | **12 WELO-WLNL-SS** | 420 | 420 |
| 22, 25 | 1 | 1 7/16-12 | 44.5 | 20.5 | 36 | 42 | 71 | 2 | 37 | 42 | 639 | **16 WELO-WLNL-S** | **16 WELO-WLNL-SS** | 420 | 420 |
| 28, 30, 32 | 1 1/4 | 1 11/16-12 | 50.4 | 26 | 41 | 46 | 75 | 2 | 43 | 42 | 718 | **20 WELO-WLNL-S** | **20 WELO-WLNL-SS** | 350 | 280 |
| 35, 38 | 1 1/2 | 2-12 | 60.3 | 32 | 48 | 50 | 80 | 2 | 51 | 42 | 945 | **24 WELO-WLNL-S** | **24 WELO-WLNL-SS** | 280 | 280 |

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.

For the version without the locknut remove “WLNML” (e.g. 16WEMLO)

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

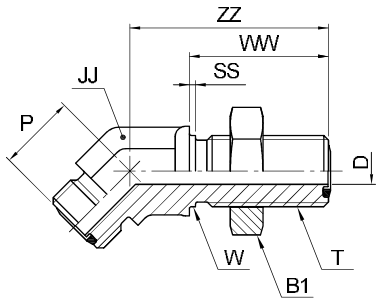
Do not create drawings from these dimensions, they are subject to change and ISO manufacturing allowances.
*JJ may vary in stainless steel

### Maximum bulkhead wallthickness

| Size | Tube O.D. inch | Tube O.D. metric | Straight bulkhead union Max. thickness mm | Shape bulkhead union Max. thickness mm |
|---|---|---|---|---|
| 4 | 1/4 | 6 | 13.5 | 13.5 |
| 6 | 3/8 | 10 | 13.5 | 13.5 |
| 8 | 1/2 | 12 | 13.5 | 13.5 |
| 10 | 5/8 | 14–16 | 13.2 | 13.2 |
| 12 | 3/4 | 18–20 | 12.7 | 12.7 |
| 16 | 1 | 22–25 | 13.0 | 13.0 |
| 20 | 1 1/4 | 28–32 | 13.0 | 13.0 |
| 24 | 1 1/2 | 35–38 | 13.0 | 13.0 |

## WNLO Bulkhead union 45° elbow

ORFS tube ends
SAE 520801 ISO 8434-3 BHE 45




| Tube O.D. mm | Tube O.D. in. | Thread UN/UNF-2A T | B1 mm | D mm | JJ* mm | P mm | SS mm | W mm | WW mm | ZZ mm | Weight (steel) g/1 piece | Steel | PN (bar) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 1/4 | 9/16-18 | 20.6 | 4.5 | 14 | 16 | 2 | 14 | 32 | 44 | 65 | **4 WNLO-WLNL-S** | 630 |
| 8, 10 | 5/16, 3/8 | 11/16-16 | 25.4 | 6.5 | 19 | 19 | 2 | 17 | 34 | 49 | 123 | **6 WNLO-WLNL-S** | 630 |
| 12 | 1/2 | 13/16-16 | 28.6 | 9.5 | 19 | 21 | 2 | 21 | 37 | 51 | 163 | **8 WNLO-WLNL-S** | 630 |
| 14, 15, 16 | 5/8 | 1-14 | 33.3 | 12.5 | 27 | 24 | 2 | 25 | 41 | 57 | 252 | **10 WNLO-WLNL-S** | 420 |
| 18, 20 | 3/4 | 1 3/16-12 | 38 | 15.5 | 30 | 26 | 2 | 30 | 42 | 61 | 386 | **12 WNLO-WLNL-S** | 420 |
| 22, 25 | 1 | 1 7/16-12 | 44.5 | 20.5 | 36 | 30 | 2 | 37 | 42 | 65 | 465 | **16 WNLO-WLNL-S** | 420 |
| 28, 30, 32 | 1 1/4 | 1 11/16-12 | 50.4 | 26.0 | 41 | 32 | 2 | 43 | 42 | 67 | 578 | **20 WNLO-WLNL-S** | 350 |
| 35, 38 | 1 1/2 | 2-12 | 60.3 | 32.0 | 48 | 37 | 2 | 51 | 42 | 67 | 770 | **24 WNLO-WLNL-S** | 280 |

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.

For the version without the locknut remove “WLNL” (e.g. 16 WNLO)

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

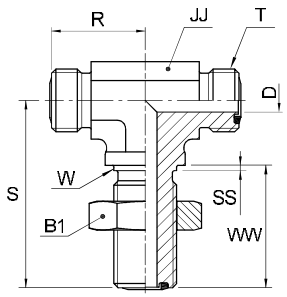
Do not create drawings from these dimensions, they are subject to change and ISO manufacturing allowances.
*JJ may vary in stainless steel

### Maximum bulkhead wallthickness

| Size | Tube O.D. inch | Tube O.D. metric | Straight bulkhead union Max. thickness mm | Shape bulkhead union Max. thickness mm |
|---|---|---|---|---|
| 4 | 1/4 | 6 | 13.5 | 13.5 |
| 6 | 3/8 | 10 | 13.5 | 13.5 |
| 8 | 1/2 | 12 | 13.5 | 13.5 |
| 10 | 5/8 | 14–16 | 13.2 | 13.2 |
| 12 | 3/4 | 18–20 | 12.7 | 12.7 |
| 16 | 1 | 22–25 | 13.0 | 13.0 |
| 20 | 1 1/4 | 28–32 | 13.0 | 13.0 |
| 24 | 1 1/2 | 35–38 | 13.0 | 13.0 |

## WJLO Bulkhead branch tee

ORFS tube ends




| Tube O.D. mm | Tube O.D. in. | Thread UN/UNF-2A T | B1 mm | D mm | JJ* mm | R mm | S mm | SS mm | W mm | WW mm | Weight (steel) g/1 piece | Steel | PN (bar) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 1/4 | 9/16-18 | 20.6 | 4.5 | 14 | 23 | 47 | 2 | 14 | 32 | 100 | **4 WJLO-WLNL-S** | 630 |
| 8, 10 | 5/16, 3/8 | 11/16-16 | 25.4 | 6.5 | 19 | 26 | 52 | 2 | 18 | 34 | 178 | **6 WJLO-WLNL-S** | 630 |
| 12 | 1/2 | 13/16-16 | 28.6 | 9.5 | 19 | 29 | 55 | 2 | 21 | 37 | 270 | **8 WJLO-WLNL-S** | 630 |
| 14, 15, 16 | 5/8 | 1-14 | 33.3 | 12.5 | 27 | 35 | 63 | 2 | 25 | 41 | 370 | **10 WJLO-WLNL-S** | 420 |
| 18, 20 | 3/4 | 1 3/16-12 | 38 | 15.5 | 30 | 39 | 67 | 2 | 30 | 42 | 520 | **12 WJLO-WLNL-S** | 420 |
| 22, 25 | 1 | 1 7/16-12 | 44.5 | 20.5 | 36 | 42 | 71 | 2 | 37 | 42 | 680 | **16 WJLO-WLNL-S** | 420 |

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.

For the version without the locknut remove “WLNL” (e.g. 16 WJLO)

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

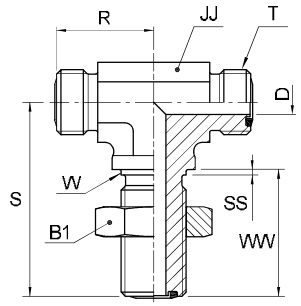
Do not create drawings from these dimensions, they are subject to change and ISO manufacturing allowances.
*JJ may vary in stainless steel

### Maximum bulkhead wallthickness

| Size | Tube O.D. inch | Tube O.D. metric | Straight bulkhead union Max. thickness mm | Shape bulkhead union Max. thickness mm |
|---|---|---|---|---|
| 4 | 1/4 | 6 | 13.5 | 13.5 |
| 6 | 3/8 | 10 | 13.5 | 13.5 |
| 8 | 1/2 | 12 | 13.5 | 13.5 |
| 10 | 5/8 | 14–16 | 13.2 | 13.2 |
| 12 | 3/4 | 18–20 | 12.7 | 12.7 |
| 16 | 1 | 22–25 | 13.0 | 13.0 |
| 20 | 1 1/4 | 28–32 | 13.0 | 13.0 |
| 24 | 1 1/2 | 35–38 | 13.0 | 13.0 |

## WJJLO Bulkhead run tee

ORFS tube ends
SAE 520958 ISO 8434-3 BHRT




| Tube O.D. mm | Tube O.D. in. | Thread UN/UNF-2A T | B1 mm | D mm | JJ* mm | R mm | S mm | SS mm | W mm | WW mm | Weight (steel) g/1 piece | Steel | PN (bar) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 1/4 | 9/16-18 | 20.6 | 4.5 | 14 | 23 | 46 | 2 | 14 | 32 | 99 | **4 WJJLO-WLNL-S** | 630 |
| 8, 10 | 5/16, 3/8 | 11/16-16 | 25.4 | 6.5 | 19 | 26 | 52 | 2 | 17 | 34 | 178 | **6 WJJLO-WLNL-S** | 630 |
| 12 | 1/2 | 13/16-16 | 28.6 | 9.5 | 19 | 29 | 55 | 2 | 21 | 37 | 270 | **8 WJJLO-WLNL-S** | 630 |
| 14, 15, 16 | 5/8 | 1-14 | 33.3 | 12.5 | 27 | 35 | 63 | 2 | 25 | 41 | 368 | **10 WJJLO-WLNL-S** | 420 |
| 18, 20 | 3/4 | 1 3/16-12 | 38 | 15.5 | 30 | 39 | 67 | 2 | 30 | 42 | 516 | **12 WJJLO-WLNL-S** | 420 |
| 22, 25 | 1 | 1 7/16-12 | 44.5 | 20.5 | 36 | 42 | 71 | 2 | 37 | 42 | 678 | **16 WJJLO-WLNL-S** | 420 |
| 28, 30, 32 | 1 1/4 | 1 11/16-12 | 50.4 | 26 | 41 | 46 | 71 | 2 | 43 | 42 | 980 | **20 WJJLO-WLNL-S** | 350 |
| 35, 38 | 1 1/2 | 2-12 | 60.3 | 32 | 48 | 50 | 80 | 2 | 51 | 42 | 1900 | **24 WJJLO-WLNL-S** | 280 |

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.

For the version without the locknut remove “WLNL” (e.g. 16 WJJLO)

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

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

### Maximum bulkhead wallthickness

| Size | Tube O.D. inch | Tube O.D. metric | Straight bulkhead union Max. thickness mm | Shape bulkhead union Max. thickness mm |
|---|---|---|---|---|
| 4 | 1/4 | 6 | 13.5 | 13.5 |
| 6 | 3/8 | 10 | 13.5 | 13.5 |
| 8 | 1/2 | 12 | 13.5 | 13.5 |
| 10 | 5/8 | 14–16 | 13.2 | 13.2 |
| 12 | 3/4 | 18–20 | 12.7 | 12.7 |
| 16 | 1 | 22–25 | 13.0 | 13.0 |
| 20 | 1 1/4 | 28–32 | 13.0 | 13.0 |
| 24 | 1 1/2 | 35–38 | 13.0 | 13.0 |