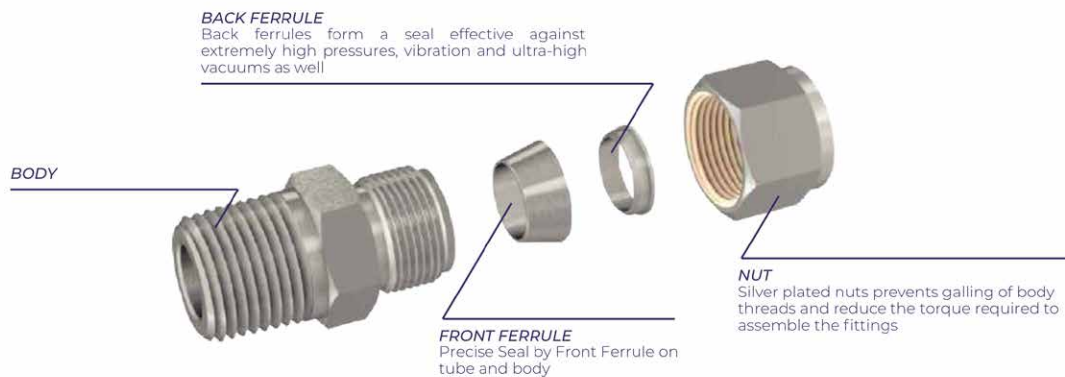


FEATURES

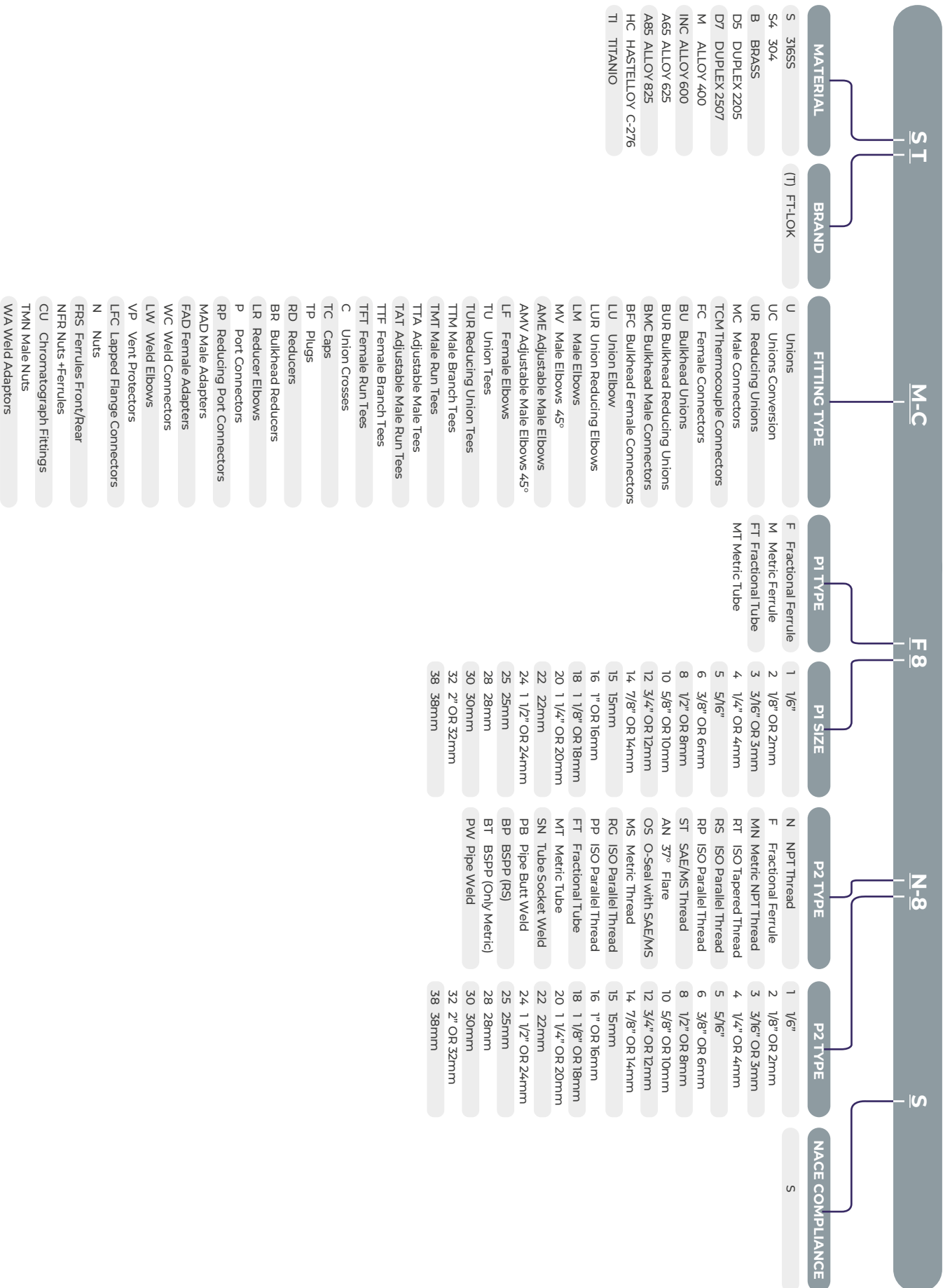
- ° Size ranges from 1/16" to 1" and 2mm to 25mm
- ° All fittings have a high-quality appearance
- ° Straight fittings are manufactured from Bar stock and Shaped fittings are manufactured from forgings
- ° Every fitting is marked with Manufacturer's name, Size, Material and heat code for traceability
- ° Precision machined components ensure perfect deformation of ferrules and the tubing
- ° Excellent leak-free sealing integrity on heavy vibration, vacuum and impulse
- ° Case hardened back ferrules for additional strength
- ° Female nut threads are silver plated to reduce friction against the body threads and avoid galling
- ° Radius junction design for elbows provides smooth flow path
- ° Fittings are easy to disconnect and retighten



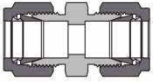
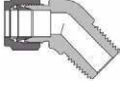
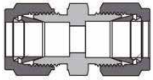
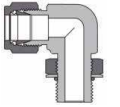
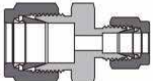
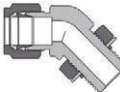
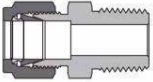
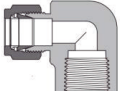
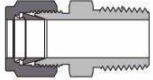
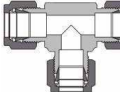
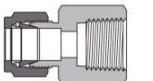
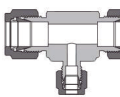
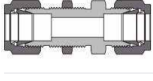
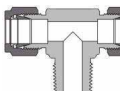
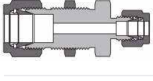
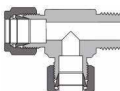
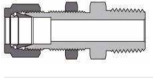
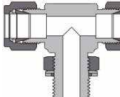
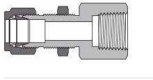
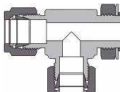

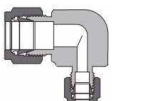
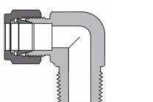
PRESSURE RATING

NPT / ISO Pipe Size	Stainless steel 316				Brass				Carbon Steel			
	Male		Female		Male		Female		Male		Female	
	Bar	Psig	Bar	Psig	Bar	Psig	Bar	Psig	Bar	Psig	Bar	Psig
1/8	689	10,000	420	6,100	337	4,900	207	3,000	689	10,000	420	6,100
1/4	558	8,100	434	6,300	275	4,000	214	3,200	558	8,100	434	6,300
3/8	524	7,600	345	5,000	262	3,800	172	2,500	524	7,600	345	5,000
1/2	517	7,500	324	4,700	255	3,700	158	2,300	524	7,500	324	4,700
3/4	496	7,200	303	4,400	248	3,600	152	2,200	496	7,200	303	4,400
1	365	5,300	296	4,300	172	2,500	145	2,100	365	5,300	296	4,300

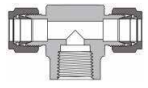
- ° Pressure ratings are calculated at -28 to 37 C (-20 to 100 F) using allowable stress value of 20,000psi for SS 316, 10,000psi for Brass and 20,000psi for Carbon Steel as per ASME B31.3
- ° Process Piping Code
- ° Pressure ratings are listed for temperatures up to 37°C (100°F)
- ° To determine the pressure ratings in accordance with ASME B31.1, Power Piping:
 - ° Carbon Steel material - multiply by 0.85
 - ° Stainless Steel and Brass material - remains the same



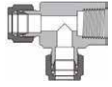
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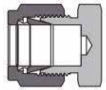
Female Branch Tees **TTF** **46**



Female Run Tees **TFT** **47**



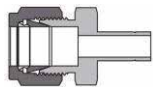
Union Crosses **C** **48**



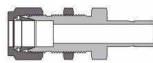
Caps **TC** **49**



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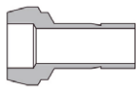
Bulkhead Reducers **BR** **53**



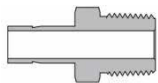
Reducer Elbows **LR** **54**



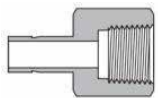
Port Connectors **P** **54**



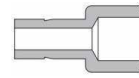
Reducing Port Connectors **RP** **55**



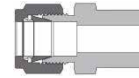
Male Adapters **MAD** **56-59**



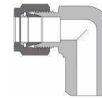
Female Adapters **FAD** **60-62**



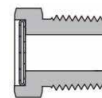
Weld Adapters **WA** **63**



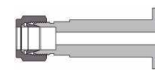
Weld Connectors **WC** **63-64**



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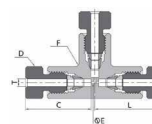
Nuts + Ferrules **NFR** **68**



Male Nuts **MN** **68**



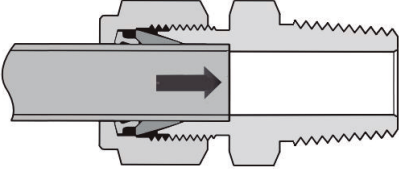
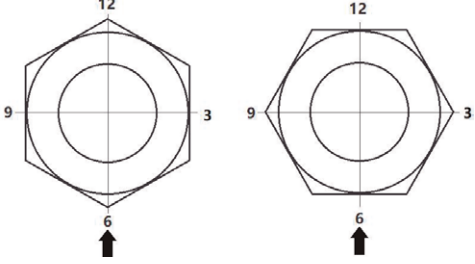
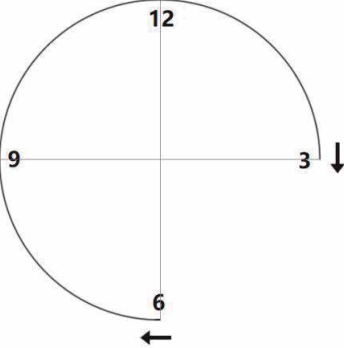
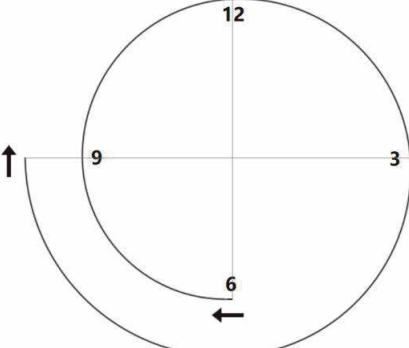
Chromatograph Fittings **CU** **69**



Chromatograph Tee Fittings **CT** **69**

TUBE FITTINGS UP TO 1IN. / 25MM

These instructions apply both to traditional fittings and to fittings with the advanced back-ferrule geometry.

 <p>Fully insert the tube into the fitting and against the shoulder; rotate the nut finger-tight.</p>	 <p>Mark the nut at the 6 o'clock position.</p>
 <p>1/16, 1/8 and 3/16 in.; 2,3 and 4mm tube fittings, tighten the nut only three-quarters turn to the 3 o'clock position.</p>	 <p>1/4 to 1 inch., and 6mm to 25mm tube fittings, tighten the nut one and one-quarters turn to the 9 o'clock position.</p>

TUBE FITTINGS OVER 1IN. / 25MM

1. Preswage the ferrules onto the tube using the Multihead Hydraulic Swaging Unit (MHSU).
2. Apply the lubricant lightly to the body threads and the rear surface of the back ferrule.
3. Insert the tube with preswaged ferrules into the fitting until the front ferrule seats against the fitting body; rotate the nut finger-tight.
4. Mark the nut at the 6 o'clock position.
5. While holding the fitting body steady, tighten the nut one-half turn to the 12 o'clock position.

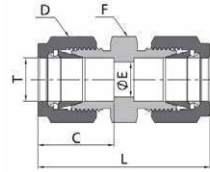
REASSEMBLY ALL-SIZES

You may disassemble and reassemble tube fittings many times. Always depressurize the system before disassembling. Prior to disassembly, mark a line along the nut and fitting body flats. Use the marks to ensure that you return the nut to the previously pulled-up position.

Insert the tube with preswaged ferrules into the fitting until the front ferrule seats against the fitting body.

While holding the fitting body steady, rotate the nut with a wrench to the previously pulled-up position, as indicated by the marks on the tube and flats. At this point, you will feel a significant increase in resistance. Tighten the nut slightly.

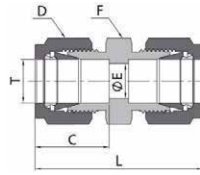
UNIONS



Fractional Tube						
T - Tube O.D. (in.)	Basic Ordering Number	Dimension, in. (mm)				
		L	C	D	F	E
1/16	_T-U-F1	0.99 (25.1)	0.34 (8.6)	0.31 (7.9)	0.44 (11.1)	0.05 (1.3)
1/8	_T-U-F2	1.40 (35.6)	0.54 (13.7)	0.44 (11.1)	0.44 (11.1)	0.09 (2.3)
3/16	_T-U-F3	1.47 (37.3)	0.60 (15.2)	0.50 (12.7)	0.50 (12.7)	0.12 (3.0)
1/4	_T-U-F4	1.61 (40.9)	0.64 (16.2)	0.56 (14.3)	0.50 (12.7)	0.19 (4.8)
5/16	_T-U-F5	1.69 (42.9)	0.66 (16.8)	0.63 (15.9)	0.56 (14.3)	0.25 (6.4)
3/8	_T-U-F6	1.77 (45.0)	0.90 (22.9)	0.69 (17.5)	0.63 (15.9)	0.28 (7.1)
1/2	_T-U-F8	2.02 (51.3)	0.96 (24.4)	0.87 (22.2)	0.81 (20.6)	0.41 (10.4)
5/8	_T-U-F10	2.05 (52.1)	1.02 (25.9)	1.00 (25.4)	0.94 (23.9)	0.50 (12.7)
3/4	_T-U-F12	2.11 (53.6)	1.23 (31.2)	1.13 (28.6)	1.06 (27.0)	0.62 (15.7)
7/8	_T-U-F14	2.17 (55.1)	1.23 (31.2)	1.25 (31.8)	1.37 (34.9)	0.72 (18.3)
1	_T-U-F16	2.55 (64.8)	1.62 (41.1)	1.5 (38.1)	1.37 (34.9)	0.88 (22.4)
1 1/8	_T-U-F18	2.55 (64.8)	1.97 (50.0)	1.75 (44.5)	1.63 (41.3)	0.97 (24.6)
1 1/4	_T-U-F20	3.63 (92.2)	3.63 (92.2)	1.87 (47.6)	1.75 (44.5)	1.09 (27.7)
1 1/2	_T-U-F24	4.25 (108.0)	4.25 (108.0)	2.25 (57.2)	2.13 (54.0)	1.34 (34.0)

Metric Tube						
T - Tube O.D. (mm)	Basic Ordering Number	Dimension, mm (in.)				
		L	C	D	F	E
2	_T-U-MT2	35.6 (1.40)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)	1.7 (0.07)
3	_T-U-MT3	35.3 (1.39)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)	2.4 (0.09)
4	_T-U-MT4	37.3 (1.47)	13.7 (0.54)	12.0 (0.47)	12.0 (0.47)	2.4 (0.09)
6	_T-U-MT6	41.0 (1.61)	15.3 (0.60)	14.0 (0.55)	14.0 (0.55)	4.8 (0.19)
8	_T-U-MT8	43.2 (1.70)	16.2 (0.64)	16.0 (0.63)	15.0 (0.59)	6.4 (0.25)
10	_T-U-MT10	46.2 (1.82)	17.2 (0.68)	19.0 (0.75)	18.0 (0.71)	7.9 (0.31)
12	_T-U-MT12	51.2 (2.02)	22.8 (0.90)	22.0 (0.87)	22.0 (0.87)	9.5 (0.37)
14	_T-U-MT14	52.0 (2.05)	24.4 (0.96)	25.0 (0.98)	24.0 (0.94)	11.1 (0.44)
15	_T-U-MT15	52.0 (2.05)	24.4 (0.96)	25.0 (0.98)	24.0 (0.94)	11.9 (0.47)
16	_T-U-MT16	52.0 (2.05)	24.4 (0.96)	25.0 (0.98)	24.0 (0.94)	12.7 (0.50)
18	_T-U-MT18	53.5 (2.11)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)	15.1 (0.59)
20	_T-U-MT20	55.0 (2.17)	26.0 (1.02)	32.0 (1.26)	30.0 (1.18)	15.9 (0.63)
22	_T-U-MT22	55.0 (2.17)	26.0 (1.02)	32.0 (1.26)	30.0 (1.18)	18.3 (0.72)
25	_T-U-MT25	65.0 (2.56)	31.3 (1.23)	38.0 (1.50)	35.0 (1.38)	21.8 (0.86)
28	_T-U-MT28	85.0 (3.35)	36.6 (1.44)	46.0 (1.81)	41.0 (1.61)	21.8 (0.86)
30	_T-U-MT30	92.7 (3.65)	39.6 (1.56)	50.0 (1.97)	46.0 (1.81)	26.2 (1.03)
32	_T-U-MT32	97.3 (3.83)	42.0 (1.65)	50.0 (1.97)	46.0 (1.81)	28.6 (1.13)
38	_T-U-MT38	113.6 (4.47)	49.4 (1.94)	60.0 (2.36)	55.0 (2.17)	33.7 (1.33)

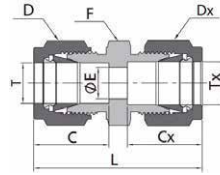
CONVERSION UNIONS



Metric Tube to Fractional Tube

T - Tube O.D. (mm)	Tx - Tube O.D. (in.)	Basic Ordering Number	Dimension, in. (mm)						
			L	C	D	F	E	Cx	Dx
3	1/8	_T-UC-M3-F2	35.2 (1.39)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)	2.4 (0.09)	12.7 (0.50)	11.1 (0.44)
4	1/8	_T-UC-M4-F2	36.5 (1.44)	13.7 (0.54)	12.0 (0.47)	12.0 (0.47)	2.4 (0.09)	12.7 (0.50)	11.1 (0.44)
4	1/4	_T-UC-M4-F4	39.4 (1.55)	13.7 (0.54)	12.0 (0.47)	14.0 (0.55)	2.4 (0.09)	15.2 (0.60)	14.3 (0.56)
6	1/8	_T-UC-M6-F2	38.5 (1.52)	15.3 (0.60)	14.0 (0.55)	14.0 (0.55)	2.4 (0.09)	12.7 (0.50)	11.1 (0.44)
6	1/4	_T-UC-M6-F4	41.0 (1.61)	15.3 (0.60)	14.0 (0.55)	14.0 (0.55)	4.8 (0.19)	15.2 (0.60)	14.3 (0.56)
6	5/16	_T-UC-M6-F5	42.3 (1.67)	15.3 (0.60)	14.0 (0.55)	14.0 (0.55)	4.8 (0.19)	16.2 (0.64)	15.9 (0.63)
8	1/4	_T-UC-M8-F4	42.3 (1.67)	16.2 (0.64)	16.0 (0.63)	15.0 (0.59)	4.8 (0.19)	15.2 (0.60)	14.3 (0.56)
8	3/8	_T-UC-M8-F6	44.3 (1.74)	16.2 (0.64)	16.0 (0.63)	16.0 (0.63)	6.4 (0.25)	16.8 (0.66)	17.5 (0.69)
10	1/8	_T-UC-M10-F2	41.8 (1.65)	17.2 (0.68)	19.0 (0.75)	18.0 (0.71)	2.4 (0.09)	12.7 (0.50)	11.1 (0.44)
10	1/4	_T-UC-M10-F4	44.5 (1.75)	17.2 (0.68)	19.0 (0.75)	18.0 (0.71)	4.8 (0.19)	15.2 (0.60)	14.3 (0.56)
10	5/16	_T-UC-M10-F5	45.1 (1.78)	17.2 (0.68)	19.0 (0.75)	18.0 (0.71)	6.4 (0.25)	16.2 (0.64)	15.9 (0.63)
10	3/8	_T-UC-M10-F6	45.9 (1.81)	17.2 (0.68)	19.0 (0.75)	18.0 (0.71)	7.1 (0.28)	16.8 (0.66)	17.5 (0.69)
12	5/16	_T-UC-M12-F5	47.8 (1.88)	22.8 (0.90)	22.0 (0.87)	22.0 (0.87)	6.4 (0.25)	16.2 (0.64)	15.9 (0.63)
12	3/8	_T-UC-M12-F6	48.4 (1.91)	22.8 (0.90)	22.0 (0.87)	22.0 (0.87)	7.1 (0.28)	16.8 (0.66)	17.5 (0.69)
12	1/2	_T-UC-M12-F8	51.2 (2.02)	22.8 (0.90)	22.0 (0.87)	22.0 (0.87)	9.5 (0.37)	22.9 (0.90)	22.2 (0.87)
15	1/2	_T-UC-M15-F8	52.0 (2.05)	24.4 (0.96)	25.0 (0.98)	24.0 (0.94)	10.4 (0.41)	22.9 (0.90)	22.2 (0.87)
16	5/8	_T-UC-M16-F10	52.0 (2.05)	24.4 (0.96)	25.0 (0.98)	24.0 (0.94)	12.7 (0.50)	24.4 (0.96)	25.4 (1.00)
18	3/4	_T-UC-M18-F12	53.5 (2.11)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)	15.1 (0.59)	24.4 (0.96)	28.6 (1.13)
20	1/2	_T-UC-M20-F8	55.0 (2.17)	26.0 (1.02)	32.0 (1.26)	30.0 (1.18)	10.4 (0.41)	22.9 (0.90)	22.2 (0.87)
20	1	_T-UC-M20-F16	62.8 (2.47)	26.0 (1.02)	32.0 (1.26)	35.0 (1.38)	15.9 (0.63)	31.2 (1.23)	38.1 (1.50)
25	1	_T-UC-M25-F16	65.0 (2.56)	31.3 (1.23)	38.0 (1.50)	35.0 (1.38)	21.8 (0.86)	31.2 (1.23)	38.1 (1.50)
28	1	_T-UC-M28-F16	79.6 (3.13)	36.6 (1.44)	46.0 (1.81)	41.0 (1.61)	21.8 (0.86)	31.2 (1.23)	38.1 (1.50)
30	1	_T-UC-M32-F16	85.3 (3.35)	39.6 (1.56)	50.0 (1.97)	46.0 (1.81)	21.8 (0.86)	31.2 (1.23)	38.1 (1.50)
32	1	_T-UC-M32-F16	86.5 (3.40)	42.0 (1.65)	50.0 (1.97)	46.0 (1.81)	21.8 (0.86)	31.2 (1.23)	38.1 (1.50)
38	1	_T-UC-M38-F16	95.4 (3.76)	49.4 (1.94)	60.0 (2.36)	55.0 (2.17)	21.8 (0.86)	31.2 (1.23)	38.1 (1.50)

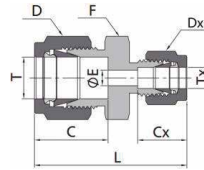
REDUCING UNIONS



Fractional Tube

T - Tube O.D. (in.)	Tx - Tube O.D. (in.)	Basic Ordering Number	Dimension, in. (mm)						
			L	C	D	F	E	Cx	Gx
1/8	1/16	_T-UR-F2-F1	1.22 (31.0)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)	0.05 (1.3)	0.34 (8.6)	0.31 (7.9)
3/16	1/16	_T-UR-F3-F1	1.27 (32.3)	0.54 (13.7)	0.50 (12.7)	0.44 (11.1)	0.05 (1.3)	0.34 (8.6)	0.31 (7.9)
3/16	1/8	_T-UR-F3-F2	1.44 (36.6)	0.54 (13.7)	0.50 (12.7)	0.44 (11.1)	0.09 (2.3)	0.50 (12.7)	0.44 (11.1)
1/4	1/16	_T-UR-F4-F1	1.35 (34.3)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.05 (1.3)	0.34 (8.6)	0.31 (7.9)
1/4	1/8	_T-UR-F4-F2	1.52 (38.6)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.09 (2.3)	0.50 (12.7)	0.44 (11.1)
1/4	3/16	_T-UR-F4-F3	1.55 (39.4)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.12 (3.0)	0.54 (13.7)	0.50 (12.7)
5/16	1/8	_T-UR-F5-F2	1.56 (39.6)	0.64 (16.2)	0.63 (15.9)	0.56 (14.3)	0.09 (2.3)	0.50 (12.7)	0.44 (11.1)
5/16	1/4	_T-UR-F5-F4	1.66 (42.2)	0.64 (16.2)	0.63 (15.9)	0.56 (14.3)	0.19 (4.8)	0.60 (15.2)	0.56 (14.3)
3/8	1/16	_T-UR-F6-F1	1.44 (36.6)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.05 (1.3)	0.34 (8.6)	0.31 (7.9)
3/8	1/8	_T-UR-F6-F2	1.61 (40.9)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.09 (2.3)	0.50 (12.7)	0.44 (11.1)
3/8	1/4	_T-UR-F6-F4	1.70 (43.2)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.19 (4.8)	0.60 (15.2)	0.56 (14.3)
1/2	1/4	_T-UR-F8-F4	1.85 (47.0)	0.90 (22.8)	0.87 (22.2)	0.81 (20.6)	0.19 (4.8)	0.60 (15.2)	0.56 (14.3)
1/2	3/8	_T-UR-F8-F6	1.91 (48.5)	0.90 (22.8)	0.87 (22.2)	0.81 (20.6)	0.28 (7.1)	0.66 (16.8)	0.69 (17.5)
5/8	3/8	_T-UR-F10-F6	1.94 (49.3)	0.96 (24.4)	1.00 (25.4)	0.94 (23.9)	0.28 (7.1)	0.66 (16.8)	0.69 (17.5)
5/8	1/2	_T-UR-F10-F8	2.05 (52.1)	0.96 (24.4)	1.00 (25.4)	0.94 (23.9)	0.41 (10.4)	0.90 (22.8)	0.87 (22.2)
3/4	1/4	_T-UR-F12-F4	1.94 (49.3)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.19 (4.8)	0.60 (15.2)	0.56 (14.3)
3/4	3/8	_T-UR-F12-F6	2.00 (50.8)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.28 (7.1)	0.66 (16.8)	0.69 (17.5)
3/4	1/2	_T-UR-F12-F8	2.11 (53.6)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.41 (10.4)	0.90 (22.8)	0.87 (22.2)
1	1/2	_T-UR-F16-F8	2.38 (60.5)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)	0.41 (10.4)	0.90 (22.8)	0.87 (22.2)
1	3/4	_T-UR-F16-F12	2.38 (60.5)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)	0.62 (15.7)	0.96 (24.4)	1.13 (28.6)

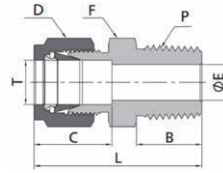
REDUCING UNIONS



Metric Tube

T - Tube O.D. (mm)	Tx - Tube O.D. (mm)	Basic Ordering Number	Dimension, mm (in.)						
			L	C	D	F	E	Cx	Gx
3	2	_T-UR-M3-M2	35.3 (1.39)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)	1.7 (0.07)	12.9 (0.51)	12.0 (0.47)
6	3	_T-UR-M6-M3	38.6 (1.52)	15.3 (0.60)	14.0 (0.55)	14.0 (0.55)	2.4 (0.09)	12.9 (0.51)	12.0 (0.47)
6	4	_T-UR-M6-M4	39.4 (1.55)	15.3 (0.60)	14.0 (0.55)	14.0 (0.55)	2.4 (0.09)	13.7 (0.54)	12.0 (0.47)
8	6	_T-UR-M8-M6	42.3 (1.67)	16.3 (0.64)	16.0 (0.63)	15.0 (0.59)	4.8 (0.19)	15.3 (0.60)	14.0 (0.55)
10	6	_T-UR-M10-M6	44.5 (1.75)	17.2 (0.68)	19.0 (0.75)	18.0 (0.71)	4.8 (0.19)	15.3 (0.60)	14.0 (0.55)
10	8	_T-UR-M10-M8	45.1 (1.78)	17.2 (0.68)	19.0 (0.75)	18.0 (0.71)	6.4 (0.25)	16.3 (0.64)	16.0 (0.63)
12	8	_T-UR-M12-M8	47.8 (1.88)	22.8 (0.90)	22.0 (0.87)	22.0 (0.87)	6.4 (0.25)	16.3 (0.64)	16.0 (0.63)
12	10	_T-UR-M12-M10	48.7 (1.92)	22.8 (0.90)	22.0 (0.87)	22.0 (0.87)	7.9 (0.31)	17.2 (0.68)	19.0 (0.75)
16	10	_T-UR-M16-M10	49.5 (1.95)	24.4 (0.96)	25.0 (0.98)	24.0 (0.94)	7.9 (0.31)	17.2 (0.68)	19.0 (0.75)
16	12	_T-UR-M16-M12	52.0 (2.05)	24.4 (0.96)	25.0 (0.98)	24.0 (0.94)	9.5 (0.37)	22.8 (0.90)	22.0 (0.87)
18	12	_T-UR-M18-M12	53.5 (2.11)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)	9.5 (0.37)	22.8 (0.90)	22.0 (0.87)
25	18	_T-UR-M25-M18	61.0 (2.40)	31.3 (1.23)	38.0 (1.50)	35.0 (1.38)	15.1 (0.59)	24.4 (0.96)	30.0 (1.18)
25	20	_T-UR-M25-M20	62.3 (2.45)	31.3 (1.23)	38.0 (1.50)	35.0 (1.38)	15.9 (0.63)	26.0 (1.02)	32.0 (1.26)
30	20	_T-UR-M30-M20	75.4 (2.97)	39.6 (1.56)	50.0 (1.97)	46.0 (1.81)	15.9 (0.63)	26.0 (1.02)	32.0 (1.26)
30	25	_T-UR-M30-M25	80.1 (3.15)	39.6 (1.56)	50.0 (1.97)	46.0 (1.81)	21.8 (0.86)	31.3 (1.23)	38.0 (1.50)
32	20	_T-UR-M32-M20	77.8 (3.06)	42.0 (1.65)	50.0 (1.97)	46.0 (1.81)	15.9 (0.63)	26.0 (1.02)	32.0 (1.26)
32	25	_T-UR-M32-M25	82.3 (3.24)	42.0 (1.65)	50.0 (1.97)	46.0 (1.81)	21.8 (0.86)	31.3 (1.23)	38.0 (1.50)
38	25	_T-UR-M38-M25	92.0 (3.62)	49.4 (1.94)	60.0 (2.36)	55.0 (2.17)	21.8 (0.86)	31.3 (1.23)	38.0 (1.50)
38	30	_T-UR-M38-M30	104.6 (4.12)	49.4 (1.94)	60.0 (2.36)	55.0 (2.17)	26.2 (1.03)	39.6 (1.56)	50.0 (1.97)

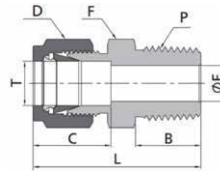
MALE CONNECTOR



Fractional Tube to NPT Thread

T - Tube O.D. (in.)	P - NPT Size	Basic Ordering Number	Dimension, in. (mm)					
			L	B	C	E	D	F
1/16	1/16	_T-MC-F1-N1	0.94 (23.9)	0.38 (9.7)	0.34 (8.6)	0.05 (1.3)	0.31 (7.9)	0.31 (7.9)
1/16	1/8	_T-MC-F1-N2	1.03 (26.2)	0.38 (9.7)	0.34 (8.6)	0.05 (1.3)	0.31 (7.9)	0.44 (11.1)
1/8	1/16	_T-MC-F2-N1	1.17 (29.7)	0.38 (9.7)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.44 (11.1)
1/8	1/8	_T-MC-F2-N2	1.20 (30.5)	0.38 (9.7)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.44 (11.1)
1/8	1/4	_T-MC-F2-N4	1.40 (35.6)	0.56 (14.2)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.56 (14.3)
3/16	1/8	_T-MC-F3-N2	1.23 (31.2)	0.38 (9.7)	0.54 (13.7)	0.12 (3.0)	0.50 (12.7)	0.44 (11.1)
3/16	1/4	_T-MC-F3-N4	1.43 (36.3)	0.56 (14.2)	0.54 (13.7)	0.12 (3.0)	0.50 (12.7)	0.56 (14.3)
1/4	1/16	_T-MC-F4-N1	1.29 (32.8)	0.38 (9.7)	0.60 (15.2)	0.12 (3.0)	0.56 (14.3)	0.50 (12.7)
1/4	1/8	_T-MC-F4-N2	1.29 (32.8)	0.38 (9.7)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.50 (12.7)
1/4	1/4	_T-MC-F4-N4	1.49 (37.8)	0.56 (14.2)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.56 (14.3)
1/4	3/8	_T-MC-F4-N6	1.51 (38.4)	0.56 (14.2)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.69 (17.5)
1/4	1/2	_T-MC-F4-N8	1.75 (44.5)	0.75 (19.1)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.87 (22.2)
5/16	1/8	_T-MC-F5-N2	1.34 (34.0)	0.38 (9.7)	0.64 (16.3)	0.19 (4.8)	0.63 (15.9)	0.56 (14.3)
5/16	1/4	_T-MC-F5-N4	1.52 (38.6)	0.38 (9.7)	0.64 (16.3)	0.25 (6.4)	0.63 (15.9)	0.56 (14.3)
5/16	3/8	_T-MC-F5-N6	1.54 (39.1)	0.56 (14.2)	0.64 (16.3)	0.25 (6.4)	0.63 (15.9)	0.69 (17.5)
5/16	1/2	_T-MC-F5-N8	1.79 (45.5)	0.75 (19.1)	0.64 (16.3)	0.25 (6.4)	0.63 (15.9)	0.87 (22.2)
3/8	1/8	_T-MC-F6-N2	1.39 (35.3)	0.38 (9.7)	0.66 (16.8)	0.19 (4.8)	0.69 (17.5)	0.63 (15.9)
3/8	1/4	_T-MC-F6-N4	1.57 (39.9)	0.56 (14.2)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.63 (15.9)
3/8	3/8	_T-MC-F6-N6	1.57 (39.9)	0.56 (14.2)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.69 (17.5)
3/8	1/2	_T-MC-F6-N8	1.82 (46.2)	0.75 (19.1)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.87 (22.2)
1/2	1/8	_T-MC-F8-N2	1.53 (38.9)	0.38 (9.7)	0.90 (22.9)	0.19 (4.8)	0.87 (22.2)	0.81 (20.6)
1/2	1/4	_T-MC-F8-N4	1.71 (43.4)	0.56 (14.2)	0.90 (22.9)	0.28 (7.1)	0.87 (22.2)	0.81 (20.6)
1/2	3/8	_T-MC-F8-N6	1.71 (43.4)	0.56 (14.2)	0.90 (22.9)	0.38 (9.7)	0.87 (22.2)	0.81 (20.6)
1/2	1/2	_T-MC-F8-N8	1.93 (49.0)	0.75 (19.1)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	0.87 (22.2)
1/2	3/4	_T-MC-F8-N12	1.99 (50.5)	0.75 (19.1)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	1.06 (27.0)
1/2	1	_T-MC-F8-N16	2.25 (57.2)	0.94 (23.9)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	1.37 (34.9)
5/8	1/4	_T-MC-F10-N4	1.74 (44.2)	0.56 (14.2)	0.96 (24.4)	0.28 (7.1)	1.00 (25.4)	0.94 (23.8)
5/8	3/8	_T-MC-F10-N6	1.74 (44.2)	0.56 (14.2)	0.96 (24.4)	0.38 (9.7)	1.00 (25.4)	0.94 (23.8)
5/8	1/2	_T-MC-F10-N8	1.93 (49.0)	0.75 (19.1)	0.96 (24.4)	0.47 (11.9)	1.00 (25.4)	0.94 (23.8)
5/8	3/4	_T-MC-F10-N12	1.99 (50.5)	0.75 (19.1)	0.96 (24.4)	0.50 (12.7)	1.00 (25.4)	1.06 (27.0)
3/4	3/8	_T-MC-F12-N6	1.99 (50.5)	0.56 (14.2)	0.96 (24.4)	0.41 (10.4)	1.13 (28.6)	1.06 (27.0)
3/4	1/2	_T-MC-F12-N8	2.25 (57.2)	0.75 (19.1)	0.96 (24.4)	0.47 (11.9)	1.13 (28.6)	1.06 (27.0)
3/4	3/4	_T-MC-F12-N12	1.99 (50.5)	0.75 (19.1)	0.96 (24.4)	0.62 (15.7)	1.13 (28.6)	1.06 (27.0)
3/4	1	_T-MC-F12-N16	2.25 (57.2)	0.94 (23.9)	0.96 (24.4)	0.62 (15.7)	1.13 (28.6)	1.37 (34.9)
7/8	1/2	_T-MC-F14-N8	2.26 (57.4)	0.75 (19.1)	1.02 (25.9)	0.47 (11.9)	1.25 (31.8)	1.19 (30.2)
7/8	3/4	_T-MC-F14-N12	2.45 (62.2)	0.75 (19.1)	1.02 (25.9)	0.62 (15.7)	1.25 (31.8)	1.19 (30.2)
7/8	1	_T-MC-F14-N16	2.45 (62.2)	0.94 (23.9)	1.02 (25.9)	0.72 (18.3)	1.25 (31.8)	1.37 (34.9)
1	1/2	_T-MC-F16-N8	3.04 (77.2)	0.75 (19.1)	1.23 (31.2)	0.47 (11.9)	1.50 (38.1)	1.37 (34.9)
1	3/4	_T-MC-F16-N12	3.04 (77.2)	0.75 (19.1)	1.23 (31.2)	0.62 (15.7)	1.50 (38.1)	1.37 (34.9)
1	1	_T-MC-F16-N16	3.50 (88.9)	0.94 (23.9)	1.23 (31.2)	0.88 (22.4)	1.50 (38.1)	1.37 (34.9)
1 1/8	1	_T-MC-F18-N16	2.45 (62.2)	0.94 (23.9)	1.23 (31.2)	0.88 (22.4)	1.81 (46.0)	1.63 (41.3)
1 1/4	1	_T-MC-F18-N16	3.04 (77.2)	0.94 (23.9)	1.62 (41.1)	0.88 (22.4)	1.87 (47.6)	1.75 (44.5)
1 1/4	1 1/4	_T-MC-F20-N20	3.04 (77.2)	0.94 (23.9)	1.62 (41.1)	1.09 (27.7)	1.87 (47.6)	1.75 (44.5)
1 1/2	1 1/2	_T-MC-F24-N24	3.50 (88.9)	1.03 (26.2)	1.97 (50.0)	1.34 (34.0)	2.25 (57.2)	2.13 (54.0)

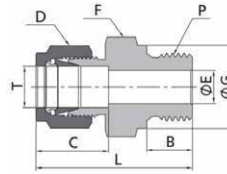
MALE CONNECTOR



Fractional Tube to RT Thread

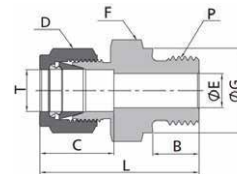
T - Tube O.D. (in.)	P-RT Size	Basic Ordering Number	Dimension, in. (mm)					
			L	B	C	E	D	F
1/8	1/8	_T-MC-F2-RT2	1.20 (30.5)	0.38 (9.7)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.44 (11.1)
1/8	1/4	_T-MC-F2-RT4	1.40 (35.6)	0.56 (14.2)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.56 (14.3)
1/4	1/8	_T-MC-F4-RT2	1.29 (32.8)	0.38 (9.7)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.50 (12.7)
1/4	1/4	_T-MC-F4-RT4	1.49 (37.8)	0.56 (14.2)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.56 (14.3)
1/4	3/8	_T-MC-F4-RT6	1.51 (38.4)	0.56 (14.2)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.69 (17.5)
1/4	1/2	_T-MC-F4-RT8	1.76 (44.7)	0.75 (19.1)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.87 (22.2)
5/16	1/8	_T-MC-F5-RT2	1.34 (34.0)	0.38 (9.7)	0.64 (16.3)	0.19 (4.8)	0.63 (15.9)	0.56 (14.3)
5/16	1/4	_T-MC-F5-RT4	1.52 (38.6)	0.56 (14.2)	0.64 (16.3)	0.25 (6.4)	0.63 (15.9)	0.56 (14.3)
3/8	1/8	_T-MC-F6-RT2	1.39 (35.3)	0.38 (9.7)	0.66 (16.8)	0.19 (4.8)	0.69 (17.5)	0.63 (15.9)
3/8	1/4	_T-MC-F6-RT4	1.57 (39.9)	0.56 (14.2)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.63 (15.9)
3/8	3/8	_T-MC-F6-RT6	1.57 (39.9)	0.56 (14.2)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.69 (17.5)
3/8	1/2	_T-MC-F6-RT8	1.82 (46.2)	0.75 (19.1)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.87 (22.2)
3/8	3/4	_T-MC-F6-RT12	1.88 (47.8)	0.75 (19.1)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	1.06 (27.0)
1/2	1/4	_T-MC-F3-RT4	1.71 (43.4)	0.56 (14.2)	0.90 (22.9)	0.28 (7.1)	0.87 (22.2)	0.81 (20.6)
1/2	3/8	_T-MC-F3-RT6	1.71 (43.4)	0.56 (14.2)	0.90 (22.9)	0.38 (9.7)	0.87 (22.2)	0.81 (20.6)
1/2	1/2	_T-MC-F3-RT8	1.93 (49.0)	0.75 (19.1)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	0.87 (22.2)
1/2	3/4	_T-MC-F3-RT12	1.99 (50.5)	0.75 (19.1)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	1.06 (27.0)
5/8	1/2	_T-MC-F10-RT8	1.93 (49.0)	0.75 (19.1)	0.96 (24.4)	0.47 (11.9)	1.00 (25.4)	0.94 (23.8)
3/4	3/4	_T-MC-F12-RT12	1.99 (50.5)	0.75 (19.1)	0.96 (24.4)	0.62 (15.7)	1.13 (28.6)	1.06 (27.0)
3/4	1	_T-MC-F12-RT16	2.25 (57.2)	0.94 (23.9)	0.96 (24.4)	0.62 (15.7)	1.13 (28.6)	1.37 (34.9)
1	3/4	_T-MC-F16-RT12	2.26 (57.4)	0.75 (19.1)	1.23 (31.2)	0.62 (15.7)	1.50 (38.1)	1.37 (34.9)
1	1	_T-MC-F16-RT16	2.45 (62.2)	0.94 (23.9)	1.23 (31.2)	0.88 (22.4)	1.50 (38.1)	1.37 (34.9)
1 1/8	1	_T-MC-F18-RT16	2.45 (62.2)	0.94 (23.9)	1.23 (31.2)	0.88 (22.4)	1.81 (46.0)	1.63 (41.3)
1 1/4	1	_T-MC-F20-RT16	3.04 (77.2)	0.94 (23.9)	1.62 (41.1)	0.88 (22.4)	1.87 (47.6)	1.75 (44.5)
1 1/4	1 1/4	_T-MC-F20-RT20	3.04 (77.2)	0.94 (23.9)	1.62 (41.1)	1.09 (27.7)	1.87 (47.6)	1.75 (44.5)
1 1/2	1 1/2	_T-MC-F24-RT24	3.50 (88.9)	1.03 (26.2)	1.97 (50.0)	1.34 (34.0)	2.25 (57.2)	2.13 (54.0)

MALE CONNECTOR



Fractional Tube to ISO Parallel Thread

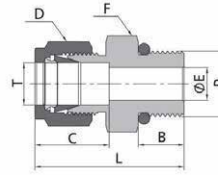
T - Tube O.D. (in.)	P-RS Size	Basic Ordering Number	Dimension, in. (mm)						
			L	B	C	E	D	F	G
1/8	1/8	_T-MC-F2-RS2	1.18 (30.0)	0.28 (7.1)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.56 (14.3)	0.54 (13.7)
1/8	1/4	_T-MC-F2-RS4	1.39 (35.3)	0.44 (11.2)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.75 (19.1)	0.71 (18.0)
1/8	3/8	_T-MC-F2-RS6	1.43 (36.3)	0.44 (11.2)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.87 (22.2)	0.86 (21.8)
1/4	1/8	_T-MC-F4-RS2	1.27 (32.3)	0.28 (7.1)	0.60 (15.2)	0.16 (4.0)	0.56 (14.3)	0.56 (14.3)	0.54 (13.7)
1/4	1/4	_T-MC-F4-RS4	1.48 (37.6)	0.44 (11.2)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.75 (19.1)	0.71 (18.0)
1/4	3/8	_T-MC-F4-RS6	1.53 (38.9)	0.44 (11.2)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.87 (22.2)	0.86 (21.8)
1/4	1/2	_T-MC-F4-RS8	1.76 (44.7)	0.56 (14.2)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	1.06 (27.0)	1.02 (25.9)
3/8	1/8	_T-MC-F6-RS2	1.49 (37.8)	0.28 (7.1)	0.66 (16.8)	0.16 (4.0)	0.69 (17.5)	0.63 (15.9)	0.54 (13.7)
3/8	1/4	_T-MC-F6-RS4	1.54 (39.1)	0.44 (11.2)	0.66 (16.8)	0.23 (5.9)	0.69 (17.5)	0.75 (19.1)	0.71 (18.0)
3/8	3/8	_T-MC-F6-RS6	1.59 (40.4)	0.44 (11.2)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.87 (22.2)	0.86 (21.8)
3/8	1/2	_T-MC-F6-RS8	1.82 (46.2)	0.56 (14.2)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	1.06 (27.0)	1.02 (25.9)
1/2	1/4	_T-MC-F8-RS4	1.68 (42.7)	0.44 (11.2)	0.90 (22.9)	0.23 (5.9)	0.87 (22.2)	0.81 (20.6)	0.71 (18.0)
1/2	3/8	_T-MC-F8-RS6	1.70 (43.2)	0.44 (11.2)	0.90 (22.9)	0.31 (7.9)	0.87 (22.2)	0.87 (22.2)	0.86 (21.8)
1/2	1/2	_T-MC-F8-RS8	1.93 (49.0)	0.56 (14.2)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	1.06 (27.0)	1.02 (25.9)
3/4	1/2	_T-MC-F12-RS8	1.93 (49.0)	0.56 (14.2)	0.96 (24.4)	0.47 (11.9)	1.13 (28.6)	1.06 (27.0)	1.02 (25.9)
3/4	3/4	_T-MC-F12-RS12	2.08 (52.9)	0.62 (15.7)	0.96 (24.4)	0.62 (15.7)	1.13 (28.6)	1.31 (33.3)	1.26 (32.0)
1	1/2	_T-MC-F16-RS8	2.19 (55.5)	0.56 (14.2)	1.23 (31.2)	0.47 (11.9)	1.50 (38.1)	1.37 (34.9)	1.02 (25.9)
1	3/4	_T-MC-F16-RS12	2.27 (57.7)	0.62 (15.7)	1.23 (31.2)	0.63 (16.0)	1.50 (38.1)	1.37 (34.9)	1.26 (32.0)
1	1	_T-MC-F16-RS16	2.36 (59.9)	0.72 (18.3)	1.23 (31.2)	0.78 (19.8)	1.50 (38.1)	1.63 (41.3)	1.54 (39.1)



Fractional Tube to ISO Parallel Thread

T - Tube O.D. (in.)	P-RS Size	Basic Ordering Number	Dimension, in. (mm)						
			L	B	C	E	D	F	G
1/8	1/8	_T-MC-F2-RP2	1.18 (30.0)	0.28 (7.1)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.56 (14.3)	0.54 (13.8)
1/8	1/4	_T-MC-F2-RP4	1.39 (35.3)	0.44 (11.2)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.75 (19.1)	0.70 (17.8)
1/4	1/8	_T-MC-F4-RP2	1.27 (32.3)	0.28 (7.1)	0.60 (15.2)	0.16 (4.1)	0.56 (14.3)	0.56 (14.3)	0.54 (13.8)
1/4	1/4	_T-MC-F4-RP4	1.48 (37.6)	0.44 (11.2)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.75 (19.1)	0.70 (17.8)
1/2	3/8	_T-MC-F8-RP6	1.59 (40.4)	0.44 (11.2)	0.90 (22.9)	0.31 (7.9)	0.87 (22.2)	0.87 (22.2)	0.86 (21.8)
1/2	1/2	_T-MC-F8-RP8	1.93 (49.0)	0.56 (14.2)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	1.06 (27.0)	1.02 (25.9)
3/4	1/2	_T-MC-F12-RP8	1.93 (49.0)	0.56 (14.2)	0.96 (24.4)	0.47 (11.9)	1.13 (28.6)	1.06 (27.0)	1.02 (25.9)
3/4	3/4	_T-MC-F12-RP12	2.08 (52.9)	0.62 (15.7)	0.96 (24.4)	0.62 (15.7)	1.13 (28.6)	1.31 (33.3)	1.26 (32.0)
1	1	_T-MC-F16-RP16	2.36 (59.9)	0.72 (18.3)	1.23 (31.2)	0.78 (19.8)	1.50 (38.1)	1.63 (41.3)	1.53 (38.8)

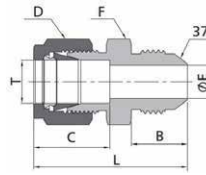
MALE CONNECTOR



Fractional Tube to SAE / MS Thread

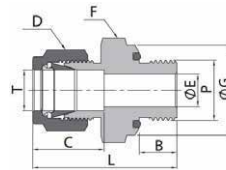
T - Tube O.D. (in.)	P-SAE/MS Size	Basic Ordering Number	Dimension, in. (mm)					
			L	B	C	E	D	F
1/16	5/16-24	_T-MC-F1-ST5	0.92 (23.4)	030 (7.6)	0.34 (8.6)	0.05 (1.3)	0.31 (7.9)	0.44 (11.1)
1/8	5/16-24	_T-MC-F2-ST5	1.18 (30.0)	030 (7.6)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.44 (11.1)
1/8	7/16-20	_T-MC-F2-ST7	1.24 (31.5)	036 (9.1)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.56 (14.3)
1/8	9/16-18	_T-MC-F2-ST9	1.31 (33.3)	039 (9.9)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.69 (17.5)
3/16	3/8-24	_T-MC-F3-ST6	1.20 (30.5)	030 (7.6)	0.54 (13.7)	0.12 (3.0)	0.50 (12.7)	0.50 (12.7)
1/4	5/16-24	_T-MC-F4-ST5	1.27 (32.3)	030 (7.6)	0.60 (15.2)	0.09 (2.3)	0.56 (14.3)	0.50 (12.7)
1/4	7/16-20	_T-MC-F4-ST7	1.34 (34.0)	036 (9.1)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.56 (14.3)
1/4	9/16-18	_T-MC-F4-ST9	1.40 (35.6)	039 (9.9)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.69 (17.5)
1/4	3/4-16	_T-MC-F4-ST12	1.48 (37.6)	0.44 (11.2)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.87 (22.2)
1/4	7/8-14	_T-MC-F4-ST14	1.60 (40.6)	0.50 (12.7)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	1.00 (25.4)
5/16	1/2-20	_T-MC-F5-ST8	1.37 (34.8)	036 (9.1)	0.64 (16.3)	0.25 (6.4)	0.63 (15.9)	0.63 (15.9)
3/8	7/16-20	_T-MC-F6-ST7	1.40 (35.6)	0.36 (9.1)	0.66 (16.8)	0.20 (5.1)	0.69 (17.5)	0.63 (15.9)
3/8	9/16-18	_T-MC-F6-ST9	1.46 (37.1)	039 (9.9)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.69 (17.5)
3/8	3/4-16	_T-MC-F6-ST12	1.54 (39.1)	0.44 (11.2)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.87 (22.2)
3/8	7/8-14	_T-MC-F6-ST14	1.66 (42.2)	0.50 (12.7)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	1.00 (25.4)
1/2	9/16-18	_T-MC-F8-ST9	1.54 (39.1)	039 (9.9)	0.90 (22.9)	0.28 (7.1)	0.87 (22.2)	0.81 (20.6)
1/2	3/4-16	_T-MC-F8-ST12	1.65 (41.9)	0.44 (11.2)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	0.87 (22.2)
1/2	7/8-14	_T-MC-F8-ST14	1.77 (45.0)	0.50 (12.7)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	1.00 (25.4)
1/2	1 1/16-12	_T-MC-F8-ST17	1.93 (49.0)	0.59 (15.0)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	1.25 (31.8)
5/8	3/4-16	_T-MC-F10-ST12	1.65 (41.9)	0.44 (11.2)	0.96 (24.4)	0.42 (10.7)	1.00 (25.4)	0.94 (23.8)
5/8	7/8-14	_T-MC-F10-ST14	1.78 (45.2)	0.50 (12.7)	0.96 (24.4)	0.50 (12.7)	1.00 (25.4)	1.00 (25.4)
3/4	3/4-16	_T-MC-F12-ST12	1.81 (46.0)	0.44 (11.2)	0.96 (24.4)	0.42 (10.7)	1.13 (28.6)	1.06 (27.0)
3/4	1 1/16-12	_T-MC-F12-ST17	1.93 (49.0)	0.59 (15.0)	0.96 (24.4)	0.62 (15.7)	1.13 (28.6)	1.25 (31.8)
3/4	1 5/16-12	_T-MC-F12-ST21	1.96 (49.8)	0.59 (15.0)	0.96 (24.4)	0.63 (16.0)	1.13 (28.6)	1.50 (38.1)
7/8	1 3/16-12	_T-MC-F14-ST19	1.93 (49.0)	0.59 (15.0)	1.02 (25.9)	0.72 (18.3)	1.25 (31.8)	1.37 (34.9)
1	1 1/16-12	_T-MC-F16-ST17	2.10 (53.3)	0.59 (15.0)	1.23 (31.2)	0.54 (13.8)	1.50 (38.1)	1.37 (34.9)
1	1 5/16-12	_T-MC-F16-ST21	2.14 (54.4)	0.59 (15.0)	1.23 (31.2)	0.88 (22.4)	1.50 (38.1)	1.50 (38.1)
1 1/4	1 5/8-12	_T-MC-F20-ST26	2.69 (68.3)	0.59 (15.0)	1.62 (41.1)	1.09 (27.7)	1.87 (47.6)	1.87 (47.6)
1 1/2	1 7/8-12	_T-MC-F24-ST30	3.06 (77.7)	0.59 (15.0)	1.97 (50.0)	1.34 (34.0)	2.25 (57.2)	2.13 (54.0)

MALE CONNECTOR



Fractional Tube to 37° Flared

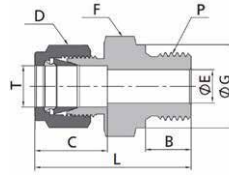
T - Tube O.D. (in.)	Flared Size	Basic Ordering Number	Dimension, in. (mm)					
			L	B	C	E	D	F
1/16	1/8	_T-MC-F1-AN2	1.07 (27.2)	0.45 (11.4)	0.34 (8.6)	0.05 (1.3)	0.31 (7.9)	0.44 (11.1)
1/8	1/8	_T-MC-F2-AN2	1.27 (32.3)	0.45 (11.4)	0.50 (12.7)	0.06 (1.5)	0.44 (11.1)	0.44 (11.1)
1/8	1/4	_T-MC-F2-AN4	1.38 (35.1)	0.55 (14.0)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.50 (12.7)
3/16	3/16	_T-MC-F3-AN3	1.32 (33.5)	0.48 (12.2)	0.54 (13.7)	0.09 (2.3)	0.50 (12.7)	0.44 (11.1)
1/4	1/4	_T-MC-F4-AN4	1.48 (37.6)	0.55 (14.0)	0.60 (15.2)	0.17 (4.3)	0.56 (14.3)	0.50 (12.7)
5/16	5/16	_T-MC-F5-AN5	1.51 (38.4)	0.55 (14.0)	0.64 (16.2)	0.23 (5.8)	0.63 (15.9)	0.56 (14.3)
3/8	1/4	_T-MC-F6-AN4	1.56 (39.6)	0.55 (14.0)	0.66 (16.8)	0.17 (4.3)	0.69 (17.5)	0.63 (15.9)
3/8	3/8	_T-MC-F6-AN6	1.56 (39.6)	0.56 (14.1)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.63 (15.9)
1/2	1/2	_T-MC-F8-AN8	1.81 (46.0)	0.66 (16.7)	0.90 (22.8)	0.39 (9.9)	0.87 (22.2)	0.81 (20.6)
5/8	5/8	_T-MC-F10-AN10	1.93 (49.0)	0.76 (19.3)	0.96 (24.5)	0.48 (12.3)	1.00 (25.4)	0.94 (23.8)
3/4	3/4	_T-MC-F12-AN12	2.10 (53.3)	0.86 (21.9)	0.96 (24.4)	0.61 (15.5)	1.13 (28.6)	1.13 (28.6)
1	1	_T-MC-F16-AN16	2.42 (61.5)	0.91 (23.1)	1.23 (31.2)	0.84 (21.3)	1.50 (38.1)	1.37 (34.9)



Fractional Tube to SAE / MS Thread

T - Tube O.D. (in.)	P-SAE/MS Size	Basic Ordering Number	Dimension, in. (mm)						
			L	B	C	E	D	F	G
1/16	5/16-24	_T-MC-F1-OS5	1.05 (26.7)	0.34 (8.6)	0.34 (8.6)	0.05 (1.3)	0.31 (7.9)	0.56 (14.3)	0.55 (14.0)
1/8	5/16-24	_T-MC-F2-OS5	1.29 (32.8)	0.34 (8.6)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.56 (14.3)	0.55 (14.0)
3/16	3/8-24	_T-MC-F3-OS6	1.35 (34.3)	0.38 (9.7)	0.54 (13.7)	0.12 (3.0)	0.50 (12.7)	0.63 (15.9)	0.62 (15.7)
1/4	7/16-20	_T-MC-F4-OS7	1.51 (38.4)	0.41 (10.4)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.75 (19.1)	0.74 (18.8)
5/16	1/2-20	_T-MC-F5-OS8	1.60 (40.6)	0.44 (11.2)	0.64 (16.3)	0.25 (6.4)	0.63 (15.9)	0.87 (22.2)	0.86 (21.8)
3/8	9/16-18	_T-MC-F6-OS9	1.67 (42.4)	0.47 (11.9)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.94 (23.8)	0.93 (23.6)
1/2	3/4-16	_T-MC-F8-OS12	1.81 (46.0)	0.47 (11.9)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	1.13 (28.6)	1.12 (28.4)
3/4	1 1/16-12	_T-MC-F12-OS17	2.06 (52.3)	0.56 (14.2)	0.96 (24.4)	0.62 (15.7)	1.13 (28.6)	1.50 (38.1)	1.49 (37.8)
1	1 5/16-12	_T-MC-F16-OS21	2.29 (58.2)	0.56 (14.2)	1.23 (31.2)	0.88 (22.4)	1.50 (38.1)	1.75 (44.5)	1.74 (44.2)

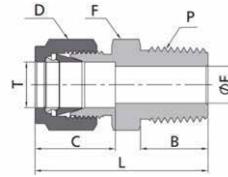
MALE CONNECTOR



Fractional Tube to Metric Thread

T - Tube O.D. (in.)	P-Metric Size	Basic Ordering Number	Dimension, in. (mm)						
			L	B	C	E	D	F	G
1/8	M14x 1.5	_T-MC-F2-MS14	1.44 (36.7)	0.47 (12.0)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.75 (19.1)	0.75 (19.0)
1/8	M16x 1.5	_T-MC-F2-MS16	1.48 (37.5)	0.47 (12.0)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.87 (22.2)	0.83 (21.0)
1/8	M18x 1.5	_T-MC-F2-MS18	1.52 (38.5)	0.47 (12.0)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.94 (23.8)	0.91 (23.0)
1/8	M20x 1.5	_T-MC-F2-MS20	1.62 (41.1)	0.55 (14.0)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	1.00 (25.4)	0.98 (25.0)
1/4	M14x 1.5	_T-MC-F4-MS14	1.50 (38.0)	0.47 (12.0)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.75 (19.1)	0.75 (19.0)
1/4	M16x 1.5	_T-MC-F4-MS16	1.57 (39.9)	0.47 (12.0)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.87 (22.2)	0.83 (21.0)
1/4	M18x 1.5	_T-MC-F4-MS18	1.61 (40.8)	0.47 (12.0)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.94 (23.8)	0.91 (23.0)
1/4	M20x 1.5	_T-MC-F4-MS20	1.72 (43.6)	0.55 (14.0)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	1.00 (25.4)	0.98 (25.0)
3/8	M14x 1.5	_T-MC-F6-MS14	1.63 (41.3)	0.47 (12.0)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.75 (19.1)	0.75 (19.0)
3/8	M16x 1.5	_T-MC-F6-MS16	1.63 (41.3)	0.47 (12.0)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.87 (22.2)	0.83 (21.0)
3/8	M18x 1.5	_T-MC-F6-MS18	1.65 (41.8)	0.47 (12.0)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.94 (23.8)	0.91 (23.0)
3/8	M20x 1.5	_T-MC-F6-MS20	1.78 (45.1)	0.55 (14.0)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	1.00 (25.4)	0.98 (25.0)
1/2	M16x 1.5	_T-MC-F8-MS16	1.73 (44.0)	0.47 (12.0)	0.90 (22.8)	0.35 (9.0)	0.87 (22.2)	0.87 (22.2)	0.83 (21.0)
1/2	M18x 1.5	_T-MC-F8-MS18	1.73 (44.0)	0.47 (12.0)	0.90 (22.9)	0.39 (10.0)	0.87 (22.2)	0.94 (23.8)	0.91 (23.0)
1/2	M20x 1.5	_T-MC-F8-MS20	1.89 (47.9)	0.55 (14.0)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	1.00 (25.4)	0.98 (25.0)
1/2	M22x 1.5	_T-MC-F8-MS22	1.91 (48.5)	0.55 (14.0)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	1.06 (27.0)	1.06 (27.0)

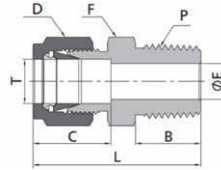
MALE CONNECTOR



Metric Tube to NPT Thread

T - Tube O.D. (mm)	P - NPT Size	Basic Ordering Number	Dimension, mm (in.)					
			L	B	C	E	D	F
2	1/8	_T-MC-M2-N2	30.5 (1.20)	9.7 (0.38)	12.9 (0.51)	1.7 (0.07)	12.0 (0.47)	12.0 (0.47)
3	1/8	_T-MC-M3-N2	30.5 (1.20)	9.7 (0.38)	12.9 (0.51)	2.4 (0.09)	12.0 (0.47)	12.0 (0.47)
3	1/4	_T-MC-M3-N4	35.6 (1.40)	14.2 (0.56)	12.9 (0.51)	2.4 (0.09)	12.0 (0.47)	14.0 (0.55)
4	1/8	_T-MC-M4-N2	31.2 (1.23)	9.7 (0.38)	13.7 (0.54)	2.4 (0.09)	12.0 (0.47)	12.0 (0.47)
4	1/4	_T-MC-M4-N4	36.3 (1.43)	14.2 (0.56)	13.7 (0.54)	2.4 (0.09)	12.0 (0.47)	14.0 (0.55)
6	1/8	_T-MC-M6-N2	32.8 (1.29)	9.7 (0.38)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	14.0 (0.55)
6	1/4	_T-MC-M6-N4	37.9 (1.49)	14.2 (0.56)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	14.0 (0.55)
6	3/8	_T-MC-M6-N6	38.4 (1.51)	14.2 (0.56)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	18.0 (0.71)
8	1/8	_T-MC-M8-N2	34.2 (1.35)	9.7 (0.38)	16.2 (0.64)	4.8 (0.19)	16.0 (0.63)	15.0 (0.59)
8	1/4	_T-MC-M8-N4	38.7 (1.52)	14.2 (0.56)	16.2 (0.64)	6.4 (0.25)	16.0 (0.63)	15.0 (0.59)
8	3/8	_T-MC-M8-N6	39.3 (1.55)	14.2 (0.56)	16.2 (0.64)	6.4 (0.25)	16.0 (0.63)	18.0 (0.71)
10	1/4	_T-MC-M10-N4	40.9 (1.61)	14.2 (0.56)	17.2 (0.68)	7.1 (0.28)	19.0 (0.75)	18.0 (0.71)
10	3/8	_T-MC-M10-N6	40.9 (1.61)	14.2 (0.56)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	18.0 (0.71)
10	1/2	_T-MC-M10-N8	46.5 (1.83)	19.1 (0.75)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	22.0 (0.87)
12	1/4	_T-MC-M12-N4	43.4 (1.71)	14.2 (0.56)	22.8 (0.90)	7.1 (0.28)	22.0 (0.87)	22.0 (0.87)
12	3/8	_T-MC-M12-N6	43.4 (1.71)	14.2 (0.56)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	22.0 (0.87)
12	1/2	_T-MC-M12-N8	49.0 (1.93)	19.1 (0.75)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	22.0 (0.87)
12	3/4	_T-MC-M12-N12	50.5 (1.99)	19.1 (0.75)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	27.0 (1.06)
14	1/8	_T-MC-M14-N2	38.8 (1.53)	9.7 (0.38)	24.4 (0.96)	4.8 (0.19)	25.0 (0.98)	24.0 (0.94)
14	1/4	_T-MC-M14-N4	44.1 (1.74)	14.2 (0.56)	24.4 (0.96)	7.1 (0.28)	25.0 (0.98)	24.0 (0.94)
14	3/8	_T-MC-M14-N6	44.1 (1.74)	14.2 (0.56)	24.4 (0.96)	9.5 (0.37)	25.0 (0.98)	24.0 (0.94)
14	1/2	_T-MC-M14-N8	49.0 (1.93)	19.1 (0.75)	24.4 (0.96)	11.1 (0.44)	25.0 (0.98)	24.0 (0.94)
14	3/4	_T-MC-M14-N12	50.5 (1.99)	19.1 (0.75)	24.4 (0.96)	11.1 (0.44)	25.0 (0.98)	27.0 (1.06)
15	1/2	_T-MC-M15-N8	49.0 (1.93)	19.1 (0.75)	24.4 (0.96)	11.9 (0.47)	25.0 (0.98)	24.0 (0.94)
15	3/4	_T-MC-M15-N12	50.5 (1.99)	19.1 (0.75)	24.4 (0.96)	11.9 (0.47)	25.0 (0.98)	27.0 (1.06)
16	1/4	_T-MC-M16-N4	44.1 (1.74)	14.2 (0.56)	24.4 (0.96)	7.1 (0.28)	25.0 (0.98)	24.0 (0.94)
16	3/8	_T-MC-M16-N6	44.1 (1.74)	14.2 (0.56)	24.4 (0.96)	9.5 (0.37)	25.0 (0.98)	24.0 (0.94)
16	1/2	_T-MC-M16-N8	49.0 (1.93)	19.1 (0.75)	24.4 (0.96)	11.9 (0.47)	25.0 (0.98)	24.0 (0.94)
16	3/4	_T-MC-M16-N12	50.5 (1.99)	19.1 (0.75)	24.4 (0.96)	12.7 (0.5)	25.0 (0.98)	27.0 (1.06)
18	3/8	_T-MC-M18-N6	45.6 (1.80)	14.2 (0.56)	24.4 (0.96)	9.5 (0.37)	30.0 (1.18)	27.0 (1.06)
18	1/2	_T-MC-M18-N8	50.5 (1.99)	19.1 (0.75)	24.4 (0.96)	11.9 (0.47)	30.0 (1.18)	27.0 (1.06)
18	3/4	_T-MC-M18-N12	50.5 (1.99)	19.1 (0.75)	24.4 (0.96)	15.1 (0.59)	30.0 (1.18)	27.0 (1.06)
20	1/2	_T-MC-M20-N8	52.3 (2.06)	19.1 (0.75)	26.0 (1.02)	11.9 (0.47)	32.0 (1.26)	30.0 (1.18)
20	3/4	_T-MC-M20-N12	52.3 (2.06)	19.1 (0.75)	26.0 (1.02)	15.9 (0.63)	32.0 (1.26)	30.0 (1.18)
20	1	_T-MC-M20-N16	57.1 (2.25)	23.9 (0.94)	26.0 (1.02)	15.9 (0.63)	32.0 (1.26)	35.0 (1.38)
22	1/2	_T-MC-M22-N8	52.3 (2.06)	19.1 (0.75)	26.0 (1.02)	11.9 (0.47)	32.0 (1.26)	30.0 (1.18)
22	3/4	_T-MC-M22-N12	52.3 (2.06)	19.1 (0.75)	26.0 (1.02)	15.9 (0.63)	32.0 (1.26)	30.0 (1.18)
22	1	_T-MC-M22-N16	57.1 (2.25)	23.9 (0.94)	26.0 (1.02)	18.3 (0.72)	32.0 (1.26)	35.0 (1.38)
25	1/2	_T-MC-M25-N8	57.5 (2.26)	19.1 (0.75)	31.3 (1.23)	11.9 (0.47)	38.0 (1.50)	35.0 (1.38)
25	3/4	_T-MC-M25-N12	57.5 (2.26)	19.1 (0.75)	31.3 (1.23)	15.9 (0.63)	38.0 (1.50)	35.0 (1.38)
25	1	_T-MC-M25-N16	62.3 (2.45)	23.9 (0.94)	31.3 (1.23)	21.8 (0.86)	38.0 (1.50)	35.0 (1.38)
28	1	_T-MC-M28-N16	72.4 (2.85)	23.9 (0.94)	36.6 (1.44)	21.8 (0.86)	46.0 (1.81)	41.0 (1.61)
28	1 1/4	_T-MC-M28-N20	73.1 (2.88)	23.9 (0.94)	36.6 (1.44)	21.8 (0.86)	46.0 (1.81)	46.0 (1.81)
30	1 1/4	_T-MC-M30-N20	77.2 (3.04)	23.9 (0.94)	39.6 (1.56)	26.2 (1.03)	50.0 (1.97)	46.0 (1.81)
32	1 1/4	_T-MC-M32-N20	79.6 (3.13)	23.9 (0.94)	42.0 (1.65)	28.6 (1.13)	50.0 (1.97)	46.0 (1.81)
38	1 1/2	_T-MC-M38-N24	91.6 (3.61)	26.2 (1.03)	49.4 (1.94)	33.7 (1.33)	60.0 (2.36)	55.0 (2.17)

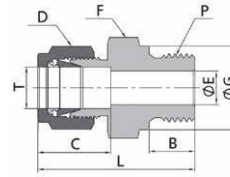
MALE CONNECTOR



Metric Tube to RT Thread

T - Tube O.D. (mm)	P - NPT Size	Basic Ordering Number	Dimension, mm (in.)					
			L	B	C	E	D	F
2	1/8	_T-MC-M2-RT2	30.5 (1.20)	9.7 (0.38)	12.9 (0.51)	1.7 (0.07)	12.0 (0.47)	12.0 (0.47)
3	1/8	_T-MC-M3-RT2	30.5 (1.20)	9.7 (0.38)	12.9 (0.51)	2.4 (0.09)	12.0 (0.47)	12.0 (0.47)
3	1/4	_T-MC-M3-RT4	35.6 (1.40)	14.2 (0.56)	12.9 (0.51)	2.4 (0.09)	12.0 (0.47)	14.0 (0.55)
4	1/8	_T-MC-M4-RT2	31.2 (1.23)	9.7 (0.38)	13.7 (0.54)	2.4 (0.09)	12.0 (0.47)	12.0 (0.47)
4	1/4	_T-MC-M4-RT4	36.3 (1.43)	14.2 (0.56)	13.7 (0.54)	2.4 (0.09)	12.0 (0.47)	14.0 (0.55)
6	1/8	_T-MC-M6-R72	32.8 (1.29)	9.7 (0.38)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	14.0 (0.55)
6	1/4	_T-MC-M6-RT4	37.9 (1.49)	14.2 (0.56)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	14.0 (0.55)
6	3/8	_T-MC-M6-RT6	38.4 (1.51)	14.2 (0.56)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	18.0 (0.71)
8	1/8	_T-MC-M8-RT2	34.2 (1.35)	9.7 (0.38)	16.2 (0.64)	4.8 (0.19)	16.0 (0.63)	15.0 (0.59)
8	1/4	_T-MC-M8-RT4	38.7 (1.52)	14.2 (0.56)	16.2 (0.64)	6.4 (0.25)	16.0 (0.63)	15.0 (0.59)
8	3/8	_T-MC-M8-RT6	39.2 (1.54)	14.2 (0.56)	16.2 (0.64)	6.4 (0.25)	16.0 (0.63)	18.0 (0.71)
10	1/4	_T-MC-M10-RT4	40.9 (1.61)	14.2 (0.56)	17.2 (0.68)	7.1 (0.28)	19.0 (0.75)	18.0 (0.71)
10	3/8	_T-MC-M10-RT6	40.9 (1.61)	14.2 (0.56)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	18.0 (0.71)
10	1/2	_T-MC-M10-RT8	46.5 (1.83)	19.1 (0.75)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	22.0 (0.87)
12	1/4	_T-MC-M12-RT4	43.4 (1.71)	14.2 (0.56)	22.8 (0.90)	7.1 (0.28)	22.0 (0.87)	22.0 (0.87)
12	3/8	_T-MC-M12-RT6	43.4 (1.71)	14.2 (0.56)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	22.0 (0.87)
12	1/2	_T-MC-M12-RT8	49.0 (1.93)	19.1 (0.75)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	22.0 (0.87)
12	3/4	_T-MC-M12-RT12	50.5 (1.99)	19.1 (0.75)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	27.0 (1.06)
14	1/4	_T-MC-M14-RT4	44.1 (1.74)	14.2 (0.56)	22.4 (0.88)	7.1 (0.28)	25.0 (0.98)	24.0 (0.94)
14	3/8	_T-MC-M14-RT6	44.1 (1.74)	14.2 (0.56)	22.4 (0.88)	7.9 (0.31)	25.0 (0.98)	24.0 (0.94)
14	1/2	_T-MC-M14-RT8	49.0 (1.93)	19.1 (0.75)	22.4 (0.88)	11.1 (0.44)	25.0 (0.98)	24.0 (0.94)
14	3/4	_T-MC-M14-RT12	50.5 (1.99)	19.1 (0.75)	22.4 (0.88)	11.1 (0.44)	25.0 (0.98)	27.0 (1.06)
15	1/2	_T-MC-M15-RT8	49.0 (1.93)	19.1 (0.75)	22.4 (0.88)	11.9 (0.47)	25.0 (0.98)	24.0 (0.94)
16	1/4	_T-MC-M16-RT4	44.1 (1.74)	14.2 (0.56)	22.4 (0.88)	7.1 (0.28)	25.0 (0.98)	24.0 (0.94)
16	3/8	_T-MC-M16-RT6	44.1 (1.74)	14.2 (0.56)	22.4 (0.88)	9.5 (0.37)	25.0 (0.98)	24.0 (0.94)
16	1/2	_T-MC-M16-RT8	49.0 (1.93)	19.1 (0.75)	22.4 (0.88)	11.9 (0.47)	25.0 (0.98)	24.0 (0.94)
16	3/4	_T-MC-M16-RT12	50.5 (1.99)	19.1 (0.75)	22.4 (0.88)	12.7 (0.5)	25.0 (0.98)	27.0 (1.06)
18	1/2	_T-MC-M18-RT8	50.5 (1.99)	19.1 (0.75)	22.4 (0.88)	11.9 (0.47)	30.0 (1.18)	27.0 (1.06)
18	3/4	_T-MC-M18-RT12	50.5 (1.99)	19.1 (0.75)	22.4 (0.88)	15.1 (0.59)	30.0 (1.18)	27.0 (1.06)
20	1/2	_T-MC-M20-RT8	52.3 (2.06)	19.1 (0.75)	26.0 (1.02)	11.9 (0.47)	32.0 (1.26)	30.0 (1.18)
20	3/4	_T-MC-M20-RT12	52.3 (2.06)	19.1 (0.75)	26.0 (1.02)	15.9 (0.63)	32.0 (1.26)	30.0 (1.18)
22	3/4	_T-MC-M22-RT12	52.3 (2.06)	19.1 (0.75)	26.0 (1.02)	15.9 (0.63)	32.0 (1.26)	30.0 (1.18)
22	1	_T-MC-M22-RT16	57.1 (2.25)	23.9 (0.94)	26.0 (1.02)	18.3 (0.72)	32.0 (1.26)	35.0 (1.38)
25	1/2	_T-MC-M25-RT8	57.5 (2.26)	19.1 (0.75)	31.3 (1.23)	11.9 (0.47)	38.0 (1.50)	35.0 (1.38)
25	3/4	_T-MC-M25-RT12	57.5 (2.26)	19.1 (0.75)	31.3 (1.23)	15.9 (0.63)	38.0 (1.50)	35.0 (1.38)
25	1	_T-MC-M25-RT16	62.3 (2.45)	23.9 (0.94)	31.3 (1.23)	21.8 (0.86)	38.0 (1.50)	35.0 (1.38)
28	1	_T-MC-M28-RT16	72.4 (2.85)	23.9 (0.94)	36.6 (1.44)	21.8 (0.86)	46.0 (1.81)	41.0 (1.61)
28	1 1/4	_T-MC-M28-RT20	73.1 (2.88)	23.9 (0.94)	36.6 (1.44)	21.8 (0.86)	46.0 (1.81)	46.0 (1.81)
30	1 1/4	_T-MC-M30-RT20	77.2 (3.04)	23.9 (0.94)	39.6 (1.56)	26.2 (1.03)	50.0 (1.97)	46.0 (1.81)
32	1 1/4	_T-MC-M32-RT20	79.6 (3.13)	23.9 (0.94)	42.0 (1.65)	28.6 (1.13)	50.0 (1.97)	46.0 (1.81)
38	1 1/2	_T-MC-M38-RT24	91.6 (3.61)	26.2 (1.03)	49.4 (1.94)	33.7 (1.33)	60.0 (2.36)	55.0 (2.17)

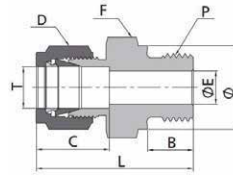
MALE CONNECTOR



Metric Tube to ISO Parallel Thread

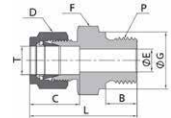
T - Tube O.D. (mm)	P - RS Size	Basic Ordering Number	Dimension, mm (in.)						
			L	B	C	E	D	F	G
2	1/8	_T-MC-M2-RS2	30.0 (1.18)	7.1 (0.28)	12.9 (0.51)	1.7 (0.07)	12.0 (0.47)	14.0 (0.55)	13.7 (0.54)
3	1/8	_T-MC-M3-RS2	30.0 (1.18)	7.1 (0.28)	12.9 (0.51)	2.4 (0.09)	12.0 (0.47)	14.0 (0.55)	13.7 (0.54)
3	1/4	_T-MC-M3-RS4	35.3 (1.39)	11.2 (0.44)	12.9 (0.51)	2.4 (0.09)	12.0 (0.47)	19.0 (0.75)	18.0 (0.71)
4	1/8	_T-MC-M4-RS2	30.7 (1.21)	7.1 (0.28)	13.7 (0.54)	2.4 (0.09)	12.0 (0.47)	14.0 (0.55)	13.7 (0.54)
4	1/4	_T-MC-M4-RS4	36.0 (1.42)	11.2 (0.44)	13.7 (0.54)	2.4 (0.09)	12.0 (0.47)	19.0 (0.75)	18.0 (0.71)
6	1/8	_T-MC-M6-RS2	32.3 (1.27)	7.1 (0.28)	15.3 (0.60)	4.0 (0.16)	14.0 (0.55)	14.0 (0.55)	13.7 (0.54)
6	1/4	_T-MC-M6-RS4	37.6 (1.48)	11.2 (0.44)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	19.0 (0.75)	18.0 (0.71)
6	3/8	_T-MC-M6-RS6	38.9 (1.53)	11.2 (0.44)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	22.0 (0.87)	21.6 (0.85)
8	1/8	_T-MC-M8-RS2	33.2 (1.31)	7.1 (0.28)	16.2 (0.64)	4.0 (0.16)	16.0 (0.63)	15.0 (0.59)	14.5 (0.57)
8	1/4	_T-MC-M8-RS4	38.5 (1.52)	11.2 (0.44)	16.2 (0.64)	6.4 (0.25)	16.0 (0.63)	19.0 (0.75)	18.0 (0.71)
8	3/8	_T-MC-M8-RS6	39.8 (1.57)	11.2 (0.44)	16.2 (0.64)	6.4 (0.25)	16.0 (0.63)	22.0 (0.87)	21.6 (0.85)
10	1/4	_T-MC-M10-RS4	39.4 (1.55)	11.2 (0.44)	17.2 (0.68)	5.9 (0.23)	19.0 (0.75)	19.0 (0.75)	18.0 (0.71)
10	3/8	_T-MC-M10-RS6	40.6 (1.60)	11.2 (0.44)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	22.0 (0.87)	21.6 (0.85)
10	1/2	_T-MC-M10-RS8	46.5 (1.83)	14.2 (0.56)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	27.0 (1.06)	25.9 (1.02)
12	1/4	_T-MC-M12-RS4	42.6 (1.68)	11.2 (0.44)	22.8 (0.90)	5.9 (0.23)	22.0 (0.87)	22.0 (0.87)	21.6 (0.85)
12	3/8	_T-MC-M12-RS6	43.1 (1.70)	11.2 (0.44)	22.8 (0.90)	7.9 (0.31)	22.0 (0.87)	22.0 (0.87)	21.6 (0.85)
12	1/2	_T-MC-M12-RS8	49.0 (1.93)	14.2 (0.56)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	27.0 (1.06)	25.9 (1.02)
12	3/4	_T-MC-M12-RS12	52.8 (2.08)	15.7 (0.62)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	35.0 (1.38)	32.0 (1.26)
14	3/8	_T-MC-M14-RS6	43.9 (1.73)	11.2 (0.44)	24.4 (0.96)	7.9 (0.31)	25.0 (0.98)	24.0 (0.94)	21.6 (0.85)
14	1/2	_T-MC-M14-RS8	49.0 (1.93)	14.2 (0.56)	24.4 (0.96)	11.1 (0.44)	25.0 (0.98)	27.0 (1.06)	25.9 (1.02)
14	3/4	_T-MC-M14-RS12	52.8 (2.08)	15.7 (0.62)	24.4 (0.96)	11.1 (0.44)	25.0 (0.98)	35.0 (1.38)	32.0 (1.26)
15	3/8	_T-MC-M15-RS6	43.9 (1.73)	11.2 (0.44)	24.4 (0.96)	7.9 (0.31)	25.0 (0.98)	24.0 (0.94)	21.6 (0.85)
15	1/2	_T-MC-M15-RS8	49.0 (1.93)	14.2 (0.56)	24.4 (0.96)	11.9 (0.47)	25.0 (0.98)	27.0 (1.06)	25.9 (1.02)
15	3/4	_T-MC-M15-RS12	52.8 (2.08)	15.7 (0.62)	24.4 (0.96)	11.9 (0.47)	25.0 (0.98)	35.0 (1.38)	32.0 (1.26)
16	3/8	_T-MC-M16-RS6	43.9 (1.73)	11.2 (0.44)	24.4 (0.96)	7.9 (0.31)	25.0 (0.98)	24.0 (0.94)	21.6 (0.85)
16	1/2	_T-MC-M16-RS8	49.0 (1.93)	14.2 (0.56)	24.4 (0.96)	11.9 (0.47)	25.0 (0.98)	27.0 (1.06)	25.9 (1.02)
18	1/2	_T-MC-M18-RS8	49.0 (1.93)	14.2 (0.56)	24.4 (0.96)	11.9 (0.47)	30.0 (1.18)	27.0 (1.06)	25.9 (1.02)
18	3/4	_T-MC-M18-RS12	52.8 (2.08)	15.7 (0.62)	24.4 (0.96)	15.1 (0.59)	30.0 (1.18)	35.0 (1.38)	32.0 (1.26)
20	1/2	_T-MC-M20-RS8	50.5 (1.99)	14.2 (0.56)	26.0 (1.02)	11.9 (0.47)	32.0 (1.26)	30.0 (1.18)	25.9 (1.02)
20	3/4	_T-MC-M20-RS12	52.8 (2.08)	15.7 (0.62)	26.0 (1.02)	15.9 (0.63)	32.0 (1.26)	35.0 (1.38)	32.0 (1.26)
22	3/4	_T-MC-M22-RS12	52.8 (2.08)	15.7 (0.62)	26.0 (1.02)	15.9 (0.63)	32.0 (1.26)	35.0 (1.38)	32.0 (1.26)
22	1	_T-MC-M22-RS16	55.3 (2.18)	18.3 (0.72)	26.0 (1.02)	18.3 (0.72)	32.0 (1.26)	41.0 (1.61)	39.1 (1.54)
25	3/4	_T-MC-M25-RS12	57.5 (2.26)	15.7 (0.62)	31.3 (1.23)	15.9 (0.63)	38.0 (1.50)	35.0 (1.38)	32.0 (1.26)
25	1	_T-MC-M25-RS16	60.1 (2.37)	18.3 (0.72)	31.3 (1.23)	19.8 (0.78)	38.0 (1.50)	41.0 (1.61)	39.1 (1.54)
28	1	_T-MC-M28-RS16	70.1 (2.76)	18.3 (0.72)	36.6 (1.44)	19.8 (0.78)	46.0 (1.81)	41.0 (1.61)	39.1 (1.54)
28	1 1/4	_T-MC-M28-RS20	73.9 (2.91)	19.8 (0.78)	36.6 (1.44)	21.8 (0.86)	46.0 (1.81)	50.0 (1.97)	49.0 (1.93)
30	1 1/4	_T-MC-M30-RS20	76.5 (3.01)	19.8 (0.78)	39.6 (1.56)	25.0 (0.98)	50.0 (1.97)	50.0 (1.97)	49.0 (1.93)
32	1 1/4	_T-MC-M32-RS20	78.9 (3.11)	19.8 (0.78)	42.0 (1.65)	25.0 (0.98)	50.0 (1.97)	50.0 (1.97)	49.0 (1.93)
38	1 1/2	_T-MC-M38-RS24	90.8 (3.57)	22.1 (0.87)	49.4 (1.94)	31.8 (1.25)	60.0 (2.36)	55.0 (2.17)	54.7 (2.15)

MALE CONNECTOR



Metric Tube to ISO Parallel Thread

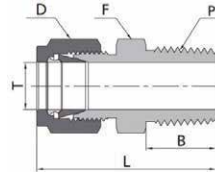
T - Tube O.D. (mm)	P-RP Size	Basic Ordering Number	Dimension, mm (in.)						
			L	B	C	E	D	F	G
3	1/8	_T-MC-M3-RP2	30.0(1.18)	7.1 (0.28)	12.9 (0.51)	2.4 (0.09)	12.0 (0.47)	14.0 (0.55)	13.8 (0.54)
4	1/8	_T-MC-M4-RP2	30.7(1.21)	7.1 (0.28)	13.7 (0.54)	2.4 (0.09)	12.0 (0.47)	14.0 (0.55)	13.8 (0.54)
6	1/4	_T-MC-M6-RP4	37.6(1.48)	11.2 (0.44)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	19.0 (0.75)	18.0 (0.71)
8	1/4	_T-MC-M8-RP4	38.5(1.52)	11.2 (0.44)	16.2 (0.64)	5.9 (0.23)	16.0 (0.63)	19.0 (0.75)	18.0 (0.71)
10	3/8	_T-MC-M10-RP6	40.6(1.60)	11.2 (0.44)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	22.0 (0.87)	21.8 (0.86)
12	3/8	_T-MC-M12-RP6	43.1(1.70)	11.2 (0.44)	22.8 (0.90)	7.9 (0.31)	22.0 (0.87)	22.0 (0.87)	21.8 (0.86)
12	1/2	_T-MC-M12-RP8	49.0(1.93)	14.2 (0.56)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	27.0 (1.06)	26.0 (1.02)
15	1/2	_T-MC-M15-RP8	49.0(1.93)	14.2 (0.56)	24.4 (0.96)	11.9 (0.47)	25.0 (0.98)	27.0 (1.06)	26.0 (1.02)
16	1/2	_T-MC-M16-RP8	49.0(1.93)	14.2 (0.56)	24.4 (0.96)	11.9 (0.47)	25.0 (0.98)	27.0 (1.06)	26.0 (1.02)
18	1/2	_T-MC-M18-RP8	49.0(1.93)	14.2 (0.56)	24.4 (0.96)	11.9 (0.47)	30.0 (1.18)	27.0 (1.06)	26.0 (1.02)
20	3/4	_T-MC-M20-RP12	52.8(2.08)	15.7 (0.62)	26.0 (1.02)	15.9 (0.63)	32.0 (1.26)	35.0 (1.38)	32.0 (1.26)
22	3/4	_T-MC-M22-RP12	52.8(2.08)	15.7 (0.62)	26.0 (1.02)	15.9 (0.63)	32.0 (1.26)	35.0 (1.38)	32.0 (1.26)
25	1	_T-MC-M25-RP16	60.1(2.37)	18.3 (0.72)	31.3 (1.23)	19.8 (0.78)	38.0 (1.50)	41.0 (1.61)	39.0 (1.54)
28	1	_T-MC-M28-RP16	70.1(2.76)	18.3 (0.72)	36.6 (1.44)	19.8 (0.78)	46.0 (1.81)	41.0 (1.61)	39.0 (1.54)
28	1 1/4	_T-MC-M28-RP20	73.9(2.91)	19.8 (0.78)	36.6 (1.44)	21.8 (0.86)	46.0 (1.81)	50.0 (1.97)	49.0 (1.93)
30	1 1/4	_T-MC-M30-RP20	76.5(3.01)	19.8 (0.78)	39.6 (1.56)	26.2 (1.03)	50.0 (1.97)	50.0 (1.97)	49.0 (1.93)
32	1 1/4	_T-MC-M32-RP20	78.9(3.11)	19.8 (0.78)	42.0 (1.65)	28.6 (1.13)	50.0 (1.97)	50.0 (1.97)	49.0 (1.93)
38	1 1/2	_T-MC-M38-RP24	89.3(3.52)	20.6 (0.81)	49.4 (1.94)	31.8 (1.25)	60.0 (2.36)	55.0 (2.17)	54.7 (2.15)



Metric Tube to Metric Thread

T - Tube O.D. (mm)	P-Metric Size	Basic Ordering Number	Dimension, mm (in.)						
			L	B	C	E	D	F	G
6	M8x1	_T-MC-M6-MS8	33.3 (1.31)	8.0 (0.31)	15.3 (0.60)	3.0 (0.12)	14.0 (0.55)	14.0 (0.55)	12.0 (0.47)
6	M10x1	_T-MC-M6-MS10	33.3 (1.31)	8.0 (0.31)	15.3 (0.60)	4.0 (0.16)	14.0 (0.55)	14.0 (0.55)	14.0 (0.55)
8	M10x1	_T-MC-M8-MS10	34.1 (1.34)	8.0 (0.31)	16.2 (0.64)	5.0 (0.20)	16.0 (0.63)	15.0 (0.59)	14.0 (0.55)
8	M12x1.5	_T-MC-M8-MS12	40.4 (1.59)	12.0 (0.47)	16.2 (0.64)	6.0 (0.24)	16.0 (0.63)	18.0 (0.71)	17.0 (0.67)
10	M12x1.5	_T-MC-M10-MS12	40.7 (1.60)	12.0 (0.47)	17.2 (0.68)	6.0 (0.24)	19.0 (0.75)	18.0 (0.71)	17.0 (0.67)
10	M14x1.5	_T-MC-M10-MS14	41.5 (1.63)	12.0 (0.47)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	19.0 (0.75)	19.0 (0.75)
12	M16x1.5	_T-MC-M12-MS16	45.5 (1.79)	12.0 (0.47)	22.8 (0.90)	9.0 (0.35)	22.0 (0.87)	22.0 (0.87)	21.0 (0.83)
12	M20x1.5	_T-MC-M12-MS20	48.0 (1.89)	14.0 (0.55)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	25.0 (0.98)	25.0 (0.98)
14	M20x1.5	_T-MC-M14-MS20	48.0 (1.89)	14.0 (0.55)	24.4 (0.96)	11.1 (0.44)	25.0 (0.98)	25.0 (0.98)	25.0 (0.98)
16	M20x1.5	_T-MC-M16-MS20	48.0 (1.89)	14.0 (0.55)	24.4 (0.96)	12.0 (0.47)	25.0 (0.98)	25.0 (0.98)	25.0 (0.98)
18	M20x1.5	_T-MC-M18-MS20	48.5 (1.91)	14.0 (0.55)	24.4 (0.96)	12.0 (0.47)	30.0 (1.18)	27.0 (1.06)	25.0 (0.98)
20	M20x1.5	_T-MC-M20-MS20	50.0 (1.97)	14.0 (0.55)	26.0 (1.02)	12.0 (0.47)	32.0 (1.26)	30.0 (1.18)	25.0 (0.98)
22	M24x1.5	_T-MC-M22-MS24	50.5 (1.99)	14.0 (0.55)	26.0 (1.02)	15.0 (0.59)	32.0 (1.26)	30.0 (1.18)	32.0 (1.26)
25	M27x2	_T-MC-M25-MS27	57.5 (2.26)	16.0 (0.63)	31.3 (1.23)	16.8 (0.66)	38.0 (1.50)	35.0 (1.38)	32.0 (1.26)

THERMOCOUPLE CONNECTOR



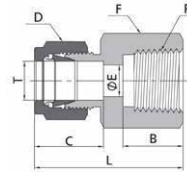
Fractional Tube to NPT Thread

T - Tube O.D. (in.)	P-NPT Size	Basic Ordering Number	Dimension, in. (mm)			
			L	B	C	D
3/16	1/16	_T-TCM-F1-N1	0.94 (23.9)	0.38(9.7)	0.31 (7.9)	0.31 (7.9)
1/16	1/8	_T-TCM-F1-N2	1.03 (26.2)	0.38(9.7)	0.31 (7.9)	0.44 (11.1)
1/8	1/16	_T-TCM-F2-N1	1.17 (29.7)	0.38(9.7)	0.44 (11.1)	0.44 (11.1)
1/8	1/8	_T-TCM-F2-N2	1.20 (30.5)	0.38(9.7)	0.44 (11.1)	0.44 (11.1)
1/8	1/4	_T-TCM-F2-N4	1.40 (35.6)	0.56(14.2)	0.44 (11.1)	0.56 (14.3)
3/16	1/8	_T-TCM-F3-N2	1.23 (31.2)	0.38(9.7)	0.50 (12.7)	0.44 (11.1)
3/16	1/4	_T-TCM-F3-N4	1.43 (36.3)	0.56(14.2)	0.50 (12.7)	0.56 (14.3)
1/4	1/8	_T-TCM-F4-N2	1.29 (32.8)	0.38(9.7)	0.56 (14.3)	0.50 (12.7)
1/4	1/4	_T-TCM-F4-N4	1.49 (37.8)	0.56(14.2)	0.56 (14.3)	0.56 (14.3)
1/4	3/8	_T-TCM-F4-N6	1.51 (38.4)	0.56(14.2)	0.56 (14.3)	0.69 (17.5)
1/4	1/2	_T-TCM-F4-N8	1.76 (44.7)	0.75(19.1)	0.56 (14.3)	0.87 (22.2)
5/16	1/4	_T-TCM-F5-N4	1.52 (38.6)	0.56(14.2)	0.63 (15.9)	0.56 (14.3)
3/8	1/4	_T-TCM-F6-N4	1.57 (39.9)	0.56(14.2)	0.69 (17.5)	0.63 (15.9)
3/8	3/8	_T-TCM-F6-N6	1.57 (39.9)	0.56(14.2)	0.69 (17.5)	0.69 (17.5)
3/8	1/2	_T-TCM-F6-N8	1.82 (46.2)	0.75(19.1)	0.69 (17.5)	0.87 (22.2)
1/2	1/2	_T-TCM-F8-N8	1.93 (49.0)	0.75(19.1)	0.87 (22.2)	0.87 (22.2)
1/2	3/4	_T-TCM-F8-N12	1.99 (50.5)	0.75(19.1)	0.87 (22.2)	1.06 (27.0)
5/8	3/4	_T-TCM-F10-N12	1.99 (50.5)	0.75(19.1)	1.00 (25.4)	1.06 (27.0)
3/4	3/4	_T-TCM-F12-N12	1.99 (50.5)	0.75(19.1)	1.13 (28.6)	1.06 (27.0)
1	1	_T-TCM-F16-N16	2.45 (62.2)	0.94 (23.9)	1.50 (38.1)	1.37 (34.9)

Metric Tube to NPT Thread

T - Tube O.D. (mm)	P-NPT Size	Basic Ordering Number	Dimension, mm (in.)			
			L	B	C	D
2	1/8	_T-TCM-M2-N2	30.5 (1.20)	9.7 (0.38)	12.0 (0.47)	12.0 (0.47)
3	1/8	_T-TCM-M3-N2	30.5 (1.20)	9.7 (0.38)	12.0 (0.47)	12.0 (0.47)
3	1/4	_T-TCM-M3-N4	35.6 (1.40)	14.2 (0.56)	12.0 (0.47)	14.0 (0.55)
4	1/8	_T-TCM-M4-N2	31.2 (1.23)	9.7 (0.38)	12.0 (0.47)	12.0 (0.47)
4	1/4	_T-TCM-M4-N4	36.3 (1.43)	14.2 (0.56)	12.0 (0.47)	14.0 (0.55)
6	1/8	_T-TCM-M6-N2	32.8 (1.29)	9.7 (0.38)	14.0 (0.55)	14.0 (0.55)
6	1/4	_T-TCM-M6-N4	37.9 (1.49)	14.2 (0.56)	14.0 (0.55)	14.0 (0.55)
8	1/4	_T-TCM-M8-N4	38.7 (1.52)	14.2 (0.56)	16.0 (0.63)	15.0 (0.59)
8	3/8	_T-TCM-M8-N6	39.3 (1.55)	14.2 (0.56)	16.0 (0.63)	18.0 (0.71)
10	3/8	_T-TCM-M10-N6	40.9 (1.61)	14.2 (0.56)	19.0 (0.75)	18.0 (0.71)
10	1/2	_T-TCM-M10-N8	46.5 (1.83)	19.1 (0.75)	19.0 (0.75)	22.0 (0.87)
12	3/8	_T-TCM-M12-N6	43.4 (1.71)	14.2 (0.56)	22.0 (0.87)	22.0 (0.87)
12	1/2	_T-TCM-M12-N8	49.0 (1.93)	19.1 (0.75)	22.0 (0.87)	22.0 (0.87)
12	3/4	_T-TCM-M12-N12	50.5 (1.99)	19.1 (0.75)	22.0 (0.87)	27.0 (1.06)
14	1/2	_T-TCM-M14-N8	49.0 (1.93)	19.1 (0.75)	25.0 (0.98)	24.0 (0.94)
14	3/4	_T-TCM-M14-N12	50.5 (1.99)	19.1 (0.75)	25.0 (0.98)	27.0 (1.06)
15	1/2	_T-TCM-M15-N8	49.0 (1.93)	19.1 (0.75)	25.0 (0.98)	24.0 (0.94)

FEMALE CONNECTOR



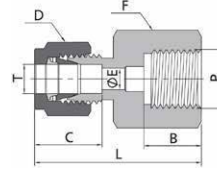
Fractional Tube to NPT Thread

T - Tube O.D. (in.)	P-NPT Size	Basic Ordering Number	Dimension, in. (mm)					
			L	B	C	E	D	F
1/16	1/16	_T-FC-F1-N1	0.93 (23.6)	0.39 (9.9)	0.34 (8.6)	0.05 (1.3)	0.31 (7.9)	0.44 (11.1)
1/16	1/8	_T-FC-F1-N2	0.96 (24.4)	0.41 (10.4)	0.34 (8.6)	0.05 (1.3)	0.31 (7.9)	0.56 (14.3)
1/8	1/8	_T-FC-F2-N2	1.13 (28.7)	0.41 (10.4)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.56 (14.3)
1/8	1/4	_T-FC-F2-N4	1.32 (33.5)	0.59 (15.0)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.75 (19.1)
3/16	1/8	_T-FC-F3-N2	1.17 (29.7)	0.41 (10.4)	0.54 (13.7)	0.12 (3.0)	0.50 (12.7)	0.56 (14.3)
1/4	1/8	_T-FC-F4-N2	1.23 (31.2)	0.41 (10.4)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.56 (14.3)
1/4	1/4	_T-FC-F4-N4	1.41 (35.8)	0.59 (15.0)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.75 (19.1)
1/4	3/8	_T-FC-F4-N6	1.48 (37.6)	0.59 (15.0)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.87 (22.2)
5/16	1/8	_T-FC-F5-N2	1.26 (32.0)	0.41 (10.4)	0.64 (16.3)	0.16 (4.1)	0.63 (15.9)	0.56 (14.3)
5/16	1/4	_T-FC-F5-N4	1.45 (36.8)	0.59 (15.0)	0.64 (16.3)	0.25 (6.4)	0.63 (15.9)	0.75 (19.1)
3/8	1/8	_T-FC-F6-N2	1.29 (32.8)	0.41 (10.4)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.63 (15.9)
3/8	1/4	_T-FC-F6-N4	1.48 (37.6)	0.59 (15.0)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.75 (19.1)
3/8	3/8	_T-FC-F6-N6	1.54 (39.1)	0.59 (15.0)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.87 (22.0)
3/8	1/2	_T-FC-F6-N8	1.73 (43.9)	0.78 (19.8)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	1.06 (27.0)
1/2	1/4	_T-FC-F8-N4	1.59 (40.4)	0.59 (15.0)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	0.81 (20.6)
1/2	3/8	_T-FC-F8-N6	1.65 (41.9)	0.59 (15.0)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	0.87 (22.2)
1/2	1/2	_T-FC-F8-N8	1.84 (46.7)	0.78 (19.8)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	1.06 (27.0)
1/2	3/4	_T-FC-F8-N12	1.90 (48.3)	0.81 (20.6)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	1.31 (33.3)
5/8	1/2	_T-FC-F10-N8	1.84 (46.7)	0.78 (19.8)	0.96 (24.4)	0.50 (12.7)	1.00 (25.4)	1.06 (27.0)
3/4	1/2	_T-FC-F12-N8	1.84 (46.7)	0.78 (19.8)	0.96 (24.4)	0.62 (15.7)	1.13 (28.6)	1.06 (27.0)
3/4	3/4	_T-FC-F12-N12	1.90 (48.3)	0.81 (20.6)	0.96 (24.4)	0.62 (15.7)	1.13 (28.6)	1.31 (33.3)
7/8	3/4	_T-FC-F14-N12	1.96 (49.8)	0.81 (20.6)	1.02 (25.9)	0.72 (18.3)	1.25 (31.8)	1.31 (33.3)
1	3/4	_T-FC-F16-N12	2.10 (53.3)	0.81 (20.6)	1.23 (31.2)	0.88 (22.4)	1.50 (38.1)	1.37 (34.9)
1	1	_T-FC-F16-N16	2.45 (62.2)	1.00 (25.4)	1.23 (31.2)	0.88 (22.4)	1.50 (38.1)	1.63 (41.3)
1 1/4	1 1/4	_T-FC-F20-N20	2.94 (74.7)	1.00 (25.4)	1.62 (41.1)	1.09 (27.7)	1.87 (47.6)	2.13 (54.0)
1 1/2	1 1/2	_T-FC-F24-N24	3.30 (83.8)	1.09 (27.7)	1.97 (50.0)	1.43 (36.3)	2.25 (57.2)	2.37 (60.3)

Fractional Tube to RT Thread

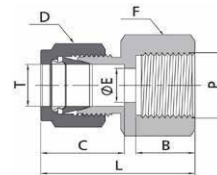
T - Tube O.D. (in.)	P-RT Size	Basic Ordering Number	Dimension, in. (mm)					
			L	B	C	E	D	F
1/4	1/8	_T-FC-F4-R2	1.23 (31.2)	0.41 (10.4)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.56 (14.3)
1/4	1/4	_T-FC-F4-R4	1.41 (35.8)	0.59 (15.0)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.75 (19.1)
1/4	3/8	_T-FC-F4-R6	1.48 (37.6)	0.59 (15.0)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.87 (22.2)
1/4	1/2	_T-FC-F4-R8	1.67 (42.4)	0.78 (19.8)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	1.06 (27.0)
3/8	1/4	_T-FC-F6-R4	1.48 (37.6)	0.59 (15.0)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.75 (19.1)
3/8	3/8	_T-FC-F6-R6	1.54 (39.1)	0.59 (15.0)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.87 (22.2)
3/8	1/2	_T-FC-F6-R8	1.73 (43.9)	0.78 (19.8)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	1.06 (27.0)
1/2	1/4	_T-FC-F8-R4	1.59 (40.4)	0.59 (15.0)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	0.81 (20.6)
1/2	3/8	_T-FC-F8-R6	1.65 (41.9)	0.59 (15.0)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	0.87 (22.2)
1/2	1/2	_T-FC-F8-R8	1.84 (46.7)	0.78 (19.8)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	1.06 (27.0)

FEMALE CONNECTOR



Fractional Tube to ISO Parallel Thread

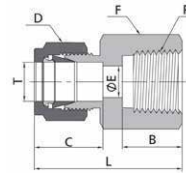
T - Tube O.D. (in.)	P-RG Size	Basic Ordering Number	Dimension, in. (mm)					
			L	B	C	E	D	F
1/8	1/4	_T-FC-F2-RG4	1.39 (35.3)	0.51 (12.9)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.75 (19.1)
1/8	3/8	_T-FC-F2-RG6	1.52 (38.7)	0.56 (14.2)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.94 (23.8)
1/4	1/4	_T-FC-F4-RG4	1.48 (37.6)	0.51 (12.9)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.75 (19.1)
1/4	3/8	_T-FC-F4-RG6	1.48 (37.6)	0.56 (14.2)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.94 (23.8)
1/4	1/2	_T-FC-F4-RG8	1.71 (43.4)	0.74 (18.8)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	1.06 (27.0)
5/16	1/4	_T-FC-F5-RG4	1.51 (38.4)	0.51 (12.9)	0.64 (16.3)	0.22 (5.6)	0.63 (15.9)	0.75 (19.1)
5/16	3/8	_T-FC-F5-RG6	1.54 (39.2)	0.56 (14.2)	0.64 (16.3)	0.25 (6.4)	0.63 (15.9)	0.94 (23.8)
5/16	1/2	_T-FC-F5-RG8	1.61 (40.9)	0.74 (18.8)	0.64 (16.3)	0.28 (7.1)	0.63 (15.9)	1.06 (27.0)
3/8	1/4	_T-FC-F6-RG4	1.54 (39.1)	0.51 (12.9)	0.66 (16.8)	0.22 (5.6)	0.69 (17.5)	0.75 (19.1)
3/8	3/8	_T-FC-F6-RG6	1.52 (38.6)	0.56 (14.2)	0.66 (16.8)	0.21 (5.4)	0.69 (17.5)	0.94 (23.8)
3/8	1/2	_T-FC-F6-RG8	1.65 (41.9)	0.74 (18.8)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	1.06 (27.0)
1/2	1/4	_T-FC-F8-RG4	1.65 (41.9)	0.51 (12.9)	0.90 (22.9)	0.22 (5.6)	0.87 (22.2)	0.87 (22.2)
1/2	3/8	_T-FC-F8-RG6	1.75 (44.5)	0.56 (14.2)	0.90 (22.9)	0.25 (6.4)	0.87 (22.2)	0.94 (23.8)
1/2	1/2	_T-FC-F8-RG8	1.90 (48.3)	0.74 (18.8)	0.90 (22.9)	0.28 (7.1)	0.87 (22.2)	1.06 (27.0)



Fractional Tube to Metric Thread

T - Tube O.D. (in.)	P-RG Size	Basic Ordering Number	Dimension, in. (mm)					
			L	B	C	E	D	F
1/8	M14 x 1.5	_T-FC-F2-MN14	1.27 (32.3)	0.51 (13.0)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.75 (19.1)
1/8	M16 x 1.5	_T-FC-F2-MN16	1.31 (33.3)	0.55 (14.0)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.87 (22.2)
1/8	M18 x 1.5	_T-FC-F2-MN18	1.35 (34.3)	0.59 (15.0)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	1.00 (25.4)
1/4	M16 x 1.5	_T-FC-F4-MN16	1.41 (35.8)	0.55 (14.0)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.87 (22.2)
1/4	M18 x 1.5	_T-FC-F4-MN18	1.45 (36.8)	0.59 (15.0)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	1.00 (25.4)
1/4	M20 x 1.5	_T-FC-F4-MN20	1.49 (37.8)	0.63 (16.0)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	1.06 (27.0)
3/8	M14 x 1.5	_T-FC-F6-MN14	1.46 (37.1)	0.51 (13.0)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.75 (19.1)
3/8	M16 x 1.5	_T-FC-F6-MN16	1.48 (37.5)	0.55 (14.0)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.87 (22.2)
3/8	M18 x 1.5	_T-FC-F6-MN18	1.52 (38.5)	0.59 (15.0)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	1.00 (25.4)
3/8	M20 x 1.5	_T-FC-F6-MN20	1.56 (39.5)	0.63 (16.0)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	1.06 (27.0)
1/2	M16 x 1.5	_T-FC-F8-MN16	1.63 (41.4)	0.55 (14.0)	0.90 (22.9)	0.33 (8.4)	0.87 (22.2)	0.87 (22.2)
1/2	M18 x 1.5	_T-FC-F8-MN18	1.67 (42.4)	0.59 (15.0)	0.90 (22.9)	0.38 (9.6)	0.87 (22.2)	1.00 (25.4)
1/2	M20 x 1.5	_T-FC-F8-MN20	1.71 (43.4)	0.63 (16.0)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	1.06 (27.0)
1/2	M22 x 1.5	_T-FC-F8-MN22	1.75 (44.4)	0.67 (17.0)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	1.06 (27.0)

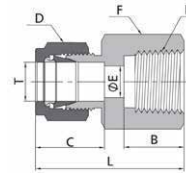
FEMALE CONNECTOR



Metric Tube to NPT Thread

T - Tube O.D. (mm)	P - NPT Size	Basic Ordering Number	Dimension, mm (in.)					
			L	B	C	E	D	F
3	1/8	_T-FC-M3-N2	28.7 (1.13)	10.4 (0.41)	12.9 (0.51)	2.4 (0.09)	12.0 (0.47)	14.0 (0.55)
3	1/4	_T-FC-M3-N4	33.5 (1.32)	15.0 (0.59)	12.9 (0.51)	2.4 (0.09)	12.0 (0.47)	19.0 (0.75)
4	1/8	_T-FC-M4-N2	29.7 (1.17)	10.4 (0.41)	13.7 (0.54)	2.4 (0.09)	12.0 (0.47)	14.0 (0.55)
6	1/8	_T-FC-M6-N2	31.3 (1.23)	10.4 (0.41)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	14.0 (0.55)
6	1/4	_T-FC-M6-N4	35.8 (1.41)	15.0 (0.59)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	19.0 (0.75)
6	3/8	_T-FC-M6-N6	37.7 (1.48)	15.0 (0.59)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	22.0 (0.87)
6	1/2	_T-FC-M6-N8	42.5 (1.67)	19.8 (0.78)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	27.0 (1.06)
8	1/8	_T-FC-M8-N2	32.1 (1.26)	10.4 (0.41)	16.2 (0.64)	4.8 (0.19)	16.0 (0.63)	15.0 (0.59)
8	1/4	_T-FC-M8-N4	37.0 (1.46)	15.0 (0.59)	16.2 (0.64)	6.4 (0.25)	16.0 (0.63)	19.0 (0.75)
8	3/8	_T-FC-M8-N6	38.5 (1.52)	15.0 (0.59)	16.2 (0.64)	6.4 (0.25)	16.0 (0.63)	22.0 (0.87)
8	1/2	_T-FC-M8-N8	43.3 (1.70)	19.8 (0.78)	16.2 (0.64)	6.4 (0.25)	16.0 (0.63)	27.0 (1.06)
10	1/8	_T-FC-M10-N2	33.0 (1.30)	10.4 (0.41)	17.2 (0.68)	4.8 (0.19)	19.0 (0.75)	15.0 (0.59)
10	1/4	_T-FC-M10-N4	37.8 (1.49)	15.0 (0.59)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	19.0 (0.75)
10	3/8	_T-FC-M10-N6	39.4 (1.55)	15.0 (0.59)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	22.0 (0.87)
10	1/2	_T-FC-M10-N8	44.2 (1.74)	19.8 (0.78)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	27.0 (1.06)
12	1/4	_T-FC-M12-N4	40.3 (1.59)	15.0 (0.59)	22.8 (0.90)	7.9 (0.31)	22.0 (0.87)	22.0 (0.87)
12	3/8	_T-FC-M12-N6	41.9 (1.65)	15.0 (0.59)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	22.0 (0.87)
12	1/2	_T-FC-M12-N8	46.7 (1.84)	19.8 (0.78)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	27.0 (1.06)
12	3/4	_T-FC-M12-N12	49.7 (1.96)	20.6 (0.81)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	35.0 (1.38)
14	3/4	_T-FC-M14-N12	49.7 (1.96)	20.6 (0.81)	24.4 (0.96)	11.1 (0.44)	25.0 (0.98)	35.0 (1.38)
15	1/2	_T-FC-M15-N8	46.7 (1.84)	19.8 (0.78)	24.4 (0.96)	11.9 (0.47)	25.0 (0.98)	27.0 (1.06)
16	3/8	_T-FC-M16-N6	41.9 (1.65)	15.0 (0.59)	24.4 (0.96)	9.5 (0.37)	25.0 (0.98)	27.0 (1.06)
16	1/2	_T-FC-M16-N8	46.9 (1.85)	19.8 (0.78)	24.4 (0.96)	11.9 (0.47)	25.0 (0.98)	27.0 (1.06)
20	1/2	_T-FC-M20-N8	47.9 (1.89)	19.8 (0.78)	26.0 (1.02)	11.9 (0.47)	32.0 (1.26)	30.0 (1.18)
20	3/4	_T-FC-M20-N12	49.7 (1.96)	20.6 (0.81)	26.0 (1.02)	15.9 (0.63)	32.0 (1.26)	35.0 (1.38)
22	3/4	_T-FC-M22-N12	49.7 (1.96)	20.6 (0.81)	26.0 (1.02)	15.9 (0.63)	32.0 (1.26)	35.0 (1.38)
22	1	_T-FC-M22-N16	57.9 (2.28)	25.4 (1.00)	26.0 (1.02)	18.3 (0.72)	32.0 (1.26)	41.0 (1.61)
25	3/4	_T-FC-M25-N12	53.4 (2.10)	20.6 (0.81)	31.3 (1.23)	15.9 (0.63)	38.0 (1.50)	35.0 (1.38)
25	1	_T-FC-M25-N16	62.3 (2.45)	25.4 (1.00)	31.3 (1.23)	21.8 (0.86)	38.0 (1.50)	41.0 (1.61)

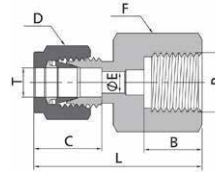
FEMALE CONNECTOR



Metric Tube to RT Thread

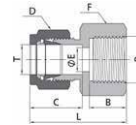
T - Tube O.D. (mm)	P - RT Size	Basic Ordering Number	Dimension, mm (in.)					
			L	B	C	E	D	F
3	1/8	_T-FC-M3-RT2	28.7 (1.13)	10.4 (0.41)	12.9 (0.51)	2.4 (0.09)	12.0 (0.47)	14.0 (0.55)
6	1/8	_T-FC-M6-RT2	31.3 (1.23)	10.4 (0.41)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	14.0 (0.55)
6	1/4	_T-FC-M6-RT4	35.8 (1.41)	15.0 (0.59)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	19.0 (0.75)
6	3/8	_T-FC-M6-RT6	36.9 (1.45)	15.0 (0.59)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	22.0 (0.87)
6	1/2	_T-FC-M6-RT8	42.5 (1.67)	19.8 (0.78)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	27.0 (1.06)
8	1/8	_T-FC-M8-RT2	32.1 (1.26)	10.4 (0.41)	16.2 (0.64)	6.4 (0.25)	16.0 (0.63)	15.0 (0.59)
8	1/4	_T-FC-M8-RT4	37.0 (1.46)	15.0 (0.59)	16.2 (0.64)	6.4 (0.25)	16.0 (0.63)	19.0 (0.75)
8	3/8	_T-FC-M8-RT6	38.5 (1.52)	15.0 (0.59)	16.2 (0.64)	6.4 (0.25)	16.0 (0.63)	22.0 (0.87)
8	1/2	_T-FC-M8-RT8	43.3 (1.70)	19.8 (0.78)	16.2 (0.64)	6.4 (0.25)	16.0 (0.63)	27.0 (1.06)
10	1/8	_T-FC-M10-RT2	33.0 (1.30)	10.4 (0.41)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	18.0 (0.71)
10	1/4	_T-FC-M10-RT4	37.8 (1.49)	15.0 (0.59)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	19.0 (0.75)
10	3/8	_T-FC-M10-RT6	39.4 (1.55)	15.0 (0.59)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	22.0 (0.87)
10	1/2	_T-FC-M10-RT8	44.2 (1.74)	19.8 (0.78)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	27.0 (1.06)
12	1/8	_T-FC-M12-RT2	35.5 (1.40)	10.4 (0.41)	22.8 (0.90)	8.3 (0.33)	22.0 (0.87)	22.0 (0.87)
12	1/4	_T-FC-M12-RT4	40.3 (1.59)	15.0 (0.59)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	22.0 (0.87)
12	3/8	_T-FC-M12-RT6	41.9 (1.65)	15.0 (0.59)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	22.0 (0.87)
12	1/2	_T-FC-M12-RT8	46.7 (1.84)	19.8 (0.78)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	27.0 (1.06)
12	3/4	_T-FC-M12-RT12	49.0 (1.93)	20.6 (0.81)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	35.0 (1.38)
15	1/2	_T-FC-M15-RT8	46.7 (1.84)	19.8 (0.78)	24.4 (0.96)	11.9 (0.47)	25.0 (0.98)	27.0 (1.06)
16	1/2	_T-FC-M16-RT8	48.4 (1.91)	19.8 (0.78)	24.4 (0.96)	11.9 (0.47)	25.0 (0.98)	27.0 (1.06)
16	3/4	_T-FC-M16-RT12	49.7 (1.96)	20.6 (0.81)	24.4 (0.96)	12.7 (0.5)	25.0 (0.98)	35.0 (1.38)
20	1/2	_T-FC-M20-RT8	47.9 (1.89)	19.8 (0.78)	26.0 (1.02)	11.9 (0.47)	32.0 (1.26)	30.0 (1.18)
20	3/4	_T-FC-M20-RT12	49.7 (1.96)	20.6 (0.81)	26.0 (1.02)	15.9 (0.63)	32.0 (1.26)	35.0 (1.38)
22	3/4	_T-FC-M22-RT12	49.7 (1.96)	20.6 (0.81)	26.0 (1.02)	15.9 (0.63)	32.0 (1.26)	35.0 (1.38)
22	1	_T-FC-M22-RT16	57.9 (2.28)	25.4 (1.00)	26.0 (1.02)	18.3 (0.72)	32.0 (1.26)	41.0 (1.61)
25	3/4	_T-FC-M25-RT12	53.4 (2.10)	20.6 (0.81)	31.3 (1.23)	15.9 (0.63)	38.0 (1.50)	35.0 (1.38)
25	1	_T-FC-M25-RT16	62.3 (2.45)	25.4 (1.00)	31.3 (1.23)	21.8 (0.86)	38.0 (1.50)	41.0 (1.61)
25	3/4	_T-FC-M25-RT12	53.4 (2.10)	20.6 (0.81)	31.3 (1.23)	15.9 (0.63)	38.0 (1.50)	35.0 (1.38)
25	1	_T-FC-M25-RT16	62.3 (2.45)	25.4 (1.00)	31.3 (1.23)	21.8 (0.86)	38.0 (1.50)	41.0 (1.61)

FEMALE CONNECTOR



Metric Tube to ISO Parallel Thread

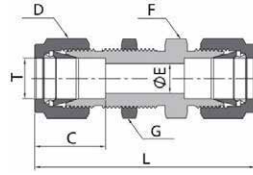
T - Tube O.D. (mm)	P-RG Size	Basic Ordering Number	Dimension, mm (in.)					
			L	B	C	E	D	F
3	1/4	_T-FC-M3-RG4	35.3 (1.39)	12.9 (0.51)	12.9 (0.51)	2.4 (0.09)	12.0 (0.47)	19.0 (0.75)
6	1/4	_T-FC-M6-RG4	37.6 (1.48)	12.9 (0.51)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	19.0 (0.75)
6	3/8	_T-FC-M6-RG6	37.6 (1.48)	14.2 (0.56)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	24.0 (0.94)
6	1/2	_T-FC-M6-RG8	43.5 (1.71)	18.8 (0.74)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	27.0 (1.06)
8	1/4	_T-FC-M8-RG4	38.5 (1.52)	12.9 (0.51)	16.2 (0.64)	6.4 (0.25)	16.0 (0.63)	19.0 (0.75)
8	3/8	_T-FC-M8-RG6	36.2 (1.43)	14.2 (0.56)	16.2 (0.64)	6.4 (0.25)	16.0 (0.63)	24.0 (0.94)
8	1/2	_T-FC-M8-RG8	41.0 (1.61)	18.8 (0.74)	16.2 (0.64)	6.4 (0.25)	16.0 (0.63)	27.0 (1.06)
10	1/4	_T-FC-M10-RG4	39.4 (1.55)	12.9 (0.51)	17.2 (0.68)	5.9 (0.23)	19.0 (0.75)	19.0 (0.75)
10	3/8	_T-FC-M10-RG6	38.8 (1.53)	14.2 (0.56)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	24.0 (0.94)
10	1/2	_T-FC-M10-RG8	42.1 (1.66)	18.8 (0.74)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	27.0 (1.06)
12	1/4	_T-FC-M12-RG4	41.9 (1.65)	12.9 (0.51)	22.8 (0.90)	5.9 (0.23)	22.0 (0.87)	22.0 (0.87)
12	3/8	_T-FC-M12-RG6	44.4 (1.75)	14.2 (0.56)	22.8 (0.90)	7.9 (0.31)	22.0 (0.87)	24.0 (0.94)
12	1/2	_T-FC-M12-RG8	48.2 (1.90)	18.8 (0.74)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	27.0 (1.06)
20	1/2	_T-FC-M20-RG8	54.3 (2.14)	18.8 (0.74)	26.0 (1.02)	11.9 (0.47)	32.0 (1.26)	30.0 (1.18)
22	1/2	_T-FC-M22-RG8	54.3 (2.14)	18.8 (0.74)	26.0 (1.02)	11.9 (0.47)	32.0 (1.26)	30.0 (1.18)



Metric Tube to Metric Thread

T - Tube O.D. (mm)	P-Metric Size	Basic Ordering Number	Dimension, in. (mm)					
			L	B	C	E	D	F
6	M10 x 1	_T-FM-M6-MN10	32.7 (1.29)	11.0 (0.43)	15.3 (0.60)	4.0 (0.16)	14.0 (0.55)	16.0 (0.63)
6	M14 x 1.5	_T-FM-M6-MN14	34.2 (1.35)	13.0 (0.51)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	19.0 (0.75)
6	M20 x 1.5	_T-FM-M6-MN20	37.7 (1.48)	16.0 (0.63)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	27.0 (1.06)
8	M8 x 1	_T-FM-M8-MN8	31.6 (1.24)	9.0 (0.35)	16.2 (0.64)	3.2 (0.13)	16.0 (0.63)	14.0 (0.55)
8	M10 x 1	_T-FM-M8-MN10	33.6 (1.32)	11.0 (0.43)	16.2 (0.64)	4.0 (0.16)	16.0 (0.63)	16.0 (0.63)
8	M14 x 1.5	_T-FM-M8-MN14	35.6 (1.40)	13.0 (0.51)	16.2 (0.64)	6.0 (0.24)	16.0 (0.63)	19.0 (0.75)
8	M20 x 1.5	_T-FM-M8-MN20	38.6 (1.52)	16.0 (0.63)	16.2 (0.64)	6.4 (0.25)	16.0 (0.63)	27.0 (1.06)
10	M16 x 1.5	_T-FC-M10-MN16	38.1 (1.50)	14.0 (0.55)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	22.0 (0.87)
12	M20 x 1.5	_T-FM-M12-MN20	44.9 (1.77)	16.0 (0.63)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	27.0 (1.06)
14	M10 x 1	_T-FM-M14-MN10	42.5 (1.67)	11.0 (0.43)	24.4 (0.96)	4.0 (0.16)	25.0 (0.98)	24.0 (0.94)
14	M20 x 1.5	_T-FM-M14-MN20	44.9 (1.77)	16.0 (0.63)	24.4 (0.96)	10.8 (0.43)	25.0 (0.98)	27.0 (1.06)
14	M22 x 1.5	_T-FM-M14-MN22	45.9 (1.81)	17.0 (0.67)	24.4 (0.96)	11.1 (0.44)	25.0 (0.98)	27.0 (1.06)
16	M20 x 1.5	_T-FM-M16-MN20	44.9 (1.77)	16.0 (0.63)	24.4 (0.96)	10.8 (0.43)	26.0 (1.02)	27.0 (1.06)
20	M20 x 1.5	_T-FM-M20-MN20	46.5 (1.83)	16.0 (0.63)	26.0 (1.02)	10.8 (0.43)	32.0 (1.26)	30.0 (1.18)
25	M27 x 2	_T-FM-M25-MN27	54.4 (2.14)	18.0 (0.71)	31.3 (1.23)	16.1 (0.63)	38.0 (1.50)	35.0 (1.38)

BULKHEAD UNIONS



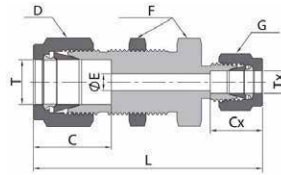
Fractional Tube

T - Tube O.D.(in.)	Basic Ordering Number	Dimension, mm (in.)						Panel Hole Size in. (mm)	Max. Panel Thickness in. (mm)
		L	C	E	D	F	G		
1/16	_T-BU-F1	1.24 (31.5)	0.34 (8.6)	0.05 (1.3)	0.31 (7.9)	0.31 (7.9)	0.31 (7.9)	0.20 (5.2)	0.12 (3.0)
1/8	_T-BU-F2	2.02 (51.3)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.50 (12.7)	0.50 (12.7)	0.33 (8.3)	0.50 (12.7)
3/16	_T-BU-F3	2.11 (53.6)	0.54 (13.7)	0.12 (3.0)	0.50 (12.7)	0.56 (14.3)	0.56 (14.3)	0.39 (9.9)	0.50 (12.7)
1/4	_T-BU-F4	2.27 (57.7)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.63 (15.9)	0.63 (15.9)	0.45 (11.5)	0.40 (10.2)
5/16	_T-BU-F5	2.39 (60.7)	0.64 (16.3)	0.25 (6.4)	0.63 (15.9)	0.69 (17.5)	0.69 (17.5)	0.52 (13.1)	0.44 (11.2)
3/8	_T-BU-F6	2.45 (62.2)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.75 (19.1)	0.75 (19.1)	0.58 (14.7)	0.44 (11.2)
1/2	_T-BU-F8	2.80 (71.1)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	0.94 (23.8)	0.94 (23.8)	0.76 (19.4)	0.50 (12.7)
5/8	_T-BU-F10	2.86 (72.6)	0.96 (24.4)	0.50 (12.7)	1.00 (25.4)	1.06 (27.0)	1.06 (27.0)	0.89 (22.6)	0.50 (12.7)
3/4	_T-BU-F12	3.11 (79.0)	0.96 (24.4)	0.62 (15.7)	1.13 (28.6)	1.19 (30.2)	1.19 (30.2)	1.02 (25.8)	0.66 (16.8)
7/8	_T-BU-F14	3.33 (84.6)	1.02(25.9)	0.72(18.3)	1.25 (31.8)	1.31 (33.3)	1.37 (34.9)	1.14 (29.0)	0.75 (19.1)
1	_T-BU-F16	3.77 (95.8)	1.23(31.2)	0.88(22.4)	1.50 (38.1)	1.63 (41.3)	1.63 (41.3)	1.33 (33.7)	0.75 (19.1)
1 1/4	_T-BU-F20	4.85 (123.2)	1.62(41.1)	1.09(27.8)	1.87 (47.6)	1.87 (47.6)	1.87 (47.6)	1.64 (41.7)	0.75 (19.1)
1 1/2	_T-BU-F24	5.48 (139.2)	1.97(50.0)	1.34(34.0)	2.25 (57.2)	2.25 (57.2)	2.25 (57.2)	1.95 (49.6)	0.75 (19.1)

Metric Tube

T - Tube O.D.(mm)	Basic Ordering Number	Dimension, mm (in.)						Panel Hole Size in. (mm)	Max. Panel Thickness in. (mm)
		L	C	E	D	F	G		
3	_T-BU-M3	51.3 (2.02)	12.9 (0.51)	2.4 (0.09)	12.0 (0.47)	14.0 (0.55)	14.0 (0.55)	8.3 (0.33)	12.7 (0.50)
4	_T-BU-M4	53.6 (2.11)	13.7 (0.54)	2.4 (0.09)	12.0 (0.47)	14.0 (0.55)	14.0 (0.55)	9.9 (0.39)	12.7 (0.50)
6	_T-BU-M6	57.7 (2.27)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	16.0 (0.63)	16.0 (0.63)	11.5 (0.45)	10.2 (0.40)
8	_T-BU-M8	61.0 (2.40)	16.2 (0.64)	6.4 (0.25)	16.0 (0.63)	18.0 (0.71)	18.0 (0.71)	13.1 (0.52)	11.2 (0.44)
10	_T-BU-M10	63.7 (2.51)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	22.0 (0.87)	22.0 (0.87)	16.3 (0.64)	11.2 (0.44)
12	_T-BU-M12	71.0 (2.80)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	24.0 (0.94)	24.0 (0.94)	19.5 (0.77)	12.7 (0.50)
14	_T-BU-M14	72.5 (2.85)	24.4 (0.96)	11.1 (0.44)	25.0 (0.98)	27.0 (1.06)	27.0 (1.06)	22.5 (0.89)	12.7 (0.50)
15	_T-BU-M15	72.5 (2.85)	24.4 (0.96)	11.9 (0.47)	25.0 (0.98)	27.0 (1.06)	27.0 (1.06)	22.8 (0.90)	12.7 (0.50)
16	_T-BU-M16	72.5 (2.85)	24.4 (0.96)	12.7 (0.50)	25.0 (0.98)	27.0 (1.06)	27.0 (1.06)	22.8 (0.90)	12.7 (0.50)
18	_T-BU-M18	78.9 (3.11)	24.4 (0.96)	15.1 (0.59)	30.0 (1.18)	30.0 (1.18)	30.0 (1.18)	26.0 (1.02)	16.8 (0.66)
20	_T-BU-M20	84.5 (3.33)	26.0 (1.02)	15.9 (0.63)	32.0 (1.26)	35.0 (1.38)	35.0 (1.38)	29.0 (1.14)	19.0 (0.75)
25	_T-BU-M25	96.0 (3.78)	31.3 (1.23)	21.8 (0.86)	38.0 (1.50)	41.0 (1.61)	41.0 (1.61)	34.0 (1.34)	19.0 (0.75)
30	_T-BU-M30	124.0 (4.88)	39.6 (1.56)	26.2 (1.03)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)	40.5 (1.59)	19.0 (0.75)
32	_T-BU-M32	128.0 (5.04)	42.0 (1.65)	28.6 (1.13)	50.0 (1.97)	50.0 (1.97)	50.0 (1.97)	42.5 (1.67)	19.0 (0.75)
38	_T-BU-M38	145.0 (5.71)	49.4 (1.94)	33.7 (1.33)	60.0 (2.36)	60.0 (2.36)	60.0 (2.36)	50.5 (1.99)	19.0 (0.75)

BULKHEAD REDUCING UNIONS



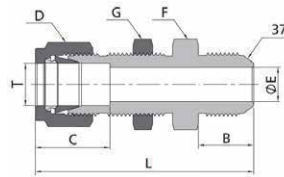
Fractional Tube

T - Tube O.D.(in.)	Tx - Tube O.D.(in.)	Basic Ordering Number	Dimension, in. (mm)							Panel Hole Size in. (mm)	Max. Panel Thickness in. (mm)
			L	C	E	D	F	Cx	G		
1/4	1/8	_T-BUR-F4-F2	2.17 (55.1)	0.60 (15.2)	0.09 (2.3)	0.56 (14.3)	0.63 (15.9)	0.50 (12.7)	0.44 (11.1)	0.45 (11.5)	0.40 (10.2)
3/8	1/4	_T-BUR-F6-F4	2.39 (60.7)	0.66 (16.8)	0.19 (4.8)	0.69 (17.5)	0.75 (19.1)	0.60 (15.2)	0.56 (14.3)	0.58 (14.7)	0.44 (11.2)
1/2	1/4	_T-BUR-F8-F4	2.63 (66.8)	0.90 (22.9)	0.19 (4.8)	0.87 (22.2)	0.94 (23.8)	0.60 (15.2)	0.56 (14.3)	0.76 (19.4)	0.50 (12.7)

Metric Tube

T - Tube O.D.(mm)	Tx - Tube O.D.(mm)	Basic Ordering Number	Dimension, mm (in.)							Panel Hole Size in. (mm)	Max. Panel Thickness in. (mm)
			L	C	E	D	F	Cx	G		
16	3	_T-BUR-FT6-AN3	55.1 (2.17)	15.3 (0.60)	2.4 (0.09)	14.0 (0.55)	16.0 (0.63)	12.9 (0.51)	12.0 (0.47)	11.5 (0.45)	10.2 (0.40)
8	6	_T-BUR-FT8-AN6	60.1 (2.37)	16.2 (0.64)	4.8 (0.19)	16.0 (0.63)	18.0 (0.71)	15.3 (0.60)	14.0 (0.55)	13.1 (0.52)	11.2 (0.44)
12	8	_T-BUR-FT12-AN8	67.6 (2.66)	22.8 (0.90)	6.4 (0.25)	22.0 (0.87)	24.0 (0.94)	16.2 (0.64)	16.0 (0.63)	19.5 (0.77)	12.7 (0.50)

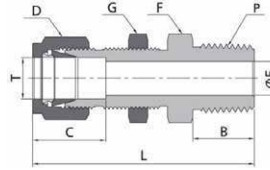
BULKHEAD FLARED CONNECTOR



Fractional Tube to 37° Flared

T - Tube O.D.(in.)	Tube Flared Size	Basic Ordering Number	Dimension, in. (mm)							Panel Hole Size in. (mm)	Max. Panel Thickness in. (mm)
			L	B	C	E	D	F	G		
1/8	1/8	_T-BMC-FT2-AN2	1.91 (48.5)	0.45 (11.4)	0.50 (12.7)	0.06 (1.5)	0.44 (11.1)	0.50 (12.7)	0.50 (12.7)	0.33 (8.3)	0.50 (12.7)
1/8	1/4	_T-BMC-FT2-AN4	2.04 (51.8)	0.55 (14.0)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.63 (15.9)	0.63 (15.9)	0.33 (8.3)	0.51 (12.7)
3/16	3/16	_T-BMC-FT3-AN3	1.98 (50.3)	0.48 (12.2)	0.54 (13.7)	0.09 (2.3)	0.50 (12.7)	0.56 (14.3)	0.56 (14.3)	0.39 (9.9)	0.50 (12.7)
1/4	1/4	_T-BMC-FT4-AN4	2.12 (53.8)	0.55 (14.0)	0.60 (15.2)	0.17 (4.3)	0.56 (14.3)	0.63 (15.9)	0.63 (15.9)	0.45 (11.5)	0.40 (10.2)
5/16	5/16	_T-BMC-FT5-AN5	2.21 (56.1)	0.55 (14.0)	0.64 (16.2)	0.23 (5.8)	0.63 (15.9)	0.69 (17.5)	0.69 (17.5)	0.52 (13.1)	0.56 (14.3)
3/8	1/4	_T-BMC-FT6-AN4	2.25 (57.2)	0.55 (14.0)	0.66 (16.8)	0.17 (4.3)	0.69 (17.5)	0.75 (19.1)	0.75 (19.1)	0.58 (14.7)	0.44 (11.2)
3/8	3/8	_T-BMC-FT6-AN6	2.25 (57.2)	0.56 (14.2)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.75 (19.1)	0.75 (19.1)	0.58 (14.7)	0.44 (11.2)
1/2	1/2	_T-BMC-FT8-AN8	2.59 (65.8)	0.66 (16.8)	0.90 (22.8)	0.39 (9.9)	0.87 (22.2)	0.94 (23.8)	0.94 (23.8)	0.76 (19.4)	0.50 (12.7)
5/8	5/8	_T-BMC-FT10-AN10	2.74 (69.6)	0.76 (19.3)	0.96 (24.4)	0.48 (12.3)	1.00 (25.4)	1.06 (27.0)	1.06 (27.0)	0.89 (22.6)	0.59 (15.1)
3/4	3/4	_T-BMC-FT12-AN12	3.11 (79.0)	0.86 (21.8)	0.96 (24.4)	0.61 (15.5)	1.13 (28.6)	1.19 (30.2)	1.19 (30.2)	1.02 (25.8)	0.66 (16.8)
1	1	_T-BMC-FT16-AN16	3.64 (92.5)	0.91 (23.1)	1.23 (31.2)	0.84 (21.3)	1.50 (38.1)	1.63 (41.3)	1.63 (41.3)	1.33 (33.7)	0.75 (19.1)

BULKHEAD MALE CONNECTOR



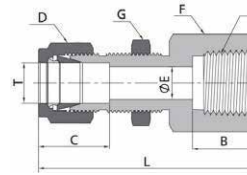
Fractional Tube to NPT Thread

T - Tube O.D.(in.)	P-NPT Size	Basic Ordering Number	Dimension, in. (mm)							Panel Hole Size in. (mm)	Max. Panel Thickness in. (mm)
			L	B	C	E	D	F	G		
1/16	1/16	_T-BMC-M1-N1	1.19 (30.2)	0.38 (9.7)	0.34 (8.6)	0.05 (1.3)	0.31(7.9)	0.31(7.9)	0.31 (7.9)	0.20 (5.2)	0.25 (6.4)
1/16	1/8	_T-BMC-M1-N2	1.27 (32.3)	0.38 (9.7)	0.34 (8.6)	0.05 (1.3)	0.31(7.9)	0.44(11.1)	0.31 (7.9)	0.20 (5.2)	0.25 (6.4)
1/8	1/8	_T-BMC-M2-N2	1.83 (46.5)	0.38 (9.7)	0.50 (12.7)	0.09 (2.3)	0.44(11.1)	0.50(12.7)	0.50 (12.7)	0.33 (8.3)	0.50 (12.7)
3/16	1/8	_T-BMC-M3-N2	1.89 (48.0)	0.38 (9.7)	0.54 (13.7)	0.12 (3.0)	0.50(12.7)	0.56(14.3)	0.56 (14.3)	0.39 (9.9)	0.50 (12.7)
1/4	1/8	_T-BMC-M4-N2	1.95 (49.5)	0.38 (9.7)	0.60 (15.2)	0.19 (4.8)	0.56(14.3)	0.63(15.9)	0.63 (15.9)	0.45 (11.5)	0.40 (10.2)
1/4	1/4	_T-BMC-M4-N4	2.13 (54.1)	0.56 (14.2)	0.60 (15.2)	0.19 (4.8)	0.56(14.3)	0.63(15.9)	0.63 (15.9)	0.45 (11.5)	0.40 (10.2)
1/4	3/8	_T-BMC-M4-N6	2.16 (54.9)	0.56 (14.2)	0.60 (15.2)	0.19 (4.8)	0.56(14.3)	0.69(17.5)	0.69 (17.5)	0.45 (11.5)	0.40 (10.2)
1/4	1/2	_T-BMC-M4-N8	2.37 (60.3)	0.75 (19.1)	0.60 (15.2)	0.19 (4.8)	0.56(14.3)	0.87(22.2)	0.87 (22.2)	0.45 (11.5)	0.40 (10.2)
5/16	1/8	_T-BMC-M5-N2	2.08 (52.8)	0.38 (9.7)	0.64 (16.3)	0.19 (4.8)	0.63(15.9)	0.69(17.5)	0.69 (17.5)	0.52 (13.1)	0.44 (11.2)
5/16	1/4	_T-BMC-M5-N4	2.27 (57.7)	0.56 (14.2)	0.64 (16.3)	0.25 (6.4)	0.63(15.9)	0.69(17.5)	0.69 (17.5)	0.52 (13.1)	0.44 (11.2)
3/8	1/8	_T-BMC-M6-N2	2.08 (52.9)	0.38 (9.7)	0.66 (16.8)	0.19 (4.8)	0.69(17.5)	0.75(19.1)	0.75 (19.1)	0.58 (14.7)	0.44 (11.2)
3/8	1/4	_T-BMC-M6-N4	2.26 (57.4)	0.56 (14.2)	0.66 (16.8)	0.28 (7.1)	0.69(17.5)	0.75(19.1)	0.75 (19.1)	0.58 (14.7)	0.44 (11.2)
3/8	3/8	_T-BMC-M6-N6	2.26 (57.4)	0.56 (14.2)	0.66 (16.8)	0.28 (7.1)	0.69(17.5)	0.75(19.1)	0.75 (19.1)	0.58 (14.7)	0.44 (11.2)
3/8	1/2	_T-BMC-M6-N8	2.51 (63.8)	0.75 (19.1)	0.66 (16.8)	0.28 (7.1)	0.69(17.5)	0.87(22.2)	0.87 (22.2)	0.58 (14.7)	0.44 (11.2)
1/2	1/8	_T-BMC-M8-N2	2.31 (58.7)	0.38 (9.7)	0.90 (22.9)	0.19 (4.8)	0.87(22.2)	0.94(23.8)	0.94 (23.8)	0.76 (19.4)	0.50 (12.7)
1/2	1/4	_T-BMC-M8-N4	2.49 (63.2)	0.56 (14.2)	0.90 (22.9)	0.28 (7.1)	0.87(22.2)	0.94(23.8)	0.94 (23.8)	0.76 (19.4)	0.50 (12.7)
1/2	3/8	_T-BMC-M8-N6	2.49 (63.2)	0.56 (14.2)	0.90 (22.9)	0.38 (9.7)	0.87(22.0)	0.94(23.8)	0.94 (23.8)	0.76 (19.4)	0.50 (12.7)
1/2	1/2	_T-BMC-M8-N8	2.71 (68.8)	0.75 (19.1)	0.90 (22.9)	0.41 (10.4)	0.87(22.0)	0.94(23.8)	0.94 (23.8)	0.76 (19.4)	0.50 (12.7)
5/8	3/8	_T-BMC-M10-N6	2.63 (66.7)	0.56 (14.2)	0.96 (24.4)	0.38 (9.7)	1.00(25.4)	1.06(27.0)	1.06 (27.0)	0.89 (22.6)	0.59 (15.1)
5/8	1/2	_T-BMC-M10-N8	2.81 (71.5)	0.75 (19.1)	0.96 (24.4)	0.47 (11.9)	1.00(25.4)	1.06(27.0)	1.06 (27.0)	0.89 (22.6)	0.59 (15.1)
3/4	1/2	_T-BMC-M12-N8	3.00 (76.2)	0.75 (19.1)	0.96 (24.4)	0.47 (11.9)	1.13(28.6)	1.19(30.2)	1.19 (30.2)	1.02 (25.8)	0.66 (16.8)
3/4	3/4	_T-BMC-M12-N12	3.00 (76.2)	0.75 (19.1)	0.96 (24.4)	0.62 (15.7)	1.13(28.6)	1.19(30.2)	1.19 (30.2)	1.02 (25.8)	0.66 (16.8)
7/8	3/4	_T-BMC-M14-N12	3.31 (84.1)	0.75 (19.1)	1.02 (25.9)	0.62 (15.7)	1.25(31.8)	1.31(33.3)	1.31 (33.3)	1.14 (29.0)	0.75 (19.1)
1	3/4	_T-BMC-M16-N12	3.48 (88.4)	0.75 (19.1)	1.23 (31.2)	0.62 (15.7)	1.50(38.1)	1.63(41.3)	1.63 (41.3)	1.33 (33.7)	0.75 (19.1)
1	1	_T-BMC-M6-N16	3.67 (93.2)	0.94 (23.9)	1.23 (31.2)	0.88 (22.4)	1.50(38.1)	1.63(41.3)	1.63 (41.3)	1.33 (33.7)	0.75 (19.1)

Metric Tube to NPT Thread

T - Tube O.D.(mm)	P-NPT Size	Basic Ordering Number	Dimension, mm (in.)							Panel Hole Size in. (mm)	Max. Panel Thickness in. (mm)
			L	B	C	E	D	F	G		
6	1/8	_T-BMC-M6-N2	49.6 (1.95)	9.7 (0.38)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	16.0 (0.63)	16.0 (0.63)	11.5 (0.45)	10.2 (0.40)
6	1/4	_T-BMC-M6-N4	53.6 (2.11)	14.2 (0.56)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	16.0 (0.63)	16.0 (0.63)	11.5 (0.45)	10.2 (0.40)
8	1/8	_T-BMC-M8-N2	52.3 (2.06)	9.7 (0.38)	16.2 (0.64)	4.8 (0.19)	16.0 (0.63)	18.0 (0.71)	18.0 (0.71)	13.1 (0.52)	11.2 (0.44)
8	1/4	_T-BMC-M8-N4	57.5 (2.26)	14.2 (0.56)	16.2 (0.64)	6.4 (0.25)	16.0 (0.63)	18.0 (0.71)	18.0 (0.71)	13.1 (0.52)	11.2 (0.44)
10	1/4	_T-BMC-M10-N4	58.4 (2.30)	14.2 (0.56)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	22.0 (0.87)	22.0 (0.87)	16.3 (0.64)	11.2 (0.44)
10	3/8	_T-BMC-M10-N6	58.4 (2.30)	14.2 (0.56)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	22.0 (0.87)	22.0 (0.87)	16.3 (0.64)	11.2 (0.44)
10	1/2	_T-BMC-M10-N8	63.1 (2.48)	19.1 (0.75)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	22.0 (0.87)	22.0 (0.87)	16.3 (0.64)	11.2 (0.44)
12	1/4	_T-BMC-M12-N4	63.9 (2.52)	14.2 (0.56)	22.8 (0.90)	7.9 (0.31)	22.0 (0.87)	24.0 (0.94)	24.0 (0.94)	19.5 (0.77)	12.7 (0.50)
12	3/8	_T-BMC-M12-N6	63.9 (2.52)	14.2 (0.56)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	24.0 (0.94)	24.0 (0.94)	19.5 (0.77)	12.7 (0.50)
12	1/2	_T-BMC-M12-N8	68.8 (2.71)	19.1 (0.75)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	24.0 (0.94)	24.0 (0.94)	19.5 (0.77)	12.7 (0.50)

BULKHEAD FEMALE CONNECTOR



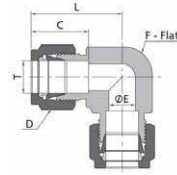
Fractional Tube to NPT Thread

T - Tube O.D.(in.)	P-NPT Size	Basic Ordering Number	Dimension, in. (mm)							Panel Hole Size in. (mm)	Max. Panel Thickness in. (mm)
			L	B	C	E	D	F	G		
1/16	1/16	_T-BFC-F1-MN1	1.03 (26.2)	0.39 (9.9)	0.34 (8.6)	0.05 (1.3)	0.31 (7.9)	0.44 (11.1)	0.31 (7.9)	0.20 (5.2)	0.13 (3.2)
1/16	1/8	_T-BFC-F1-MN2	1.06 (26.9)	0.41 (10.4)	0.34 (8.6)	0.05 (1.3)	0.31 (7.9)	0.56 (14.3)	0.31 (7.9)	0.20 (5.2)	0.13 (3.2)
1/8	1/8	_T-BFC-F2-MN2	1.76 (44.7)	0.41 (10.4)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.56 (14.3)	0.50 (12.7)	0.33 (8.3)	0.50 (12.7)
1/8	1/4	_T-BFC-F2-MN4	1.95 (49.6)	0.59 (15.0)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.75 (19.1)	0.50 (12.7)	0.33 (8.3)	0.50 (12.7)
3/16	1/8	_T-BFC-F3-MN2	1.79 (45.5)	0.41 (10.4)	0.54 (13.7)	0.12 (3.0)	0.50 (12.7)	0.56 (14.3)	0.56 (14.3)	0.39 (9.9)	0.50 (12.7)
1/4	1/8	_T-BFC-F4-MN2	1.85 (47.0)	0.41 (10.4)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.63 (15.9)	0.63 (15.9)	0.45 (11.5)	0.40 (10.2)
1/4	1/4	_T-BFC-F4-MN4	2.04 (51.8)	0.59 (15.0)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.75 (19.1)	0.63 (15.9)	0.45 (11.5)	0.40 (10.2)
1/4	3/8	_T-BFC-F4-MN6	2.10 (53.3)	0.59 (15.0)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.87 (22.2)	0.63 (15.9)	0.45 (11.5)	0.40 (10.2)
1/4	1/2	_T-BFC-F4-MN8	2.29 (58.2)	0.78 (19.8)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	1.06 (27.0)	0.63 (15.9)	0.45 (11.5)	0.40 (10.2)
5/16	1/8	_T-BFC-F5-MN2	1.96 (49.8)	0.41 (10.4)	0.64 (16.3)	0.25 (6.4)	0.63 (15.9)	0.56 (14.3)	0.69 (17.5)	0.52 (13.1)	0.44 (11.2)
5/16	1/4	_T-BFC-F5-MN4	2.38 (60.5)	0.59 (15.0)	0.64 (16.3)	0.25 (6.4)	0.63 (15.9)	0.75 (19.1)	0.69 (17.5)	0.52 (13.1)	0.44 (11.2)
3/8	1/8	_T-BFC-F6-MN2	1.98 (50.3)	0.41 (10.4)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.63 (15.9)	0.75 (19.1)	0.58 (14.7)	0.44 (11.2)
3/8	1/4	_T-BFC-F6-MN4	2.17 (55.1)	0.59 (15.0)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.75 (19.1)	0.75 (19.1)	0.58 (14.7)	0.44 (11.2)
3/8	3/8	_T-BFC-F6-MN6	2.23 (56.6)	0.59 (15.0)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.87 (22.2)	0.75 (19.1)	0.58 (14.7)	0.44 (11.2)
3/8	1/2	_T-BFC-F6-FN8	2.42 (61.5)	0.78 (19.8)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	1.06 (27.0)	0.75 (19.1)	0.58 (14.7)	0.44 (11.2)
3/8	3/4	_T-BFC-F6-MN12	2.57 (65.3)	0.81 (20.6)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	1.31 (33.3)	0.75 (19.1)	0.58 (14.7)	0.44 (11.2)
1/2	1/4	_T-BFC-F8-MN4	2.37 (60.2)	0.59 (15.0)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	0.94 (23.8)	0.94 (23.8)	0.76 (19.4)	0.50 (12.7)
1/2	3/8	_T-BFC-F8-MN6	2.43 (61.7)	0.59 (15.0)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	0.94 (23.8)	0.94 (23.8)	0.76 (19.4)	0.50 (12.7)
1/2	1/2	_T-BFC-F8-MN8	2.62 (66.5)	0.78 (19.8)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	1.06 (27.0)	0.94 (23.8)	0.76 (19.4)	0.50 (12.7)
1/2	3/4	_T-BFC-F8-MN12	2.68 (68.1)	0.81 (20.6)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	1.31 (33.3)	0.94 (23.8)	0.76 (19.4)	0.50 (12.7)
5/8	3/8	_T-BFC-F10-MN6	2.46 (62.5)	0.59 (15.0)	0.96 (24.4)	0.50 (12.7)	1.00 (25.4)	0.94 (23.8)	1.06 (27.0)	0.89 (22.6)	0.59 (15.1)
5/8	1/2	_T-BFC-F10-MN8	2.65 (67.3)	0.78 (19.8)	0.96 (24.4)	0.50 (12.7)	1.00 (25.4)	1.06 (27.0)	1.06 (27.0)	0.89 (22.6)	0.59 (15.1)
3/4	1/2	_T-BFC-F12-MN8	2.84 (72.2)	0.78 (19.8)	0.96 (24.4)	0.62 (15.7)	1.13 (28.6)	1.06 (27.0)	1.19 (30.2)	1.02 (25.8)	0.78 (19.8)
3/4	3/4	_T-BFC-F12-MN12	2.90 (73.7)	0.81 (20.6)	0.96 (24.4)	0.62 (15.7)	1.13 (28.6)	1.31 (33.3)	1.19 (30.2)	1.02 (25.8)	0.78 (19.8)
7/8	3/4	_T-BFC-F14-MN12	3.18 (80.8)	0.81 (20.6)	1.02 (25.9)	0.72 (18.3)	1.25 (31.8)	1.31 (33.3)	1.31 (33.3)	1.14 (29.0)	0.94 (23.8)
1	3/4	_T-BFC-F16-MN12	3.33 (84.7)	0.81 (20.6)	1.23 (31.2)	0.88 (22.4)	1.50 (38.1)	1.63 (41.3)	1.63 (41.3)	1.33 (33.7)	0.94 (23.8)
1	1	_T-BFC-F16-MN16	3.68 (93.5)	1.00 (25.4)	1.23 (31.2)	0.88 (22.4)	1.50 (38.1)	1.63 (41.3)	1.63 (41.3)	1.33 (33.7)	0.94 (23.8)

Metric Tube to NPT Thread

T - Tube O.D.(mm)	P-NPT Size	Basic Ordering Number	Dimension, mm (in.)							Panel Hole Size in. (mm)	Max. Panel Thickness in. (mm)
			L	B	C	E	D	F	G		
6	1/8	_T-BFC-M6-N2	47.2 (1.86)	10.4 (0.41)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	16.0 (0.63)	16.0 (0.63)	11.5 (0.45)	10.2 (0.40)
6	1/4	_T-BFC-M6-N4	51.8 (2.04)	15.0 (0.59)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	19.0 (0.75)	16.0 (0.63)	11.5 (0.45)	10.2 (0.40)
8	1/8	_T-BFC-M8-N2	49.6 (1.95)	10.4 (0.41)	16.2 (0.64)	4.8 (0.19)	16.0 (0.63)	18.0 (0.71)	18.0 (0.71)	13.1 (0.52)	11.2 (0.44)
10	1/4	_T-BFC-M10-N4	55.2 (2.17)	15.0 (0.59)	17.2 (0.68)	7.9 (0.31)	19.0 (0.75)	22.0 (0.87)	22.0 (0.87)	16.3 (0.64)	11.2 (0.44)
12	3/8	_T-BFC-M12-N6	60.9 (2.40)	15.0 (0.59)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	24.0 (0.94)	24.0 (0.94)	19.5 (0.77)	12.7 (0.50)
12	1/2	_T-BFC-M12-N8	66.5 (2.62)	19.8 (0.78)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	24.0 (0.94)	24.0 (0.94)	19.5 (0.77)	12.7 (0.50)

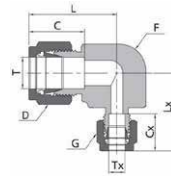
UNION ELBOWS



Fractional Tube						
T - Tube O.D. (in.)	Basic Ordering Number	Dimension, in. (mm)				
		L	C	D	F	E
1/16	_T-LU-F1	0.70 (17.8)	0.34 (8.6)	0.31 (7.9)	0.37 (9.5)	0.05 (1.3)
1/8	_T-LU-F2	0.88 (22.4)	0.50 (12.7)	0.44 (11.1)	0.37 (9.5)	0.09 (2.3)
3/16	_T-LU-F3	1.00 (25.4)	0.54 (13.7)	0.50 (12.7)	0.50 (12.7)	0.12 (3.0)
1/4	_T-LU-F4	1.06 (26.9)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.19 (4.8)
5/16	_T-LU-F5	1.13 (28.7)	0.64 (16.3)	0.63 (15.9)	0.56 (14.3)	0.25 (6.4)
3/8	_T-LU-F6	1.20 (30.5)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.28 (7.1)
1/2	_T-LU-F8	1.42 (36.1)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.41 (10.4)
5/8	_T-LU-F10	1.50 (38.1)	0.96 (24.4)	1.00 (25.4)	0.94 (23.8)	0.5 (12.7)
3/4	_T-LU-F12	1.57 (39.9)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.62 (15.7)
7/8	_T-LU-F14	1.76 (44.7)	1.02 (25.9)	1.25 (31.8)	1.37 (34.9)	0.72 (18.3)
1	_T-LU-F16	1.93 (49.0)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)	0.88 (22.4)
1 1/8	_T-LU-F18	2.17 (55.1)	1.23 (31.2)	1.63 (41.3)	1.69 (42.9)	0.97 (24.6)
1 1/4	_T-LU-F20	2.62 (66.5)	1.62 (41.1)	1.87 (47.6)	1.69 (42.9)	1.09 (27.7)
1 1/2	_T-LU-F24	3.07 (78.0)	1.97 (50.0)	2.25 (57.2)	2.00 (50.8)	1.34 (34.0)

Metric Tube						
T - Tube O.D. (mm)	Basic Ordering Number	Dimension, mm (in.)				
		L	C	D	F	E
3	_T-LU-M3	22.3 (0.88)	12.9 (0.51)	12.0 (0.47)	9.5 (0.37)	2.4 (0.09)
4	_T-LU-M4	25.4 (1.00)	13.7 (0.54)	12.0 (0.47)	12.7 (0.50)	2.4 (0.09)
6	_T-LU-M6	27.0 (1.06)	15.3 (0.60)	14.0 (0.55)	12.7 (0.50)	4.8 (0.19)
8	_T-LU-M8	28.8 (1.13)	16.2 (0.64)	16.0 (0.63)	14.3 (0.56)	6.4 (0.25)
10	_T-LU-M10	31.5 (1.24)	17.2 (0.68)	19.0 (0.75)	17.5 (0.69)	7.9 (0.31)
12	_T-LU-M12	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	9.5 (0.37)
14	_T-LU-M14	38.0 (1.50)	24.4 (0.96)	25.0 (0.98)	23.8 (0.94)	11.0 (0.43)
15	_T-LU-M15	38.8 (1.53)	24.4 (0.96)	25.0 (0.98)	23.8 (0.94)	11.9 (0.47)
16	_T-LU-M16	38.0 (1.50)	24.4 (0.96)	25.0 (0.98)	23.8 (0.94)	12.7 (0.50)
18	_T-LU-M18	39.8 (1.57)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)	15.1 (0.59)
20	_T-LU-M20	44.6 (1.76)	26.0 (1.02)	32.0 (1.26)	34.9 (1.37)	15.9 (0.63)
22	_T-LU-M22	44.6 (1.76)	26.0 (1.02)	32.0 (1.26)	34.9 (1.37)	18.3 (0.72)
25	_T-LU-M25	49.1 (1.93)	31.3 (1.23)	38.0 (1.5)	34.9 (1.37)	21.8 (0.86)
28	_T-LU-M28	64.0 (2.52)	36.6 (1.44)	46.0 (1.81)	42.9 (1.69)	21.8 (0.86)
30	_T-LU-M30	69.9 (2.75)	39.6 (1.56)	50.0 (1.97)	42.9 (1.69)	26.2 (1.03)
32	_T-LU-M32	72.3 (2.85)	42.0 (1.65)	50.0 (1.97)	42.9 (1.69)	28.6 (1.13)
38	_T-LU-M38	84.0 (3.31)	49.4 (1.94)	60.0 (2.36)	50.8 (2.00)	33.7 (1.33)

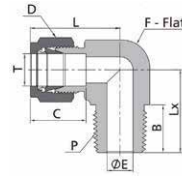
UNION REDUCING ELBOWS



Fractional Tube									
T - Tube O.D.(in.)	Tx - Tube O.D.(in.)	Basic Ordering Number	Dimension, in. (mm)						
			L	C	D	F	Cx	G	Lx
3/16	1/8	_T-LUR-F3-F2	1.00 (25.4)	0.54 (13.7)	0.50 (12.7)	0.50 (12.7)	0.50 (12.7)	0.44 (11.1)	0.97 (24.7)
1/4	1/8	_T-LUR-F4-F2	1.06 (26.9)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.50 (12.7)	0.44 (11.1)	1.00 (25.4)
5/16	1/8	_T-LUR-F5-F2	1.17 (29.7)	0.64 (16.3)	0.63 (15.9)	0.56 (14.3)	0.50 (12.7)	0.44 (11.1)	1.04 (26.4)
5/16	1/4	_T-LUR-F5-F4	1.17 (29.7)	0.64 (16.3)	0.63 (15.9)	0.56 (14.3)	0.60 (15.2)	0.56 (14.3)	1.14 (29.0)
3/8	1/8	_T-LUR-F6-F2	1.20 (30.5)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.50 (12.7)	0.44 (11.1)	1.04 (26.4)
3/8	1/4	_T-LUR-F6-F4	1.20 (30.5)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.60 (15.2)	0.56 (14.3)	1.14 (29.0)
3/8	5/16	_T-LUR-F6-F5	1.20 (30.5)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.64 (16.3)	0.63 (15.9)	1.17 (29.7)
1/2	1/4	_T-LUR-F8-F4	1.42 (36.1)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.60 (15.2)	0.56 (14.3)	1.27 (32.2)
1/2	5/16	_T-LUR-F8-F5	1.42 (36.1)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.64 (16.3)	0.63 (15.9)	1.28 (32.5)
1/2	3/8	_T-LUR-F8-F6	1.42 (36.1)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.66 (16.8)	0.69 (17.5)	1.32 (33.6)
5/8	3/8	_T-LUR-F10-F6	1.50 (38.1)	0.96 (24.4)	1.00 (25.4)	0.94 (23.8)	0.66 (16.8)	0.69 (17.5)	1.40 (35.6)
5/8	1/2	_T-LUR-F10-F8	1.50 (38.1)	0.96 (24.4)	1.00 (25.4)	0.94 (23.8)	0.90 (22.9)	0.87 (22.2)	1.50 (38.1)
3/4	1/4	_T-LUR-F12-F4	1.57 (39.9)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.60 (15.2)	0.56 (14.3)	1.41 (35.9)
3/4	3/8	_T-LUR-F12-F6	1.57 (39.9)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.66 (16.8)	0.69 (17.5)	1.47 (37.4)
3/4	1/2	_T-LUR-F12-F8	1.57 (39.9)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.90 (22.9)	0.87 (22.2)	1.57 (39.9)
7/8	1/4	_T-LUR-F14-F4	1.76 (44.7)	1.02 (25.9)	1.25 (31.8)	1.37 (34.9)	0.60 (15.2)	0.56 (14.3)	1.60 (40.7)
1	1/2	_T-LUR-F16-F8	1.93 (49.0)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)	0.90 (22.9)	0.87 (22.2)	1.75 (44.4)
1	3/4	_T-LUR-F16-F12	1.93 (49.0)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)	0.96 (24.4)	1.13 (28.6)	1.75 (44.4)

Metric Tube									
T - Tube O.D.(mm)	Tx - Tube O.D.(mm)	Basic Ordering Number	Dimension, mm (in.)						
			L	C	D	F	Cx	G	Lx
8	6	_T-LUR-M8-M6	28.8 (1.13)	16.2 (0.64)	16.0 (0.63)	14.3 (0.56)	15.3 (0.60)	14.0 (0.55)	27.9 (1.10)
10	8	_T-LUR-M10-M8	31.5 (1.24)	17.2 (0.68)	19.0 (0.75)	17.5 (0.69)	16.2 (0.64)	16.0 (0.63)	30.5 (1.20)
12	8	_T-LUR-M12-M8	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	16.2 (0.64)	16.0 (0.63)	32.6 (1.28)
14	8	_T-LUR-M14-M8	38.8 (1.53)	24.4 (0.96)	25.0 (0.98)	23.8 (0.94)	16.2 (0.64)	16.0 (0.63)	35.4 (1.39)
14	10	_T-LUR-M14-M10	38.8 (1.53)	24.4 (0.96)	25.0 (0.98)	23.8 (0.94)	17.2 (0.68)	19.0 (0.75)	36.4 (1.43)
18	12	_T-LUR-M18-M12	39.9 (1.57)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)	22.8 (0.90)	22.0 (0.87)	38.8 (1.53)
22	12	_T-LUR-M22-M12	44.7 (1.76)	26.0 (1.02)	32.0 (1.26)	34.9 (1.37)	22.8 (0.90)	22.0 (0.87)	39.8 (1.57)
25	18	_T-LUR-M25-M20	49.0 (1.93)	31.2 (1.23)	38.0 (1.5)	34.9 (1.37)	24.4 (0.96)	30.0 (1.18)	44.4 (1.75)

MALE ELBOWS



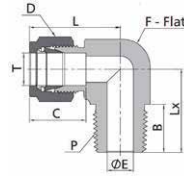
Fractional Tube to NPT Thread

T - Tube O.D.(in.)	P-NPT O.D.(in.)	Basic Ordering Number	Dimension, in. (mm)						
			L	C	D	F	E	B	Lx
1/16	1/16	_T-LM-F1-N1	0.75 (19.1)	0.34 (8.6)	0.31 (7.9)	0.44 (11.1)	0.05 (1.3)	0.38 (9.7)	0.70 (17.8)
1/16	1/8	_T-LM-F1-N2	0.75 (19.1)	0.34 (8.6)	0.31 (7.9)	0.44 (11.1)	0.05 (1.3)	0.38 (9.7)	0.70 (17.8)
1/8	1/16	_T-LM-F2-N1	0.93 (23.6)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)	0.09 (2.4)	0.38 (9.7)	0.70 (17.8)
1/8	1/8	_T-LM-F2-N2	0.93 (23.6)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)	0.09 (2.4)	0.38 (9.7)	0.70 (17.8)
1/8	1/4	_T-LM-F2-N4	0.97 (24.6)	0.50 (12.7)	0.44 (11.1)	0.50 (12.7)	0.09 (2.4)	0.56 (14.2)	0.92 (23.4)
3/16	1/8	_T-LM-F3-N2	1.00 (25.4)	0.54 (13.7)	0.50 (12.7)	0.50 (12.7)	0.12 (3.0)	0.38 (9.7)	0.74 (18.8)
3/16	1/4	_T-LM-F3-N4	1.00 (25.4)	0.54 (13.7)	0.50 (12.7)	0.50 (12.7)	0.12 (3.0)	0.56 (14.2)	0.92 (23.4)
1/4	1/8	_T-LM-F4-N2	1.06 (26.9)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.19 (4.8)	0.38 (9.7)	0.74 (18.8)
1/4	1/4	_T-LM-F4-N4	1.06 (26.9)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.19 (4.8)	0.56 (14.2)	0.92 (23.4)
1/4	3/8	_T-LM-F4-N6	1.17 (29.7)	0.60 (15.2)	0.56 (14.3)	0.69 (17.5)	0.19 (4.8)	0.56 (14.2)	1.03 (26.2)
5/16	1/4	_T-LM-F5-N4	1.13 (28.7)	0.64 (16.3)	0.63 (15.9)	0.56 (14.3)	0.25 (6.4)	0.56 (14.2)	0.96 (24.4)
5/16	3/8	_T-LM-F5-N6	1.20 (30.5)	0.64 (16.3)	0.63 (15.9)	0.69 (17.5)	0.25 (6.4)	0.56 (14.2)	1.03 (26.2)
3/8	1/4	_T-LM-F6-N4	1.20 (30.5)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.28 (7.1)	0.56 (14.2)	1.00 (25.4)
3/8	3/8	_T-LM-F6-N6	1.23 (31.2)	0.66 (16.8)	0.69 (17.5)	0.69 (17.5)	0.28 (7.1)	0.56 (14.2)	1.03 (26.2)
3/8	1/2	_T-LM-F6-N8	1.31 (33.3)	0.66 (16.8)	0.69 (17.5)	0.81 (20.6)	0.28 (7.1)	0.75 (19.1)	1.30 (33.0)
1/2	1/4	_T-LM-F8-N4	1.42 (36.1)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.28 (7.1)	0.56 (14.2)	1.11 (28.2)
1/2	3/8	_T-LM-F8-N6	1.42 (36.1)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.38 (9.7)	0.56 (14.2)	1.11 (28.2)
1/2	1/2	_T-LM-F8-N8	1.42 (36.1)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.41 (10.4)	0.75 (19.1)	1.30 (33.0)
1/2	3/4	_T-LM-F8-N12	1.57 (39.9)	0.90 (22.9)	0.87 (22.2)	1.06 (27.0)	0.41 (10.4)	0.75 (19.1)	1.45 (36.8)
5/8	3/8	_T-LM-F10-N6	1.50 (38.1)	0.96 (24.4)	1.00 (25.4)	0.94 (23.8)	0.38 (9.7)	0.56 (14.2)	1.19 (30.2)
5/8	1/2	_T-LM-F10-N8	1.50 (38.1)	0.96 (24.4)	1.00 (25.4)	0.94 (23.8)	0.47 (11.9)	0.75 (19.1)	1.38 (35.1)
5/8	3/4	_T-LM-F10-N12	1.57 (39.9)	0.96 (24.4)	1.00 (25.4)	1.06 (27.0)	0.50 (12.7)	0.75 (19.1)	1.45 (36.8)
3/4	1/2	_T-LM-F12-N8	1.57 (39.9)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.47 (11.9)	0.75 (19.1)	1.45 (36.8)
3/4	3/4	_T-LM-F12-N12	1.57 (39.9)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.62 (15.7)	0.75 (19.1)	1.45 (36.8)
7/8	3/4	_T-LM-F14-N12	1.76 (44.7)	1.02 (25.9)	1.25 (31.8)	1.37 (34.9)	0.62 (15.7)	0.75 (19.1)	1.64 (41.7)
1	3/4	_T-LM-F16-N12	1.93 (49.0)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)	0.62 (15.7)	0.75 (19.1)	1.64 (41.7)
1	1	_T-LM-F16-N16	1.93 (49.0)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)	0.88 (22.4)	0.94 (23.9)	1.83 (46.5)
1 1/4	1 1/4	_T-LM-F20-N20	2.62 (66.5)	1.62 (41.1)	1.87 (47.6)	1.69 (42.9)	1.09 (27.7)	0.94 (23.9)	2.06 (52.4)
1 1/2	1 1/2	_T-LM-F24-N24	3.07 (78.0)	1.97 (50.0)	2.25 (57.2)	2.00 (50.8)	1.34 (34.0)	1.03 (26.2)	2.38 (60.5)

Fractional Tube to RT Thread

T - Tube O.D.(in.)	P-RT O.D.(in.)	Basic Ordering Number	Dimension, in. (mm)						
			L	C	D	F	E	B	Lx
1/8	1/8	_T-LM-F2-RT2	0.93 (23.6)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)	0.09 (2.4)	0.38 (9.7)	0.70 (17.8)
1/8	1/4	_T-LM-F2-RT4	0.97 (24.6)	0.50 (12.7)	0.44 (11.1)	0.50 (12.7)	0.09 (2.4)	0.56 (14.2)	0.92 (23.4)
1/4	1/4	_T-LM-F4-RT4	1.06 (26.9)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.19 (4.8)	0.56 (14.2)	0.92 (23.4)
1/4	3/8	_T-LM-F4-RT6	1.17 (29.7)	0.60 (15.2)	0.56 (14.3)	0.69 (17.5)	0.19 (4.8)	0.56 (14.2)	1.03 (26.2)
5/16	1/4	_T-LM-F5-RT4	1.13 (28.7)	0.64 (16.3)	0.63 (15.9)	0.56 (14.3)	0.25 (6.4)	0.56 (14.2)	0.96 (24.4)
3/8	1/4	_T-LM-F6-RT4	1.20 (30.5)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.28 (7.1)	0.56 (14.2)	1.00 (25.4)
3/8	3/8	_T-LM-F6-RT6	1.23 (31.2)	0.66 (16.8)	0.69 (17.5)	0.69 (17.5)	0.28 (7.1)	0.56 (14.2)	1.03 (26.2)
1/2	3/8	_T-LM-F8-RT6	1.42 (36.1)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.38 (9.7)	0.56 (14.2)	1.10 (27.9)
1/2	1/2	_T-LM-F8-RT8	1.42 (36.1)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.41 (10.4)	0.75 (19.1)	1.30 (33.0)
3/4	1/2	_T-LM-F12-RT8	1.57 (39.9)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.47 (11.9)	0.75 (19.1)	1.45 (36.8)
1	1	_T-LM-F16-RT16	1.93 (49.0)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)	0.88 (22.4)	0.94 (23.9)	1.83 (46.5)

MALE ELBOWS



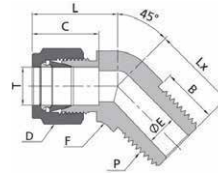
Metric Tube to NPT Thread

T - Tube O.D.(mm)	P-RT Size	Basic Ordering Number	Dimension, mm (in.)						
			L	C	D	F	E	B	Lx
3	1/8	_T-LM-M3-N2	23.6 (0.93)	12.9 (0.51)	12.0 (0.47)	11.1 (0.44)	2.4 (0.09)	9.7 (0.38)	17.8 (0.70)
3	1/4	_T-LM-M3-N4	24.6 (0.97)	12.9 (0.51)	12.0 (0.47)	12.7 (0.50)	2.4 (0.09)	14.2 (0.56)	23.4 (0.92)
4	1/8	_T-LM-M4-N2	25.4 (1.00)	13.7 (0.54)	12.0 (0.47)	12.7 (0.50)	2.4 (0.09)	9.7 (0.38)	18.8 (0.74)
4	1/4	_T-LM-M4-N4	25.4 (1.00)	13.7 (0.54)	12.0 (0.47)	12.7 (0.50)	2.4 (0.09)	14.2 (0.56)	23.4 (0.92)
6	1/8	_T-LM-M6-N2	27.0 (1.06)	15.3 (0.60)	14.0 (0.55)	12.7 (0.50)	4.8 (0.19)	9.7 (0.38)	18.8 (0.74)
6	1/4	_T-LM-M6-N4	27.0 (1.06)	15.3 (0.60)	14.0 (0.55)	12.7 (0.50)	4.8 (0.19)	14.2 (0.56)	23.4 (0.92)
8	1/4	_T-LM-M8-N4	28.8 (1.13)	16.2 (0.64)	16.0 (0.63)	14.3 (0.56)	6.4 (0.25)	14.2 (0.56)	24.4 (0.96)
8	3/8	_T-LM-M8-N6	30.6 (1.20)	16.2 (0.64)	16.0 (0.63)	17.5 (0.69)	6.4 (0.25)	14.2 (0.56)	26.2 (1.03)
10	1/4	_T-LM-M10-N4	31.5 (1.24)	17.2 (0.68)	19.0 (0.75)	17.5 (0.69)	7.1 (0.28)	14.2 (0.56)	26.2 (1.03)
10	3/8	_T-LM-M10-N6	31.5 (1.24)	17.2 (0.68)	19.0 (0.75)	17.5 (0.69)	7.9 (0.31)	14.2 (0.56)	26.2 (1.03)
10	1/2	_T-LM-M10-M8	33.5 (1.32)	17.2 (0.68)	19.0 (0.75)	20.6 (0.81)	7.9 (0.31)	19.1 (0.75)	33.0 (1.30)
12	3/8	_T-LM-M12-N6	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	9.5 (0.37)	14.2 (0.56)	28.2 (1.11)
12	1/2	_T-LM-M12-N8	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	9.5 (0.37)	19.1 (0.75)	33.0 (1.30)
15	1/2	_T-LM-M15-N8	38.0 (1.50)	24.4 (0.96)	25.0 (0.98)	23.8 (0.94)	11.9 (0.47)	19.1 (0.75)	35.1 (1.38)
16	1/2	_T-LM-M16-N8	38.0 (1.50)	24.4 (0.96)	25.0 (0.98)	23.8 (0.94)	11.9 (0.47)	19.1 (0.75)	35.1 (1.38)
16	3/4	_T-LM-M16-N12	39.8 (1.57)	24.4 (0.96)	25.0 (0.98)	27.0 (1.06)	12.7 (0.50)	19.1 (0.75)	36.8 (1.45)
18	1/2	_T-LM-M18-N8	39.8 (1.57)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)	11.9 (0.47)	19.1 (0.75)	36.8 (1.45)
18	3/4	_T-LM-M18-N12	39.8 (1.57)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)	15.1 (0.59)	19.1 (0.75)	36.8 (1.45)
20	1/2	_T-LM-M20-N8	44.6 (1.76)	26.0 (1.02)	32.0 (1.26)	34.9 (1.37)	11.9 (0.47)	19.1 (0.75)	41.7 (1.64)
20	3/4	_T-LM-M20-N12	44.6 (1.76)	26.0 (1.02)	32.0 (1.26)	34.9 (1.37)	15.9 (0.63)	19.1 (0.75)	41.7 (1.64)
22	3/4	_T-LM-M22-N12	44.6 (1.76)	26.0 (1.02)	32.0 (1.26)	34.9 (1.37)	15.9 (0.63)	19.1 (0.75)	41.7 (1.64)
22	1	_T-LM-M22-N16	44.6 (1.76)	26.0 (1.02)	32.0 (1.26)	34.9 (1.37)	18.3 (0.72)	23.9 (0.94)	46.5 (1.83)
25	1	_T-LM-M25-N16	49.1 (1.93)	31.3 (1.23)	38.0 (1.50)	34.9 (1.37)	21.8 (0.86)	23.9 (0.94)	46.5 (1.83)
30	1 1/4	_T-LM-M30-N20	69.9 (2.75)	39.6 (1.56)	50.0 (1.97)	42.9 (1.69)	26.2 (1.03)	23.9 (0.94)	53.1 (2.09)
32	1 1/4	_T-LM-M32-N20	72.3 (2.85)	42.0 (1.65)	50.0 (1.97)	42.9 (1.69)	27.8 (1.09)	23.9 (0.94)	53.1 (2.09)
38	1 1/2	_T-LM-M38-N24	84.0 (3.31)	49.4 (1.94)	60.0 (2.36)	50.8 (2.00)	33.7 (1.33)	26.2 (1.03)	60.4 (2.38)

Metric Tube to RT Thread

T - Tube O.D.(mm)	P-RT Size	Basic Ordering Number	Dimension, mm (in.)						
			L	C	D	F	E	B	Lx
3	1/8	_T-LM-M3-RT2	23.6 (0.93)	12.9 (0.51)	12.0 (0.47)	11.1 (0.44)	2.4 (0.09)	9.7 (0.38)	17.8 (0.70)
4	1/8	_T-LM-MT-RT2	25.4 (1.00)	13.7 (0.54)	12.0 (0.47)	12.7 (0.50)	2.4 (0.09)	9.7 (0.38)	18.8 (0.74)
6	1/4	_T-LM-M6-RT4	27.0 (1.06)	15.3 (0.60)	14.0 (0.55)	12.7 (0.50)	4.8 (0.19)	14.2 (0.56)	23.4 (0.92)
8	1/4	_T-LM-M8-RT4	28.8 (1.13)	16.2 (0.64)	16.0 (0.63)	14.3 (0.56)	6.4 (0.25)	14.2 (0.56)	24.4 (0.96)
10	3/8	_T-LM-M10-RT6	31.5 (1.24)	17.2 (0.68)	19.0 (0.75)	17.5 (0.69)	7.9 (0.31)	14.2 (0.56)	26.2 (1.03)
12	3/8	_T-LM-M12-RT6	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	9.5 (0.37)	14.2 (0.56)	28.2 (1.11)
12	1/2	_T-LM-M12-RT8	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	0.5 (0.02)	19.1 (0.75)	33.0 (1.30)
15	1/2	_T-LM-M15-RT8	38.1 (1.50)	24.4 (0.90)	25.0 (0.98)	23.8 (0.94)	11.9 (0.47)	19.1 (0.75)	35.1 (1.38)
16	1/2	_T-LM-M16-RT8	38.0 (1.50)	24.4 (0.90)	25.0 (0.98)	23.8 (0.94)	11.9 (0.47)	19.1 (0.75)	35.1 (1.38)
18	1/2	_T-LM-M18-RT8	39.8 (1.57)	24.4 (0.90)	30.0 (1.18)	27.0 (1.06)	11.9 (0.47)	19.1 (0.75)	36.8 (1.45)
20	3/4	_T-LM-M20-RT12	44.6 (1.76)	26.0 (0.90)	32.0 (1.26)	34.9 (1.37)	15.9 (0.63)	19.1 (0.75)	41.7 (1.64)
22	3/4	_T-LM-M22-RT12	44.6 (1.76)	26.0 (0.90)	32.0 (1.26)	34.9 (1.37)	15.9 (0.63)	19.1 (0.75)	41.7 (1.64)
25	1	_T-LM-M25-RT16	49.1 (1.93)	31.3 (0.90)	38.0 (1.50)	34.9 (1.37)	21.8 (0.86)	23.9 (0.94)	46.5 (1.83)
28	1	_T-LM-M28-RT16	64.0 (2.52)	36.6 (0.90)	46.0 (1.81)	42.9 (1.69)	21.8 (0.86)	23.9 (0.94)	53.1 (2.09)

45° MALE ELBOWS



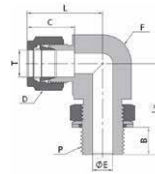
Fractional Tube to NPT Thread

T - Tube O.D.(in.)	P-NPT Size	Basic Ordering Number	Dimension, in. (mm)						
			L	C	D	F	E	B	Lx
1/16	1/16	_T-MV-F1-N1	0.62 (15.7)	0.34 (8.6)	0.31 (7.9)	0.37 (9.5)	0.05 (1.3)	0.38 (9.7)	0.57 (14.5)
1/8	1/8	_T-MV-F2-N2	0.82 (20.8)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)	0.09 (2.3)	0.38 (9.7)	0.66 (16.8)
3/16	1/8	_T-MV-F3-N2	0.85 (21.6)	0.54 (13.7)	0.50 (12.7)	0.44 (11.1)	0.12 (3.0)	0.38 (9.7)	0.58 (14.7)
1/4	1/8	_T-MV-F4-N2	0.97 (24.6)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.19 (4.8)	0.38 (9.7)	0.65 (16.5)
1/4	1/4	_T-MV-F4-N4	0.97 (24.6)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.19 (4.8)	0.56 (14.2)	0.83 (21.1)
5/16	1/8	_T-MV-F5-N2	1.03 (26.1)	0.64 (16.3)	0.63 (15.9)	0.56 (14.3)	0.19 (4.8)	0.38 (9.7)	0.66 (16.8)
3/8	1/8	_T-MV-F6-N2	1.10 (27.9)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.19 (4.8)	0.38 (9.7)	0.72 (18.3)
3/8	1/4	_T-MV-F6-N4	1.10 (27.9)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.28 (7.1)	0.56 (14.2)	0.90 (22.9)
3/8	3/8	_T-MV-F6-N6	1.15 (29.2)	0.66 (16.8)	0.69 (17.5)	0.81 (20.6)	0.28 (7.1)	0.75 (19.1)	0.95 (24.1)
1/2	3/8	_T-MV-F8-N6	1.26 (32.0)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.38 (9.7)	0.75 (19.1)	0.95 (24.1)
5/8	1/2	_T-V-F10-N8	1.21 (30.7)	0.96 (24.4)	1.00 (25.4)	0.94 (23.8)	0.47 (11.9)	0.75 (19.1)	1.17 (29.7)
3/4	3/4	_T-MV-F12-N12	1.34 (34.0)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.62 (15.7)	0.75 (19.1)	1.22 (31.0)
7/8	3/4	_T-MV-F14-N12	1.59 (40.4)	1.02 (25.9)	1.25 (31.8)	1.25 (31.8)	0.62 (15.7)	0.75 (19.1)	1.27 (32.3)
1	1	_T-MV-F16-N16	1.59 (40.4)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)	0.88 (22.4)	0.94 (23.9)	1.49 (37.8)

Metric Tube to NPT Thread

T - Tube O.D.(mm)	P-NPT Size	Basic Ordering Number	Dimension, mm (in.)						
			L	C	D	F	E	B	Lx
6	1/8	_T-MV-M6-N2	23.4 (0.92)	15.3 (0.60)	14.0 (0.55)	12.7 (0.50)	4.8 (0.19)	9.7 (0.38)	16.8 (0.66)
6	1/4	_T-MV-M6-N4	23.4 (0.92)	15.3 (0.60)	14.0 (0.55)	12.7 (0.50)	4.8 (0.19)	14.2 (0.56)	21.8 (0.86)
8	1/8	_T-MV-M8-N2	24.3 (0.96)	16.2 (0.64)	16.0 (0.63)	15.9 (0.63)	4.8 (0.19)	9.7 (0.38)	16.8 (0.66)
10	1/4	_T-MV-M10-N4	26.6 (1.05)	17.2 (0.68)	19.0 (0.75)	17.5 (0.69)	7.9 (0.31)	14.2 (0.56)	24.1 (0.95)
12	3/8	_T-MV-M12-N6	29.1 (1.15)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	9.5 (0.37)	19.1 (0.75)	24.1 (0.95)
12	1/2	_T-MV-M12-N8	30.7 (1.21)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	9.5 (0.37)	19.1 (0.75)	29.7 (1.17)
16	1/2	_T-MV-M16-N8	30.7 (1.21)	24.4 (0.96)	25.0 (0.98)	23.8 (0.94)	11.9 (0.47)	19.1 (0.75)	29.7 (1.17)
18	3/4	_T-MV-M18-N12	34.0 (1.34)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)	15.1 (0.59)	19.1 (0.75)	1.22 (31.0)
22	3/4	_T-MV-M22-N12	40.4 (1.59)	26.0 (1.02)	32.0 (1.26)	34.9 (1.37)	15.9 (0.63)	19.1 (0.75)	32.3 (1.27)
25	1	_T-MV-M25-N16	40.4 (1.59)	31.3 (1.23)	38.0 (1.50)	34.9 (1.37)	21.8 (0.86)	23.9 (0.94)	37.8 (1.49)

AJUSTABLE MALE ELBOWS



Fractional Tube to SAE/MS Thread

T - Tube O.D.(in.)	P-SAE/MS Size	Basic Ordering Number	Dimension, in. (mm)						
			L	B	C	D	E	F	Lx
1/4	7/16-20	_T-AME-F4-ST7	1.12 (28.4)	0.39 (9.9)	0.60 (15.2)	0.56 (14.3)	0.19 (4.8)	0.50 (12.7)	1.12 (28.4)
1/4	9/16-18	_T-AME-F4-ST9	1.20 (30.5)	0.44 (11.2)	0.60 (15.2)	0.56 (14.3)	0.19 (4.8)	0.63 (15.9)	1.27 (32.3)
5/16	1/2-20	_T-AME-F5-ST8	1.19 (30.2)	0.39 (9.9)	0.64 (16.3)	0.63 (15.9)	0.23 (5.8)	0.56 (14.3)	1.16 (29.5)
3/8	7/16-20	_T-AME-F6-ST7	1.31 (33.3)	0.39 (9.9)	0.66 (16.8)	0.69 (17.5)	0.20 (5.1)	0.63 (15.9)	1.24 (31.5)
3/8	9/16-18	_T-AME-F6-ST9	1.26 (32.0)	0.44 (11.2)	0.66 (16.8)	0.69 (17.5)	0.28 (7.1)	0.63 (15.9)	1.27 (32.3)
3/8	3/4-16	_T-AME-F6-ST12	1.37 (34.8)	0.50 (12.7)	0.66 (16.8)	0.69 (17.5)	0.28 (7.1)	0.81 (20.6)	1.49 (37.8)
1/2	9/16-18	_T-AME-F8-ST9	1.48 (37.6)	0.44 (11.2)	0.90 (22.9)	0.87 (22.2)	0.28 (7.1)	0.81 (20.6)	1.48 (37.5)
1/2	3/4-16	_T-AME-F8-ST12	1.48 (37.6)	0.50 (12.7)	0.90 (22.9)	0.87 (22.2)	0.41 (10.4)	0.81 (20.6)	1.49 (37.8)
5/8	7/8-14	_T-AME-F10-ST14	1.56 (39.6)	0.56 (14.2)	0.96 (24.4)	1.00 (25.4)	0.50 (12.7)	0.94 (23.8)	1.71 (43.4)
3/4	1 1/16-12	_T-AME-F12-ST17	1.63 (41.4)	0.66 (16.8)	0.96 (24.4)	1.13 (28.6)	0.62 (15.7)	1.06 (27.0)	1.92 (48.8)
7/8	1 3/16-12	_T-AME-F14-ST19	1.70 (43.2)	0.66 (16.8)	1.02 (25.9)	1.25 (31.8)	0.72 (18.3)	1.19 (30.2)	1.99 (50.5)
1	1 5/16-12	_T-AME-F16-ST21	1.99 (50.5)	0.66 (16.8)	1.23 (31.2)	1.50 (38.1)	0.88 (22.4)	1.37 (34.9)	2.11 (53.6)
1 1/4	1 5/8-12	_T-AME-F20-ST26	2.67 (67.8)	0.66 (16.8)	1.62 (41.1)	1.87 (47.6)	1.09 (27.7)	1.69 (42.9)	2.29 (58.2)
1 1/2	1 7/8-12	_T-AME-F24-ST30	3.07 (78.0)	0.66 (16.8)	1.97 (50.0)	2.25 (57.2)	1.34 (34.0)	2.00 (50.8)	2.38 (60.5)

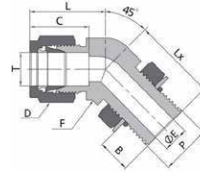
Fractional Tube to ISO Parallel Thread

T - Tube O.D.(in.)	P-BSP Size	Basic Ordering Number	Dimension, in. (mm)						
			L	B	C	D	E	F	Lx
1/4	1/8	_T-AME-F4-PP2	1.06 (26.9)	0.32 (8.1)	0.60 (15.2)	0.56 (14.3)	0.16 (4.1)	0.50 (12.7)	1.04 (26.4)
1/4	1/4	_T-AME-F4-PP4	1.14 (29.0)	0.36 (9.1)	0.60 (15.2)	0.56 (14.3)	0.19 (4.8)	0.63 (15.9)	1.27 (32.3)
3/8	1/4	_T-AME-F6-PP4	1.20 (30.5)	0.36 (9.1)	0.66 (16.8)	0.69 (17.5)	0.23 (5.8)	0.63 (15.9)	1.27 (32.3)
3/8	3/8	_T-AME-F6-PP6	1.31 (33.3)	0.37 (9.4)	0.66 (16.8)	0.69 (17.5)	0.28 (7.1)	0.81 (20.6)	1.46 (37.1)
1/2	1/4	_T-AME-F8-PP4	1.42 (36.1)	0.36 (9.1)	0.90 (22.9)	0.87 (22.2)	0.23 (5.8)	0.81 (20.6)	1.38 (35.1)
1/2	3/8	_T-AME-F8-PP6	1.42 (36.1)	0.37 (9.4)	0.90 (22.9)	0.87 (22.2)	0.31 (7.9)	0.81 (20.6)	1.46 (37.1)
1/2	1/2	_T-AME-F8-PP8	1.50 (38.1)	0.51 (13.0)	0.90 (22.9)	0.87 (22.2)	0.41 (10.4)	0.94 (23.8)	1.71 (43.4)
5/8	1/2	_T-AME-F10-PP8	1.50 (38.1)	0.51 (13.0)	0.96 (24.4)	1.00 (25.4)	0.47 (11.9)	0.94 (23.8)	1.71 (43.4)
3/4	1/2	_T-AME-F12-PP8	1.57 (39.9)	0.51 (13.0)	0.96 (24.4)	1.13 (28.6)	0.47 (11.9)	1.06 (27.0)	1.78 (45.2)
3/4	3/4	_T-AME-F12-PP12	1.57 (39.9)	0.51 (13.0)	0.96 (24.4)	1.13 (28.6)	0.62 (15.7)	1.06 (27.0)	1.92 (48.8)
1	3/4	_T-AME-F16-PP12	1.93 (49.0)	0.51 (13.0)	1.23 (31.2)	1.50 (38.1)	0.62 (15.7)	1.37 (34.9)	2.10 (53.3)
1	1	_T-AME-F16-PP16	1.93 (49.0)	0.55 (14.0)	1.23 (31.2)	1.50 (38.1)	0.78 (19.8)	1.37 (34.9)	2.11 (53.6)

Metric Tube to ISO Parallel Thread

T - Tube O.D.(mm)	P-BSP Size	Basic Ordering Number	Dimension, mm (in.)						
			L	B	C	D	E	F	Lx
6	1/8	_T-AME-M6-PP2	27.0 (1.06)	8.1 (0.32)	15.3 (0.60)	14.0 (0.55)	4.0 (0.16)	12.7 (0.50)	26.4 (1.04)
6	1/4	_T-AME-M6-PP4	29.0 (1.14)	9.1 (0.36)	15.3 (0.60)	14.0 (0.55)	4.8 (0.19)	15.9 (0.63)	32.3 (1.27)
8	1/8	_T-AME-M8-PP2	28.8 (1.13)	8.1 (0.32)	16.2 (0.64)	16.0 (0.63)	4.0 (0.16)	14.3 (0.56)	27.4 (1.08)
8	1/4	_T-AME-M8-PP4	29.9 (1.18)	9.1 (0.36)	16.2 (0.64)	16.0 (0.63)	5.9 (0.23)	15.9 (0.63)	32.2 (1.27)
10	1/4	_T-AME-M10-PP4	33.5 (1.32)	9.1 (0.36)	17.2 (0.68)	19.0 (0.75)	5.9 (0.23)	20.6 (0.81)	35.0 (1.38)
10	3/8	_T-AME-M10-PP6	33.5 (1.32)	9.4 (0.37)	17.2 (0.68)	19.0 (0.75)	7.9 (0.31)	20.6 (0.81)	37.1 (1.46)
12	1/4	_T-AME-M12-PP4	36.0 (1.42)	9.1 (0.36)	22.8 (0.90)	22.0 (0.87)	5.9 (0.23)	20.6 (0.81)	35.0 (1.38)
12	3/8	_T-AME-M12-PP6	36.0 (1.42)	9.4 (0.37)	22.8 (0.90)	22.0 (0.87)	7.9 (0.31)	20.6 (0.81)	37.1 (1.46)
12	1/2	_T-AME-M12-PP8	38.0 (1.50)	13.0 (0.51)	22.8 (0.90)	22.0 (0.87)	9.5 (0.37)	23.8 (0.94)	43.4 (1.71)
12	3/4	_T-AME-M12-PP12	39.8 (1.57)	13.0 (0.51)	22.8 (0.90)	22.0 (0.87)	9.5 (0.37)	27.0 (1.06)	48.8 (1.92)

45° AJUSTABLE MALE ELBOWS



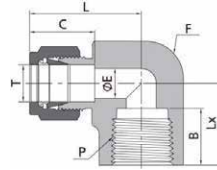
Fractional Tube to SAE/MS Thread

T - Tube O.D.(in.)	P-SAE/MS Size	Basic Ordering Number	Dimension, in. (mm)						
			L	B	C	D	E	F	Lx
1/4	7/16-20	_T-AMV-FT-ST7	1.01 (25.7)	0.39 (9.9)	0.60 (15.2)	0.56 (14.3)	0.19 (4.8)	0.50 (12.7)	1.01 (25.7)
3/8	9/16-18	_T-AMV-F6-ST9	1.10 (27.9)	0.44 (11.2)	0.66 (16.8)	0.69 (17.5)	0.28 (7.1)	0.63 (15.9)	1.11 (28.2)
1/2	3/4-16	_T-AMV-F8-ST12	1.26 (32.0)	0.50 (12.7)	0.90 (22.9)	0.87 (22.2)	0.41 (10.4)	0.81 (20.6)	1.27 (32.3)
3/4	1 1/16-12	_T-AMV-F12-ST17	1.57 (39.9)	0.66 (16.8)	0.96 (24.4)	1.13 (28.6)	0.62 (15.7)	1.06 (27.0)	1.86 (47.2)
1	1 5/16-12	_T-AMV-F16-ST21	1.87 (47.5)	0.66 (16.8)	1.23 (31.2)	1.50 (38.1)	0.88 (22.4)	1.37 (34.9)	1.99 (50.5)

Fractional Tube to ISO Parallel Thread

T - Tube O.D.(in.)	P-BSP Size	Basic Ordering Number	Dimension, in. (mm)						
			L	B	C	D	E	F	Lx
1/4	1/8	_T-AMV-F4-PP2	1.06 (26.9)	0.32 (8.1)	0.60 (15.2)	0.56 (14.3)	0.16 (4.1)	0.50 (12.7)	1.04 (26.4)
3/8	1/4	_T-AMV-F6-PP4	1.20 (30.5)	0.36 (9.1)	0.66 (16.8)	0.69 (17.5)	0.23 (5.8)	0.63 (15.9)	1.27 (32.3)
1/2	1/2	_T-AMV-F8-PP8	1.50 (38.1)	0.51 (13.0)	0.90 (22.9)	0.87 (22.2)	0.41 (10.4)	0.94 (23.8)	1.71 (43.4)
3/4	3/4	_T-AMV-F12-PP12	1.57 (39.9)	0.51 (13.0)	0.96 (24.4)	1.13 (28.6)	0.62 (15.7)	1.06 (27.0)	1.92 (48.8)
1	1	_T-AMV-F16-PP16	1.93 (49.0)	0.55 (14.0)	1.23 (31.2)	1.50 (38.1)	0.78 (19.8)	1.37 (34.9)	2.11 (53.6)

FEMALE ELBOWS



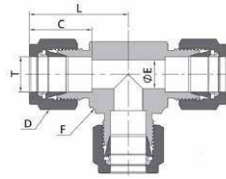
Fractional Tube to NPT Thread

T - Tube O.D. (in.)	P-NPT Size	Basic Ordering Number	Dimension, in. (mm)						
			L	B	C	D	E	F	Lx
1/16	1/16	_T-LF-F1-N1	0.71 (18.0)	0.39 (9.9)	0.34 (8.6)	0.31 (7.9)	0.05 (1.3)	0.44 (11.1)	0.56 (14.2)
1/16	1/8	_T-LF-F1-N2	0.81 (20.6)	0.41 (10.4)	0.34 (8.6)	0.31 (7.9)	0.05 (1.3)	0.56 (14.3)	0.75 (19.1)
1/8	1/8	_T-LF-F2-N2	0.97 (24.6)	0.41 (10.4)	0.50 (12.7)	0.44 (11.1)	0.09 (2.3)	0.56 (14.3)	0.75 (19.1)
1/8	1/4	_T-LF-F2-N4	1.08 (27.4)	0.59 (15.0)	0.50 (12.7)	0.44 (11.1)	0.09 (2.3)	0.69 (17.5)	0.88 (22.4)
3/16	1/8	_T-LF-F3-N2	1.00 (25.4)	0.41 (10.4)	0.54 (13.7)	0.50 (12.7)	0.12 (3.0)	0.5 (12.7)	0.75 (19.1)
1/4	1/8	_T-LF-F4-N2	1.06 (26.9)	0.41 (10.4)	0.60 (15.2)	0.56 (14.3)	0.19 (4.8)	0.56 (14.3)	0.75 (19.1)
1/4	1/4	_T-LF-F4-N4	1.17 (29.7)	0.59 (15.0)	0.60 (15.2)	0.56 (14.3)	0.19 (4.8)	0.69 (17.5)	0.88 (22.4)
1/4	3/8	_T-LF-F4-N6	1.25 (31.8)	0.59 (15.0)	0.60 (15.2)	0.56 (14.3)	0.19 (4.8)	0.81 (20.6)	0.88 (22.4)
1/4	1/2	_T-LF-F4-N8	1.36 (34.5)	0.78 (19.8)	0.60 (15.2)	0.56 (14.3)	0.19 (4.8)	1.00 (25.4)	1.12 (28.4)
5/16	1/8	_T-LF-F5-N2	1.13 (28.7)	0.41 (10.4)	0.64 (16.3)	0.63 (15.9)	0.25 (6.4)	0.56 (14.3)	0.75 (19.1)
5/16	1/4	_T-LF-F5-N4	1.20 (30.5)	0.59 (15.0)	0.64 (16.3)	0.63 (15.9)	0.25 (6.4)	0.69 (17.5)	0.88 (22.4)
3/8	1/8	_T-LF-F6-N2	1.20 (30.5)	0.41 (10.4)	0.66 (16.8)	0.69 (17.5)	0.28 (7.1)	0.63 (15.9)	0.75 (19.1)
3/8	1/4	_T-LF-F6-N4	1.23 (31.2)	0.59 (15.0)	0.66 (16.8)	0.69 (17.5)	0.28 (7.1)	0.69 (17.5)	0.88 (22.4)
3/8	3/8	_T-LF-F6-N6	1.31 (33.3)	0.59 (15.0)	0.66 (16.8)	0.69 (17.5)	0.28 (7.1)	0.81 (20.6)	0.88 (22.4)
3/8	1/2	_T-LF-F6-N8	1.42 (36.1)	0.78 (19.8)	0.66 (16.8)	0.69 (17.5)	0.28 (7.1)	1.00 (25.4)	1.12 (28.4)
1/2	1/4	_T-LF-F8-N4	1.42 (36.1)	0.59 (15.0)	0.90 (22.9)	0.87 (22.2)	0.41 (10.4)	0.81 (20.6)	0.88 (22.4)
1/2	3/8	_T-LF-F8-N6	1.42 (36.1)	0.59 (15.0)	0.90 (22.9)	0.87 (22.2)	0.41 (10.4)	0.81 (20.6)	0.88 (22.4)
1/2	1/2	_T-LF-F8-N8	1.53 (38.9)	0.78 (19.8)	0.90 (22.9)	0.87 (22.2)	0.41 (10.4)	1.00 (25.4)	1.12 (28.4)
5/8	3/8	_T-LF-F10-N6	1.50 (38.1)	0.59 (15.0)	0.96 (24.4)	1.00 (25.4)	0.50 (12.7)	0.94 (23.8)	0.88 (22.4)
5/8	1/2	_T-LF-F10-N8	1.57 (39.9)	0.78 (19.8)	0.96 (24.4)	1.00 (25.4)	0.50 (12.7)	1.06 (27.0)	1.12 (28.4)
3/4	1/2	_T-LF-F12-N8	1.57 (39.9)	0.78 (19.8)	0.96 (24.4)	1.13 (28.6)	0.62 (15.7)	1.06 (27.0)	1.12 (28.4)
3/4	3/4	_T-LF-F12-N12	1.76 (44.7)	0.81 (20.6)	0.96 (24.4)	1.13 (28.6)	0.62 (15.7)	1.37 (34.9)	1.25 (31.8)
7/8	3/4	_T-LF-F14-N12	1.76 (44.7)	0.81 (20.6)	1.02 (25.9)	1.25 (31.8)	0.72 (18.3)	1.37 (34.9)	1.25 (31.8)
1	3/4	_T-LF-F16-N12	1.93 (49.0)	0.81 (20.6)	1.23 (31.2)	1.50 (38.1)	0.88 (22.4)	1.37 (34.9)	1.25 (31.8)
1	1	_T-LF-F6-N16	2.11 (53.6)	1.00 (25.4)	1.23 (31.2)	1.50 (38.1)	0.88 (22.4)	1.69 (42.9)	1.50 (38.1)

Metric Tube to NPT Thread

T - Tube O.D. (mm)	P-NPT Size	Basic Ordering Number	Dimension, mm (in.)						
			L	B	C	D	E	F	Lx
6	1/8	_T-LF-M6-N2	27.0 (1.06)	10.4 (0.41)	15.3 (0.60)	14.0 (0.55)	4.8 (0.19)	12.7 (0.50)	19.0 (0.75)
6	1/4	_T-LF-M6-N4	29.8 (1.17)	15.0 (0.59)	15.3 (0.60)	14.0 (0.55)	4.8 (0.19)	17.5 (0.69)	22.4 (0.88)
8	1/8	_T-LF-M8-N2	28.8 (1.13)	10.4 (0.41)	16.2 (0.64)	16.0 (0.63)	4.8 (0.19)	14.3 (0.56)	19.1 (0.75)
8	1/4	_T-LF-M8-N4	30.6 (1.20)	15.0 (0.59)	16.2 (0.64)	16.0 (0.63)	6.4 (0.25)	17.5 (0.69)	22.4 (0.88)
10	1/4	_T-LF-M10-N4	33.5 (1.32)	15.0 (0.59)	17.2 (0.68)	19.0 (0.75)	7.9 (0.31)	20.6 (0.81)	22.4 (0.88)
10	3/8	_T-LF-M10-N6	33.5 (1.32)	15.0 (0.59)	17.2 (0.68)	19.0 (0.75)	7.9 (0.31)	20.6 (0.81)	22.4 (0.88)
10	1/2	_T-LF-M10-N8	36.6 (1.44)	19.8 (0.78)	17.2 (0.68)	19.0 (0.75)	7.9 (0.31)	25.4 (1.00)	28.5 (1.12)
12	1/4	_T-LF-M12-N4	36.0 (1.42)	15.0 (0.59)	22.8 (0.90)	22.0 (0.87)	7.9 (0.31)	20.6 (0.81)	22.4 (0.88)
12	3/8	_T-LF-M12-N6	36.0 (1.42)	15.0 (0.59)	22.8 (0.90)	22.0 (0.87)	9.5 (0.37)	20.6 (0.81)	22.4 (0.88)
12	1/2	_T-LF-M12-N8	38.8 (1.53)	19.8 (0.78)	22.8 (0.90)	22.0 (0.87)	9.5 (0.37)	25.4 (1.00)	28.4 (1.12)
16	3/8	_T-LF-M16-N6	39.5 (1.56)	15.0 (0.59)	24.4 (0.96)	25.0 (0.98)	9.5 (0.37)	27.0 (1.06)	23.6 (0.93)
16	1/2	_T-LF-M16-N8	39.5 (1.56)	19.8 (0.78)	24.4 (0.96)	25.0 (0.98)	12.7 (0.50)	27.0 (1.06)	28.5 (1.12)

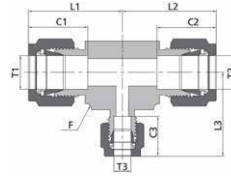
UNION TEES



Fractional Tube						
T - Tube O.D. (in.)	Basic Ordering Number	Dimension, in. (mm)				
		L	C	D	F	E
1/16	_T-TU-F1	0.70 (17.8)	0.34 (8.6)	0.31 (7.9)	0.37 (9.5)	0.05 (1.3)
1/8	_T-TU-F2	0.96 (24.4)	0.50 (12.7)	0.44 (11.1)	0.37 (9.5)	0.09 (2.3)
3/16	_T-TU-F3	0.96 (24.4)	0.54 (13.7)	0.50 (12.7)	0.44 (11.1)	0.12 (3.0)
1/4	_T-TU-F4	1.06 (26.9)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.19 (4.8)
5/16	_T-TU-F5	1.17 (29.7)	0.64 (16.2)	0.63 (15.9)	0.63 (15.9)	0.25 (6.4)
3/8	_T-TU-F6	1.20 (30.5)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.28 (7.1)
1/2	_T-TU-F8	1.42 (36.1)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.41 (10.4)
5/8	_T-TU-F10	1.53 (38.9)	0.96 (24.4)	1.00 (25.4)	1.00 (25.4)	0.50 (12.7)
3/4	_T-TU-F12	1.57 (39.9)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.62 (15.7)
7/8	_T-TU-F14	1.76 (44.7)	1.02 (25.9)	1.25 (31.8)	1.37 (34.9)	0.72 (18.3)
1	_T-TU-F16	1.93 (49.0)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)	0.88 (22.4)
1 1/8	_T-TU-F18	2.17 (55.1)	1.23 (31.2)	1.81 (46.0)	1.69 (42.9)	0.97 (24.6)
1 1/4	_T-TU-F20	2.62 (66.5)	1.62 (41.1)	1.87 (47.6)	1.69 (42.9)	1.09 (27.7)
1 1/2	_T-TU-F24	3.07 (78.0)	1.97 (50.0)	2.25 (57.2)	2.00 (50.8)	1.34 (34.0)

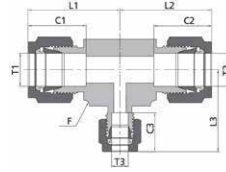
Metric Tube						
T - Tube O.D. (mm)	Basic Ordering Number	Dimension, mm (in.)				
		L	C	D	F	E
2	_T-TU-M2	22.3 (0.88)	12.9 (0.51)	12.0 (0.47)	9.5 (0.37)	1.7 (0.07)
3	_T-TU-M3	22.3 (0.88)	12.9 (0.51)	12.0 (0.47)	9.5 (0.37)	2.4 (0.09)
4	_T-TU-M4	25.4 (1.00)	13.7 (0.54)	12.0 (0.47)	12.7 (0.50)	2.4 (0.09)
6	_T-TU-M6	27.0 (1.06)	15.3 (0.60)	14.0 (0.55)	12.7 (0.50)	4.8 (0.19)
8	_T-TU-M8	29.9 (1.18)	16.2 (0.64)	16.0 (0.63)	15.9 (0.63)	6.4 (0.25)
10	_T-TU-M10	31.5 (1.24)	17.2 (0.68)	19.0 (0.75)	17.5 (0.69)	7.9 (0.31)
12	_T-TU-M12	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	9.5 (0.37)
14	_T-TU-M14	38.8 (1.53)	24.4 (0.96)	25.0 (0.98)	25.4 (1.00)	11.1 (0.44)
15	_T-TU-M15	38.8 (1.53)	24.4 (0.96)	25.0 (0.98)	25.4 (1.00)	11.9 (0.47)
16	_T-TU-M16	38.8 (1.53)	24.4 (0.96)	25.0 (0.98)	25.4 (1.00)	12.7 (0.50)
18	_T-TU-M18	38.8 (1.53)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)	15.1 (0.59)
20	_T-TU-M20	44.6 (1.76)	26.0 (1.02)	32.0 (1.26)	34.9 (1.37)	15.9 (0.63)
22	_T-TU-M22	44.6 (1.76)	26.0 (1.02)	32.0 (1.26)	34.9 (1.37)	18.3 (0.72)
25	_T-TU-M25	49.1 (1.93)	31.3 (1.23)	38.0 (1.50)	34.9 (1.37)	21.8 (0.86)
28	_T-TU-M28	64.0 (2.52)	36.6 (1.44)	46.0 (1.81)	42.9 (1.69)	21.8 (0.86)
30	_T-TU-M30	69.9 (2.75)	39.6 (1.56)	50.0 (1.97)	42.9 (1.69)	26.2 (1.03)
32	_T-TU-M32	72.3 (2.85)	42.0 (1.65)	50.0 (1.97)	42.9 (1.69)	28.6 (1.13)
38	_T-TU-M38	84.0 (3.31)	49.4 (1.94)	60.0 (2.36)	50.8 (2.00)	33.7 (1.33)

REDUCING UNION TEES



Fractional Tube				Dimension, in. (mm)						
T1 - O.D. (in.)	T2 - O.D. (in.)	T3 - O.D. (in.)	Basic Ordering Number	L1	L2	L3	C1	C2	C3	F
1/4	1/4	1/8	_T-TUR-F4-F4-F2	1.05 (26.7)	1.05 (26.7)	0.96 (24.4)	0.60 (15.2)	0.60 (15.2)	0.50 (12.7)	0.50 (12.7)
3/8	1/4	1/4	_T-TUR-F6-F4-F4	1.20 (30.5)	1.14 (29.0)	1.14 (29.0)	0.66 (16.8)	0.60 (15.2)	0.60 (15.2)	0.63 (15.9)
3/8	1/4	3/8	_T-TUR-F6-F4-F6	1.20 (30.5)	1.14 (29.0)	1.20 (30.5)	0.66 (16.8)	0.60 (15.2)	0.66 (16.8)	0.63 (15.9)
3/8	3/8	1/4	_T-TUR-F6-F6-F4	1.20 (30.5)	1.20 (30.5)	1.14 (29.0)	0.66 (16.8)	0.66 (16.8)	0.60 (15.2)	0.63 (15.9)
1/2	1/4	1/4	_T-TUR-F8-F4-F4	1.42 (36.1)	1.25 (31.8)	1.25 (31.8)	0.90 (22.9)	0.60 (15.2)	0.60 (15.2)	0.81 (20.6)
1/2	1/4	1/2	_T-TUR-F8-F4-F8	1.42 (36.1)	1.25 (31.8)	1.42 (36.1)	0.90 (22.9)	0.60 (15.2)	0.90 (22.9)	0.81 (20.6)
1/2	3/8	3/8	_T-TUR-F8-F6-F6	1.42 (36.1)	1.31 (33.3)	1.31 (33.3)	0.90 (22.9)	0.66 (16.8)	0.66 (16.8)	0.81 (20.6)
1/2	3/8	1/2	_T-TUR-F8-F6-F8	1.42 (36.1)	1.31 (33.3)	1.42 (36.1)	0.90 (22.9)	0.66 (16.8)	0.90 (22.9)	0.81 (20.6)
1/2	1/2	1/4	_T-TUR-F8-F8-F4	1.42 (36.1)	1.42 (36.1)	1.25 (31.8)	0.90 (22.9)	0.90 (22.9)	0.60 (15.2)	0.81 (20.6)
1/2	1/2	3/8	_T-TUR-F8-F8-F6	1.42 (36.1)	1.42 (36.1)	1.31 (33.3)	0.90 (22.9)	0.90 (22.9)	0.66 (16.8)	0.81 (20.6)
5/8	3/8	3/8	_T-TUR-F10-F6-F6	1.53 (38.9)	1.42 (36.1)	1.42 (36.1)	0.96 (24.4)	0.66 (16.8)	0.66 (16.8)	1.00 (25.4)
5/8	3/8	1/2	_T-TUR-F10-F6-F8	1.53 (38.9)	1.42 (36.1)	1.53 (38.9)	0.96 (24.4)	0.66 (16.8)	0.90 (22.9)	1.00 (25.4)
5/8	1/2	1/2	_T-TUR-F10-F8-F8	1.53 (38.9)	1.53 (38.9)	1.53 (38.9)	0.96 (24.4)	0.90 (22.9)	0.90 (22.9)	1.00 (25.4)
5/8	5/8	3/8	_T-TUR-F10-F10-F6	1.53 (38.9)	1.53 (38.9)	1.42 (36.1)	0.96 (24.4)	0.96 (24.4)	0.66 (16.8)	1.00 (25.4)
5/8	5/8	1/2	_T-TUR-F10-F10-F8	1.53 (38.9)	1.53 (38.9)	1.53 (38.9)	0.96 (24.4)	0.96 (24.4)	0.90 (22.9)	1.00 (25.4)
3/4	3/8	3/8	_T-TUR-F12-F6-F6	1.56 (39.6)	1.45 (36.9)	1.45 (36.9)	0.96 (24.4)	0.66 (16.8)	0.66 (16.8)	1.06 (27.0)
3/4	1/2	3/8	_T-TUR-F12-F8-F6	1.56 (39.6)	1.56 (39.6)	1.45 (36.9)	0.96 (24.4)	0.90 (22.9)	0.66 (16.8)	1.06 (27.0)
3/4	1/2	1/2	_T-TUR-F12-F8-F8	1.56 (39.6)	1.56 (39.6)	1.56 (39.6)	0.96 (24.4)	0.90 (22.9)	0.90 (22.9)	1.06 (27.0)
3/4	5/8	1/2	_T-TUR-F12-F10-F8	1.56 (39.6)	1.56 (39.6)	1.56 (39.6)	0.96 (24.4)	0.96 (24.4)	0.90 (22.9)	1.06 (27.0)
3/4	5/8	5/8	_T-TUR-F12-F10-F10	1.56 (39.6)	1.56 (39.6)	1.56 (39.6)	0.96 (24.4)	0.96 (24.4)	0.96 (24.4)	1.06 (27.0)
3/4	3/4	1/4	_T-TUR-F12-F12-F4	1.56 (39.6)	1.56 (39.6)	1.38 (35.1)	0.96 (24.4)	0.96 (24.4)	0.60 (15.2)	1.06 (27.0)
3/4	3/4	3/8	_T-TUR-F12-F12-F6	1.56 (39.6)	1.56 (39.6)	1.45 (36.9)	0.96 (24.4)	0.96 (24.4)	0.66 (16.8)	1.06 (27.0)
3/4	3/4	1/2	_T-TUR-F12-F12-F8	1.56 (39.6)	1.56 (39.6)	1.56 (39.6)	0.96 (24.4)	0.96 (24.4)	0.90 (22.9)	1.06 (27.0)
3/4	3/4	5/8	_T-TUR-F12-F12-F10	1.56 (39.6)	1.56 (39.6)	1.56 (39.6)	0.96 (24.4)	0.96 (24.4)	0.96 (24.4)	1.06 (27.0)
7/8	1/2	3/4	_T-TUR-F14-F8-F12	1.76 (44.7)	1.76 (44.7)	1.76 (44.7)	1.02 (25.9)	0.90 (22.9)	0.96 (24.4)	1.37 (34.9)
7/8	5/8	3/8	_T-TUR-F14-F10-F6	1.76 (44.7)	1.76 (44.7)	1.65 (41.9)	1.02 (25.9)	0.96 (24.4)	0.66 (16.8)	1.37 (34.9)
7/8	3/4	1/2	_T-TUR-F14-F12-F8	1.76 (44.7)	1.76 (44.7)	1.76 (44.7)	1.02 (25.9)	0.96 (24.4)	0.90 (22.9)	1.37 (34.9)
7/8	3/4	3/4	_T-TUR-F14-F12-F12	1.76 (44.7)	1.76 (44.7)	1.76 (44.7)	1.02 (25.9)	0.96 (24.4)	0.96 (24.4)	1.37 (34.9)
7/8	7/8	1/4	_T-TUR-F14-F14-F4	1.76 (44.7)	1.76 (44.7)	1.59 (40.4)	1.02 (25.9)	1.02 (25.9)	0.60 (15.2)	1.37 (34.9)
7/8	7/8	3/8	_T-TUR-F14-F14-F6	1.76 (44.7)	1.76 (44.7)	1.65 (41.9)	1.02 (25.9)	1.02 (25.9)	0.66 (16.8)	1.37 (34.9)
1	3/8	3/8	_T-TUR-F16-F6-F6	1.94 (49.3)	1.65 (41.9)	1.65 (41.9)	1.23 (31.2)	0.66 (16.8)	0.66 (16.8)	1.37 (34.9)
1	1/2	1/4	_T-TUR-F16-F8-F4	1.94 (49.3)	1.76 (44.7)	1.59 (40.4)	1.23 (31.2)	0.90 (22.9)	0.60 (15.2)	1.37 (34.9)
1	1/2	3/8	_T-TUR-F16-F8-F6	1.94 (49.3)	1.76 (44.7)	1.65 (41.9)	1.23 (31.2)	0.90 (22.9)	0.66 (16.8)	1.37 (34.9)
1	1/2	1/2	_T-TUR-F16-F8-F8	1.94 (49.3)	1.76 (44.7)	1.76 (44.7)	1.23 (31.2)	0.90 (22.9)	0.90 (22.9)	1.37 (34.9)
1	1/2	1	_T-TUR-F16-F8-F16	1.94 (49.3)	1.76 (44.7)	1.94 (49.3)	1.23 (31.2)	0.90 (22.9)	1.23 (31.2)	1.37 (34.9)
1	3/4	3/8	_T-TUR-F16-F12-F6	1.94 (49.3)	1.76 (44.7)	1.65 (41.9)	1.23 (31.2)	0.96 (24.4)	0.66 (16.8)	1.37 (34.9)
1	3/4	1/2	_T-TUR-F16-F12-F8	1.94 (49.3)	1.76 (44.7)	1.76 (44.7)	1.23 (31.2)	0.96 (24.4)	0.90 (22.9)	1.37 (34.9)
1	3/4	5/8	_T-TUR-F16-F12-F10	1.94 (49.3)	1.76 (44.7)	1.76 (44.7)	1.23 (31.2)	0.96 (24.4)	0.96 (24.4)	1.37 (34.9)
1	3/4	1	_T-TUR-F16-F12-F16	1.94 (49.3)	1.76 (44.7)	1.94 (49.3)	1.23 (31.2)	0.96 (24.4)	1.23 (31.2)	1.37 (34.9)
1	7/8	1/4	_T-TUR-F16-F14-F4	1.94 (49.3)	1.76 (44.7)	1.59 (40.4)	1.23 (31.2)	1.02 (25.9)	0.60 (15.2)	1.37 (34.9)
1	7/8	3/8	_T-TUR-F16-F14-F6	1.94 (49.3)	1.76 (44.7)	1.65 (41.9)	1.23 (31.2)	1.02 (25.9)	0.66 (16.8)	1.37 (34.9)
1	7/8	1/2	_T-TUR-F16-F14-F8	1.94 (49.3)	1.76 (44.7)	1.76 (44.7)	1.23 (31.2)	1.02 (25.9)	0.90 (22.9)	1.37 (34.9)
1	7/8	3/4	_T-TUR-F16-F14-F12	1.94 (49.3)	1.76 (44.7)	1.76 (44.7)	1.23 (31.2)	1.02 (25.9)	0.96 (24.4)	1.37 (34.9)
1	7/8	7/8	_T-TUR-F16-F14-F14	1.94 (49.3)	1.76 (44.7)	1.76 (44.7)	1.23 (31.2)	1.02 (25.9)	1.02 (25.9)	1.37 (34.9)
1	1	1/4	_T-TUR-F16-F16-F4	1.94 (49.3)	1.94 (49.3)	1.59 (40.4)	1.23 (31.2)	1.23 (31.2)	0.60 (15.2)	1.37 (34.9)
1	1	3/8	_T-TUR-F16-F16-F6	1.94 (49.3)	1.94 (49.3)	1.65 (41.9)	1.23 (31.2)	1.23 (31.2)	0.66 (16.8)	1.37 (34.9)
1	1	1/2	_T-TUR-F16-F16-F8	1.94 (49.3)	1.94 (49.3)	1.76 (44.7)	1.23 (31.2)	1.23 (31.2)	0.90 (22.9)	1.37 (34.9)
1	1	5/8	_T-TUR-F16-F16-F10	1.94 (49.3)	1.94 (49.3)	1.76 (44.7)	1.23 (31.2)	1.23 (31.2)	0.96 (24.4)	1.37 (34.9)
1	1	3/4	_T-TUR-F16-F16-F12	1.94 (49.3)	1.94 (49.3)	1.76 (44.7)	1.23 (31.2)	1.23 (31.2)	0.96 (24.4)	1.37 (34.9)
1	1	7/8	_T-TUR-F16-F16-F14	1.94 (49.3)	1.94 (49.3)	1.76 (44.7)	1.23 (31.2)	1.23 (31.2)	1.02 (25.9)	1.37 (34.9)
1 1/4	1 1/4	1	_T-TUR-F20-F20-F16	2.67 (67.8)	2.67 (67.8)	2.17 (55.1)	1.62 (41.2)	1.62 (41.2)	1.23 (31.3)	1.69 (42.9)
1 1/2	1 1/2	1	_T-TUR-F24-F24-F16	3.10 (78.7)	3.10 (78.7)	2.36 (60.0)	1.97 (50.0)	1.97 (50.0)	1.23 (31.3)	2.00 (50.8)

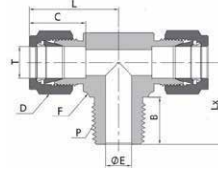
REDUCING UNION TEES



Metric Tube

T1 - O.D. (mm)	T2 - O.D. (mm)	T3 - O.D. (mm)	Basic Ordering Number	Dimension, mm (in.)						
				L1	L2	L3	C1	C2	C3	F
3	3	6	_T-TUR-M3-M3-M6	24.7 (0.97)	24.7 (0.97)	27.0 (1.06)	12.9 (0.51)	12.9 (0.51)	15.3 (0.60)	12.7 (0.50)
6	6	3	_T-TUR-M6-M6-M3	27.0 (1.06)	27.0 (1.06)	25.4 (1.00)	15.3 (0.60)	15.3 (0.60)	12.9 (0.51)	12.7 (0.50)
6	6	8	_T-TUR-M6-M6-M8	28.0 (1.10)	28.0 (1.10)	28.8 (1.13)	15.3 (0.60)	15.3 (0.60)	16.2 (0.64)	14.3 (0.56)
8	8	6	_T-TUR-M8-M8-M6	30.0 (1.18)	30.0 (1.18)	29.0 (1.14)	16.2 (0.64)	16.2 (0.64)	15.3 (0.60)	15.9 (0.63)
8	8	12	_T-TUR-M8-M8-M12	35.2 (1.39)	35.2 (1.39)	36.0 (1.42)	16.2 (0.64)	16.2 (0.64)	22.8 (0.90)	20.6 (0.81)
10	10	6	_T-TUR-M10-M10-M6	31.5 (1.24)	31.5 (1.24)	29.9 (1.18)	17.2 (0.68)	17.2 (0.68)	15.3 (0.60)	17.5 (0.69)
10	10	8	_T-TUR-M10-M10-M8	31.5 (1.24)	31.5 (1.24)	30.7 (1.21)	17.2 (0.68)	17.2 (0.68)	16.2 (0.64)	17.5 (0.69)
12	12	6	_T-TUR-M12-M12-M6	36.0 (1.42)	36.0 (1.42)	31.8 (1.25)	22.8 (0.90)	22.8 (0.90)	15.3 (0.60)	20.6 (0.81)
12	12	8	_T-TUR-M12-M12-M8	36.0 (1.42)	36.0 (1.42)	35.2 (1.39)	22.8 (0.90)	22.8 (0.90)	16.2 (0.64)	20.6 (0.81)
12	12	14	_T-TUR-M12-M12-M14	38.0 (1.50)	38.0 (1.50)	38.0 (1.50)	22.8 (0.90)	22.8 (0.90)	24.4 (0.96)	25.4 (1.00)
12	12	18	_T-TUR-M12-M12-M18	39.8 (1.57)	39.8 (1.57)	39.8 (1.57)	22.8 (0.90)	22.8 (0.90)	24.4 (0.96)	27.0 (1.06)
14	14	8	_T-TUR-M14-M14-M8	38.0 (1.50)	38.0 (1.50)	37.2 (1.46)	24.4 (0.96)	24.4 (0.96)	16.2 (0.64)	25.4 (1.00)
14	14	10	_T-TUR-M14-M14-M10	38.0 (1.50)	38.0 (1.50)	38.0 (1.50)	24.4 (0.96)	24.4 (0.96)	17.2 (0.68)	25.4 (1.00)
15	15	12	_T-TUR-M15-M15-M12	38.8 (1.53)	38.8 (1.53)	38.8 (1.53)	24.4 (0.96)	24.4 (0.96)	22.8 (0.90)	25.4 (1.00)
16	8	16	_T-TUR-M16-M8-M16	38.8 (1.53)	37.2 (1.46)	38.8 (1.53)	24.4 (0.96)	16.2 (0.64)	24.4 (0.96)	25.4 (1.00)
16	16	12	_T-TUR-M16-M16-M12	38.8 (1.53)	38.8 (1.53)	38.9 (1.53)	24.4 (0.96)	24.4 (0.96)	22.8 (0.90)	25.4 (1.00)
18	18	8	_T-TUR-M18-M18-M8	39.8 (1.57)	39.8 (1.57)	39.0 (1.54)	24.4 (0.96)	24.4 (0.96)	16.2 (0.64)	27.0 (1.06)
18	18	10	_T-TUR-M18-M18-M10	39.8 (1.57)	39.8 (1.57)	39.8 (1.57)	24.4 (0.96)	24.4 (0.96)	17.2 (0.68)	27.0 (1.06)
18	18	12	_T-TUR-M18-M18-M12	39.8 (1.57)	39.8 (1.57)	39.8 (1.57)	24.4 (0.96)	24.4 (0.96)	22.8 (0.90)	27.0 (1.06)
18	18	14	_T-TUR-M18-M18-M14	39.8 (1.57)	39.8 (1.57)	39.8 (1.57)	24.4 (0.96)	24.4 (0.96)	24.4 (0.96)	27.0 (1.06)
20	20	14	_T-TUR-M20-M20-M14	44.6 (1.76)	44.6 (1.76)	44.6 (1.76)	26.0 (1.02)	26.0 (1.02)	24.4 (0.96)	34.9 (1.37)
22	22	12	_T-TUR-M22-M22-M12	44.6 (1.76)	44.6 (1.76)	44.6 (1.76)	26.0 (1.02)	26.0 (1.02)	22.8 (0.90)	34.9 (1.37)
25	25	12	_T-TUR-M25-M25-M12	49.1 (1.93)	49.1 (1.93)	44.7 (1.76)	31.3 (1.23)	31.3 (1.23)	22.8 (0.90)	34.9 (1.37)

MALE BRANCH TEES



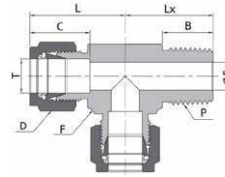
Fractional Tube to NPT Thread

T - Tube O.D. (in.)	P-NPT Size	Basic Ordering Number	Dimension, in. (mm)						
			L	C	D	F	E	B	Lx
1/8	1/8	_T-TTM-F2-N2	0.93 (23.6)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)	0.09 (2.3)	0.38 (9.7)	0.70 (17.8)
1/8	1/4	_T-TTM-F2-N4	0.97 (24.6)	0.50 (12.7)	0.44 (11.1)	0.50 (12.7)	0.09 (2.3)	0.56 (14.2)	0.92 (23.4)
3/16	1/8	_T-TTM-F3-N2	0.96 (24.4)	0.54 (13.7)	0.50 (12.7)	0.44 (11.1)	0.12 (3.0)	0.38 (9.7)	0.70 (17.8)
1/4	1/8	_T-TTM-F4-N2	1.06 (26.9)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.19 (4.8)	0.38 (9.7)	0.74 (18.8)
1/4	1/4	_T-TTM-F4-N4	1.06 (26.9)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.19 (4.8)	0.56 (14.2)	0.92 (23.4)
5/16	1/8	_T-TTM-F5-N2	1.17 (29.7)	0.64 (16.3)	0.63 (15.9)	0.63 (15.9)	0.19 (4.8)	0.38 (9.7)	0.82 (20.8)
5/16	1/4	_T-TTM-F5-N4	1.17 (29.7)	0.64 (16.3)	0.63 (15.9)	0.63 (15.9)	0.25 (6.4)	0.56 (14.2)	1.01 (25.7)
3/8	1/4	_T-TTM-F6-N4	1.20 (30.5)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.28 (7.1)	0.56 (14.2)	1.00 (25.4)
3/8	3/8	_T-TTM-F6-N6	1.31 (33.3)	0.66 (16.8)	0.69 (17.5)	0.81 (20.6)	0.28 (7.1)	0.56 (14.2)	1.11 (28.2)
1/2	3/8	_T-TTM-F8-N6	1.42 (36.1)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.38 (9.7)	0.56 (14.2)	1.11 (28.2)
1/2	1/2	_T-TTM-F8-N8	1.42 (36.1)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.41 (10.4)	0.75 (19.1)	1.30 (33.0)
5/8	1/2	_T-TTM-F10-N8	1.53 (38.9)	0.96 (24.4)	1.00 (25.4)	1.00 (25.4)	0.47 (11.9)	0.75 (19.1)	1.41 (35.8)
3/4	3/4	_T-TTM-F12-N12	1.57 (39.9)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.62 (15.7)	0.75 (19.1)	1.45 (36.8)
7/8	3/4	_T-TTM-F14-N12	1.76 (44.7)	1.02 (25.9)	1.25 (31.8)	1.31 (33.3)	0.62 (15.7)	0.75 (19.1)	1.50 (38.1)
1	3/4	_T-TTM-F16-N12	1.94 (49.3)	1.23 (31.2)	1.50 (38.1)	1.31 (33.3)	0.62 (15.7)	0.75 (19.1)	1.67 (42.4)
1	1	_T-TTM-F16-N16	1.94 (49.3)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)	0.88 (22.4)	0.94 (23.9)	1.84 (46.7)

Metric Tube to NPT Thread

T - Tube O.D. (mm)	P-NPT Size	Basic Ordering Number	Dimension, mm (in.)						
			L	C	D	F	E	B	Lx
6	1/8	_T-TTM-M6-N2	27.0 (1.06)	15.3 (0.60)	14.0 (0.55)	12.7 (0.50)	4.8 (0.19)	9.7 (0.38)	18.8 (0.74)
6	1/4	_T-TTM-M6-N4	27.0 (1.06)	15.3 (0.60)	14.0 (0.55)	12.7 (0.50)	4.8 (0.19)	14.2 (0.56)	23.4 (0.92)
8	1/8	_T-TTM-M8-N2	29.9 (1.18)	16.2 (0.64)	16.0 (0.63)	15.9 (0.63)	4.8 (0.19)	9.7 (0.38)	20.8 (0.82)
8	1/4	_T-TTM-M8-N4	29.9 (1.18)	16.2 (0.64)	16.0 (0.63)	15.9 (0.63)	6.4 (0.25)	14.2 (0.56)	25.4 (1.00)
10	1/4	_T-TTM-M10-N4	33.5 (1.32)	17.2 (0.68)	19.0 (0.75)	20.6 (0.81)	7.9 (0.31)	14.2 (0.56)	28.2 (1.11)
10	3/8	_T-TTM-M10-N6	33.5 (1.32)	17.2 (0.68)	19.0 (0.75)	20.6 (0.81)	7.9 (0.31)	14.2 (0.56)	28.2 (1.11)
12	1/4	_T-TTM-M12-N4	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	7.9 (0.31)	14.2 (0.56)	28.2 (1.11)
12	3/8	_T-TTM-M12-N6	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	9.5 (0.37)	14.2 (0.56)	28.2 (1.11)
12	1/2	_T-TTM-M12-N8	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	9.5 (0.37)	19.1 (0.75)	33.0 (1.30)
16	1/2	_T-TTM-M16-N8	38.8 (1.53)	24.4 (0.96)	25.0 (0.98)	25.4 (1.00)	11.9 (0.47)	19.1 (0.75)	35.8 (1.41)

MALE RUN TEES



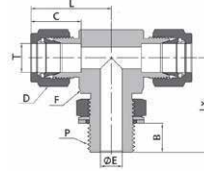
Fractional Tube to NPT Thread

T - Tube O.D. (in.)	P-NPT Size	Basic Ordering Number	Dimension, in. (mm)						
			L	C	D	F	E	B	Lx
1/8	1/8	_T-TMT-F2-N2	0.93 (23.6)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)	0.44 (11.1)	0.38 (9.7)	0.70 (17.8)
1/8	1/4	_T-TMT-F2-N4	0.97 (24.6)	0.50 (12.7)	0.44 (11.1)	0.50 (12.7)	0.50 (12.7)	0.56 (14.2)	0.92 (23.4)
3/16	1/8	_T-TMT-F3-N2	0.96 (24.4)	0.54 (13.7)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)	0.38 (9.7)	0.70 (17.8)
1/4	1/8	_T-TMT-F4-N2	1.06 (26.9)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.50 (12.7)	0.38 (9.7)	0.74 (18.8)
1/4	1/4	_T-TMT-F4-N4	1.06 (26.9)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.50 (12.7)	0.56 (14.2)	0.92 (23.4)
5/16	1/8	_T-TMT-F5-N2	1.17 (29.7)	0.64 (16.3)	0.63 (15.9)	0.63 (15.9)	0.63 (15.9)	0.38 (9.7)	0.82 (20.8)
5/16	1/4	_T-TMT-F5-N4	1.17 (29.7)	0.64 (16.3)	0.63 (15.9)	0.63 (15.9)	0.63 (15.9)	0.56 (14.2)	1.01 (25.7)
3/8	1/4	_T-TMT-F6-N4	1.20 (30.5)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.63 (15.9)	0.56 (14.2)	1.00 (25.4)
3/8	3/8	_T-TMT-F6-N6	1.31 (33.3)	0.66 (16.8)	0.69 (17.5)	0.81 (20.6)	0.81 (20.6)	0.56 (14.2)	1.11 (28.2)
1/2	3/8	_T-TMT-F8-N6	1.42 (36.1)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.81 (20.6)	0.56 (14.2)	1.11 (28.2)
1/2	1/2	_T-TMT-F8-N8	1.42 (36.1)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.81 (20.6)	0.75 (19.1)	1.3 (33.0)
5/8	1/2	_T-TMT-F10-N8	1.50 (38.1)	0.96 (24.4)	1.00 (25.4)	0.94 (23.8)	0.94 (23.8)	0.75 (19.1)	1.41 (35.8)
3/4	3/4	_T-TMT-F12-N12	1.57 (39.9)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	1.06 (27.0)	0.75 (19.1)	1.45 (36.8)
7/8	3/4	_T-TMT-F14-N12	1.76 (44.7)	1.02 (25.9)	1.25 (31.8)	1.31 (33.3)	1.31 (33.3)	0.75 (19.1)	1.50 (38.1)
1	3/4	_T-TMT-F16-N12	1.94 (49.3)	1.23 (31.2)	1.50 (38.1)	1.31 (33.3)	1.31 (33.3)	0.75 (19.1)	1.67 (42.4)
1	1	_T-TMT-F16-N16	1.94 (49.3)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)	1.37 (34.9)	0.94 (23.9)	1.84 (46.7)

Metric Tube to NPT Thread

T - Tube O.D. (mm)	P-NPT Size	Basic Ordering Number	Dimension, mm (in.)						
			L	C	D	F	E	B	Lx
6	1/8	_T-TMT-M6-N2	27.0 (1.06)	15.3 (0.60)	14.0 (0.55)	12.7 (0.50)	4.8 (0.19)	9.7 (0.38)	18.0 (0.71)
6	1/4	_T-TMT-M6-N4	27.0 (1.06)	15.3 (0.60)	14.0 (0.55)	12.7 (0.50)	4.8 (0.19)	14.2 (0.56)	23.4 (0.92)
8	1/8	_T-TMT-M8-N2	29.9 (1.18)	16.2 (0.64)	16.0 (0.63)	15.9 (0.63)	4.8 (0.19)	9.7 (0.38)	20.8 (0.82)
8	1/4	_T-TMT-M8-N4	29.9 (1.18)	16.2 (0.64)	16.0 (0.63)	15.9 (0.63)	6.4 (0.25)	14.2 (0.56)	25.4 (1.00)
10	1/4	_T-TMT-M10-N4	33.5 (1.32)	17.2 (0.68)	19.0 (0.75)	20.6 (0.81)	7.9 (0.31)	14.2 (0.56)	28.2 (1.11)
10	1/2	_T-TMT-M10-N8	33.5 (1.32)	17.2 (0.68)	19.0 (0.75)	20.6 (0.81)	7.9 (0.31)	14.2 (0.56)	28.2 (1.11)
12	1/4	_T-TMT-M12-N4	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	7.9 (0.31)	14.2 (0.56)	28.2 (1.11)
12	3/8	_T-TMT-M12-N6	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	9.5 (0.37)	14.2 (0.56)	28.2 (1.11)
12	1/2	_T-TMT-M12-N8	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	9.5 (0.37)	19.1 (0.75)	33.0 (1.30)
16	1/2	_T-TMT-M16-N8	38.0 (1.50)	24.4 (0.96)	25.0 (0.98)	23.8 (0.94)	11.9 (0.47)	19.1 (0.75)	35.0 (1.38)

AJUSTABLE MALE BRANCH TEES



Fractional Tube to ISO Parallel Thread

T - Tube O.D.(in.)	P-BSP Size	Basic Ordering Number	Dimension, in. (mm)						
			L	B	C	E	D	F	Lx
1/4	1/8	_T-TTA-F4-PP2	1.06 (26.9)	0.32 (8.1)	0.60 (15.2)	0.16 (4.1)	0.56 (14.3)	0.50 (12.7)	1.04 (26.4)
1/4	1/4	_T-TTA-F4-PP4	1.14 (29.0)	0.36 (9.1)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.63 (15.9)	1.27 (32.3)
3/8	1/4	_T-TTA-F6-PP4	1.20 (30.5)	0.36 (9.1)	0.66 (16.8)	0.23 (5.8)	0.69 (17.5)	0.63 (15.9)	1.27 (32.3)
1/2	3/8	_T-TTA-F8-PP6	1.42 (36.1)	0.37 (9.4)	0.90 (22.9)	0.31 (7.9)	0.87 (22.2)	0.81 (20.6)	1.46 (37.1)
1/2	1/2	_T-TTA-F8-PP8	1.50 (38.1)	0.51 (13.0)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	0.94 (23.8)	1.71 (43.4)
5/8	1/2	_T-TTA-F10-PP8	1.50 (38.1)	0.51 (13.0)	0.96 (24.4)	0.47 (11.9)	1.00 (25.4)	0.94 (23.8)	1.71 (43.4)
3/4	1/2	_T-TTA-F12-PP8	1.57 (39.9)	0.51 (13.0)	0.96 (24.4)	0.47 (11.9)	1.13 (28.6)	1.06 (27.0)	1.78 (45.2)
3/4	3/4	_T-TTA-F12-PP12	1.57 (39.9)	0.51 (13.0)	0.96 (24.4)	0.62 (15.7)	1.13 (28.6)	1.06 (27.0)	1.92 (48.8)
1	1	_T-TTA-F16-PP16	1.93 (49.0)	0.55 (14.0)	1.23 (31.2)	0.78 (19.8)	1.50 (38.1)	1.37 (34.9)	2.11 (53.6)

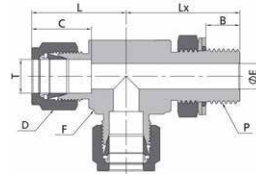
Fractional Tube to SAE/MS Thread

T - Tube O.D.(in.)	P-SAE/MS Size	Basic Ordering Number	Dimension, in. (mm)						
			L	B	C	E	D	F	Lx
1/4	7/16-20	_T-TTA-F4-ST7	1.12 (28.5)	0.39 (9.9)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.50 (12.7)	1.12 (28.5)
3/8	9/16-18	_T-TTA-F6-ST9	1.26 (32.0)	0.44 (11.2)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.63 (15.9)	1.27 (32.3)
1/2	3/4-16	_T-TTA-F8-ST12	1.48 (37.6)	0.50 (12.7)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	0.81 (20.6)	1.49 (37.8)
3/4	1 1/16-12	_T-TTA-F12-ST17	1.63 (41.4)	0.66 (16.8)	0.96 (24.4)	0.62 (15.7)	1.13 (28.6)	1.06 (27.0)	1.92 (48.8)
1	1 5/16-12	_T-TTA-F16-ST21	1.99 (50.5)	0.66 (16.8)	1.23 (31.2)	0.88 (22.4)	1.50 (38.1)	1.37 (34.9)	2.11 (53.6)
1 1/4	1 5/8-12	_T-TTA-F20-ST26	2.67 (67.8)	0.66 (16.8)	1.62 (41.1)	1.09 (27.7)	1.87 (47.6)	1.69 (42.9)	2.29 (58.2)
1 1/2	1 7/8-12	_T-TTA-F24-ST30	3.07 (78.0)	0.66 (16.8)	1.97 (50.0)	1.34 (34.0)	2.25 (57.2)	2.00 (50.8)	2.38 (60.5)

Metric Tube to ISO Parallel Thread

T - Tube O.D.(mm)	P-BSP Size	Basic Ordering Number	Dimension, mm (in.)						
			L	B	C	E	D	F	Lx
6	1/8	_T-TTA-M6-PP2	27.0 (1.06)	8.1 (0.32)	15.3 (0.60)	4.0 (0.16)	14.0 (0.55)	12.7 (0.50)	26.4 (1.04)
6	1/4	_T-TTA-M6-PP4	29.0 (1.14)	9.1 (0.36)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	15.9 (0.63)	32.2 (1.27)
8	1/8	_T-TTA-M8-PP2	28.8 (1.13)	8.1 (0.32)	16.2 (0.64)	4.0 (0.16)	16.0 (0.63)	14.3 (0.56)	27.5 (1.08)
8	1/4	_T-TTA-M8-PP4	29.9 (1.18)	9.1 (0.36)	16.2 (0.64)	5.9 (0.23)	16.0 (0.63)	15.9 (0.63)	32.2 (1.27)
10	1/4	_T-TTA-M10-PP4	33.5 (1.32)	9.1 (0.36)	17.2 (0.68)	5.9 (0.23)	19.0 (0.75)	20.6 (0.81)	35.1 (1.38)
12	3/8	_T-TTA-M12-PP6	36.0 (1.42)	9.4 (0.37)	22.8 (0.90)	7.9 (0.31)	22.0 (0.87)	20.6 (0.81)	37.1 (1.46)
12	1/2	_T-TTA-M12-PP8	38.0 (1.50)	13.0 (0.51)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	23.8 (0.94)	43.5 (1.71)

AJUSTABLE MALE RUN TEES



Fractional Tube to ISO Parallel Thread

T - Tube O.D.(in.)	P-BSP Size	Basic Ordering Number	Dimension, in. (mm)						
			L	B	C	E	D	F	Lx
1/4	1/8	_T-TAT-F4-PP2	1.06 (26.9)	0.32 (8.1)	0.60 (15.2)	0.16 (4.1)	0.56 (14.3)	0.50 (12.7)	1.04 (26.4)
1/4	1/4	_T-TAT-F4-PP4	1.14 (29.0)	0.36 (9.1)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.63 (15.9)	1.27 (32.3)
3/8	1/4	_T-TAT-F6-PP4	1.20 (30.5)	0.36 (9.1)	0.66 (16.8)	0.23 (5.8)	0.69 (17.5)	0.63 (15.9)	1.27 (32.3)
1/2	3/8	_T-TAT-F8-PP6	1.42 (36.1)	0.37 (9.4)	0.90 (22.9)	0.31 (7.9)	0.87 (22.2)	0.81 (20.6)	1.46 (37.1)
1/2	1/2	_T-TAT-F8-PP8	1.50 (38.1)	0.51 (13.0)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	0.94 (23.8)	1.71 (43.4)
5/8	1/2	_T-TAT-F10-PP8	1.50 (38.1)	0.51 (13.0)	0.96 (24.4)	0.47 (11.9)	1.00 (25.4)	0.94 (23.8)	1.71 (43.4)
3/4	1/2	_T-TAT-F12-PP8	1.57 (39.9)	0.51 (13.0)	0.96 (24.4)	0.47 (11.9)	1.13 (28.6)	1.06 (27.0)	1.78 (45.2)
3/4	3/4	_T-TAT-F12-PP12	1.57 (39.9)	0.51 (13.0)	0.96 (24.4)	0.62 (15.7)	1.13 (28.6)	1.06 (27.0)	1.92 (48.8)
1	1	_T-TAT-F16-PP16	1.93 (49.0)	0.55 (14.0)	1.23 (31.2)	0.78 (19.8)	1.50 (38.1)	1.37 (34.9)	2.11 (53.6)

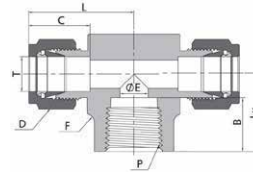
Fractional Tube to SAE/MS Thread

T - Tube O.D.(in.)	P-SAE/MS Size	Basic Ordering Number	Dimension, in. (mm)						
			L	B	C	E	D	F	Lx
1/4	7/16-20	_T-TAT-F4-ST7	1.12 (28.5)	0.39 (9.9)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.50 (12.7)	1.12 (28.5)
3/8	9/16-18	_T-TAT-F6-ST9	1.26 (32.0)	0.44 (11.2)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.63 (15.9)	1.27 (32.3)
1/2	3/4-16	_T-TAT-F8-ST12	1.48 (37.6)	0.50 (12.7)	0.90 (22.9)	0.41 (10.4)	0.87 (22.2)	0.81 (20.6)	1.49 (37.8)
3/4	1 1/16-12	_T-TAT-F12-ST17	1.63 (41.4)	0.66 (16.8)	0.96 (24.4)	0.62 (15.7)	1.13 (28.6)	1.06 (27.0)	1.92 (48.8)
1	1 5/16-12	_T-TAT-F16-ST21	1.99 (50.5)	0.66 (16.8)	1.23 (31.2)	0.88 (22.4)	1.50 (38.1)	1.37 (34.9)	2.11 (53.6)
1 1/4	1 5/8-12	_T-TAT-F20-ST26	2.67 (67.8)	0.66 (16.8)	1.62 (41.1)	1.09 (27.7)	1.87 (47.6)	1.69 (42.9)	2.29 (58.2)
1 1/2	1 7/8-12	_T-TAT-F24-ST30	3.07 (78.0)	0.66 (16.8)	1.97 (50.0)	1.34 (34.0)	2.25 (57.2)	2.00 (50.8)	2.38 (60.5)

Metric Tube to ISO Parallel Thread

T - Tube O.D.(mm)	P-BSP Size	Basic Ordering Number	Dimension, mm (in.)						
			L	B	C	E	D	F	Lx
6	1/8	_T-TAT-M6-PP2	27.0 (1.06)	8.1 (0.32)	15.3 (0.60)	4.0 (0.16)	14.0 (0.55)	12.7 (0.50)	26.4 (1.04)
6	1/4	_T-TAT-M4-PP4	29.0 (1.14)	9.1 (0.36)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	15.9 (0.63)	32.2 (1.27)
8	1/8	_T-TAT-M8-PP4	28.8 (1.13)	8.1 (0.32)	16.2 (0.64)	4.0 (0.16)	16.0 (0.63)	14.3 (0.56)	27.5 (1.08)
8	1/4	_T-TAT-M8-PP6	29.9 (1.18)	9.1 (0.36)	16.2 (0.64)	5.9 (0.23)	16.0 (0.63)	15.9 (0.63)	32.2 (1.27)
10	1/4	_T-TAT-M10-PP8	33.5 (1.32)	9.1 (0.36)	17.2 (0.68)	5.9 (0.23)	19.0 (0.75)	20.6 (0.81)	35.1 (1.38)
12	3/8	_T-TAT-M12-PP8	36.0 (1.42)	9.4 (0.37)	22.8 (0.90)	7.9 (0.31)	22.0 (0.87)	20.6 (0.81)	37.1 (1.46)
12	1/2	_T-TAT-M12-PP8	38.0 (1.50)	13.0 (0.51)	22.8 (0.90)	9.5 (0.37)	22.0 (0.87)	23.8 (0.94)	43.5 (1.71)

FEMALE BRANCH TEES



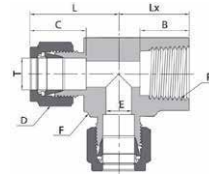
Fractional Tube to NPT Thread

T - Tube O.D.(in.)	P-NPT Size	Basic Ordering Number	Dimension, in. (mm)						
			L	C	D	F	E	B	Lx
1/8	1/8	_T-TTF-F2-N2	0.97 (24.6)	0.50 (12.7)	0.44 (11.1)	0.50 (12.7)	0.09 (2.3)	0.41 (10.4)	0.75 (19.1)
3/16	1/8	_T-TTF-F3-N2	1.01 (25.7)	0.54 (13.7)	0.50 (12.7)	0.50 (12.7)	0.12 (3.0)	0.41 (10.4)	0.75 (19.1)
1/4	1/8	_T-TTF-F4-N2	1.06 (26.9)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.19 (4.8)	0.41 (10.4)	0.75 (19.1)
1/4	1/4	_T-TTF-F4-N4	1.17 (29.7)	0.60 (15.2)	0.56 (14.3)	0.69 (17.5)	0.19 (4.8)	0.59 (15.0)	0.88 (22.4)
5/16	1/8	_T-TTF-F5-N2	1.17 (29.7)	0.64 (16.2)	0.63 (15.9)	0.63 (15.9)	0.25 (6.4)	0.41 (10.4)	0.75 (19.1)
3/8	1/4	_T-TTF-F6-N4	1.23 (31.2)	0.66 (16.8)	0.69 (17.5)	0.69 (17.5)	0.28 (7.1)	0.59 (15.0)	0.88 (22.4)
3/8	3/8	_T-TTF-F6-N6	1.31 (33.3)	0.66 (16.8)	0.69 (17.5)	0.81 (20.6)	0.28 (7.1)	0.59 (15.0)	0.88 (22.4)
3/8	1/2	_T-TTF-F6-N8	1.42 (36.1)	0.66 (16.8)	0.69 (17.5)	1.00 (25.4)	0.28 (7.1)	0.78 (19.8)	1.12 (28.4)
1/2	1/4	_T-TTF-F8-N4	1.42 (36.1)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.41 (10.4)	0.59 (15.0)	0.88 (22.4)
1/2	3/8	_T-TTF-F8-N6	1.42 (36.1)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.41 (10.4)	0.59 (15.0)	0.88 (22.4)
1/2	1/2	_T-TTF-F8-N8	1.53 (38.9)	0.90 (22.9)	0.87 (22.2)	1.00 (25.4)	0.41 (10.4)	0.78 (19.8)	1.12 (28.4)
5/8	1/2	_T-TTF-F10-N8	1.53 (38.9)	0.96 (24.4)	1.00 (25.4)	1.00 (25.4)	0.50 (12.7)	0.78 (19.8)	1.12 (28.4)
3/4	3/4	_T-TTF-F12-N12	1.76 (44.7)	0.96 (24.4)	1.13 (28.6)	1.37 (34.9)	0.62 (15.7)	0.81 (20.6)	1.25 (31.8)
7/8	3/4	_T-TTF-F14-N12	1.76 (44.7)	1.02 (25.9)	1.25 (31.8)	1.37 (34.9)	0.72 (18.3)	0.81 (20.6)	1.25 (31.8)
1	3/4	_T-TTF-F16-N12	1.93 (49.0)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)	0.88 (22.4)	0.81 (20.6)	1.25 (31.8)
1	1	_T-TTF-F16-N16	2.11 (53.6)	1.23 (31.2)	1.50 (38.1)	1.69 (42.9)	0.88 (22.4)	1.00 (25.4)	1.50 (38.1)

Metric Tube to NPT Thread

T - Tube O.D.(mm)	P-NPT Size	Basic Ordering Number	Dimension, mm (in.)						
			L	C	D	F	E	B	Lx
6	1/8	_T-TTF-M6-N2	27.0 (1.06)	115.3 (0.60)	14.0 (0.55)	12.7 (0.50)	4.8 (0.19)	10.4 (0.41)	19.0 (0.75)
6	1/4	_T-TTF-M6-N4	29.8 (1.17)	15.3 (0.60)	14.0 (0.55)	17.5 (0.69)	4.8 (0.19)	15.0 (0.59)	22.4 (0.88)
8	1/8	_T-TTF-M8-N2	29.9 (1.18)	16.2 (0.64)	16.0 (0.63)	15.9 (0.63)	6.4 (0.25)	10.4 (0.41)	19.0 (0.75)
8	1/4	_T-TTF-M8-N4	30.6 (1.2)	16.2 (0.64)	16.0 (0.63)	17.5 (0.69)	6.4 (0.25)	15.0 (0.59)	22.4 (0.88)
10	1/4	_T-TTF-M10-N4	33.5 (1.32)	17.2 (0.68)	19.0 (0.75)	20.6 (0.81)	7.9 (0.31)	15.0 (0.59)	22.4 (0.88)
12	1/8	_T-TTF-M10-N2	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	6.4 (0.25)	10.4 (0.41)	22.3 (0.88)
12	1/4	_T-TTF-M12-N4	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	9.5 (0.37)	15.0 (0.59)	22.4 (0.88)
12	3/8	_T-TTF-M12-N6	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	9.5 (0.37)	15.0 (0.59)	22.4 (0.88)
12	1/2	_T-TTF-M12-N8	38.8 (1.53)	22.8 (0.90)	22.0 (0.87)	25.4 (1.00)	9.5 (0.37)	19.8 (0.78)	28.5 (1.12)
16	1/2	_T-TTF-M16-N8	38.8 (1.53)	24.4 (0.96)	25.0 (0.98)	25.4 (1.00)	12.7 (0.50)	19.8 (0.78)	28.4 (1.12)

FEMALE RUN TEES



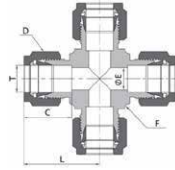
Fractional Tube to NPT Thread

T - Tube O.D.(in.)	P-NPT Size	Basic Ordering Number	Dimension, in. (mm)						
			L	C	D	F	E	B	Lx
1/8	1/8	_T-TFT-F2-N2	0.97 (24.6)	0.50 (12.7)	0.44(11.1)	0.50 (12.7)	0.09 (2.3)	0.41 (10.4)	0.75 (19.1)
3/16	1/8	_T-TFT-F3-N2	1.01 (25.7)	0.54 (13.7)	0.50(12.7)	0.50 (12.7)	0.12 (3.0)	0.41 (10.4)	0.75 (19.1)
1/4	1/8	_T-TFT-F4-N2	1.06 (26.9)	0.60 (15.2)	0.56(14.3)	0.50 (12.7)	0.19 (4.8)	0.41 (10.4)	0.75 (19.1)
1/4	1/4	_T-TFT-F4-N4	1.17 (29.7)	0.60 (15.2)	0.56(14.3)	0.69 (17.5)	0.19 (4.8)	0.59 (15.0)	0.88 (22.4)
5/16	1/8	_T-TFT-F5-FN2	1.17 (29.7)	0.64 (16.2)	0.63(15.9)	0.63 (15.9)	0.25 (6.4)	0.41 (10.4)	0.75 (19.1)
3/8	1/4	_T-TFT-F6-N4	1.23 (31.2)	0.66 (16.8)	0.69(17.5)	0.69 (17.5)	0.28 (7.1)	0.59 (15.0)	0.88 (22.4)
1/2	1/4	_T-TFT-F8-N4	1.42 (36.1)	0.90 (22.9)	0.87(22.2)	0.81 (20.6)	0.41 (10.4)	0.59 (15.0)	0.88 (22.4)
1/2	3/8	_T-TFT-F8-N6	1.42 (36.1)	0.90 (22.9)	0.87(22.2)	0.81 (20.6)	0.41 (10.4)	0.59 (15.0)	0.88 (22.4)
1/2	1/2	_T-TFT-F8-N8	1.57 (39.9)	0.90 (22.9)	0.87(22.2)	1.06 (27.0)	0.41 (10.4)	0.78 (19.8)	1.12 (28.4)
5/8	1/2	_T-TFT-F10-N8	1.57 (39.9)	0.96 (24.4)	1.00(25.4)	1.06 (27.0)	0.50 (12.7)	0.78 (19.8)	1.12 (28.4)
3/4	3/4	_T-TFT-F12-N12	1.76 (44.7)	0.96 (24.4)	1.13(28.6)	1.37 (34.9)	0.62 (15.7)	0.81 (20.6)	1.25 (31.8)
7/8	3/4	_T-TFT-F14-N8	1.76 (44.7)	1.02 (25.9)	1.25(31.8)	1.37 (34.9)	0.62 (15.7)	0.78 (19.8)	1.12 (28.4)
7/8	3/4	_T-TFT-F14-N12	1.76 (44.7)	1.02 (25.9)	1.25(31.8)	1.37 (34.9)	0.72 (18.3)	0.81 (20.6)	1.25 (31.8)
1	3/4	_T-TFT-F16-N12	1.93 (49.0)	1.23 (31.2)	1.50(38.1)	1.37 (34.9)	0.88 (22.4)	0.81 (20.6)	1.25 (31.8)
1	1	_T-TFT-F16-N16	2.11 (53.6)	1.23 (31.2)	1.50(38.1)	1.69 (42.9)	0.88 (22.4)	1.00 (25.4)	1.50 (38.1)

Metric Tube to NPT Thread

T - Tube O.D.(mm)	P-NPT Size	Basic Ordering Number	Dimension, mm (in.)						
			L	C	D	F	E	B	Lx
6	1/8	_T-TFT-M6-N2	27.0 (1.06)	15.3 (0.60)	14.0 (0.55)	12.7 (0.50)	4.8 (0.19)	10.4 (0.41)	19.0 (0.75)
6	1/4	_T-TFT-M6-N4	29.8 (1.17)	15.3 (0.60)	14.0 (0.55)	17.5 (0.69)	4.8 (0.19)	15.0 (0.59)	22.4 (0.88)
8	1/8	_T-TFT-M8-N2	29.9 (1.18)	16.2 (0.64)	16.0 (0.63)	15.9 (0.63)	4.8 (0.19)	10.4 (0.41)	19.0 (0.75)
8	1/4	_T-TFT-M8-N4	30.6 (1.20)	16.2 (0.64)	16.0 (0.63)	17.5 (0.69)	6.4 (0.25)	15.0 (0.59)	22.4 (0.88)
10	1/4	_T-TFT-M10-N4	33.5 (1.32)	17.2 (0.68)	19.0 (0.75)	20.6 (0.81)	7.9 (0.31)	15.0 (0.59)	22.4 (0.88)
12	1/4	_T-TFT-M12-N4	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	9.5 (0.37)	15.0 (0.59)	22.4 (0.88)
12	3/8	_T-TFT-M12-N6	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	9.5 (0.37)	15.0 (0.59)	23.1 (0.91)
12	1/2	_T-TFT-M12-N8	38.8 (1.53)	22.8 (0.90)	22.0 (0.87)	25.4 (1.00)	9.5 (0.37)	19.8 (0.78)	28.5 (1.12)
16	1/2	_T-TFT-M16-N8	39.8 (1.57)	24.4 (0.96)	25.0 (0.98)	27.0 (1.06)	11.9 (0.47)	19.8 (0.78)	28.4 (1.12)

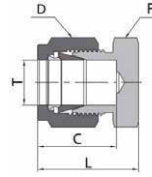
UNION CROSSES



Fractional Tube						
T - Tube O.D.(in.)	Basic Ordering Number	Dimension, in. (mm)				
		L	C	D	F	E
1/8	_T-C-F2	0.88 (22.4)	0.50 (12.7)	0.44 (11.1)	0.37 (9.5)	0.09 (2.3)
3/16	_T-C-F3	0.96 (24.4)	0.54 (13.7)	0.50 (12.7)	0.44 (11.1)	0.12 (3.0)
1/4	_T-C-F4	1.06 (26.9)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.19 (4.8)
5/16	_T-C-F5	1.17 (29.7)	0.64 (16.2)	0.63 (15.9)	0.63 (15.9)	0.25 (6.4)
3/8	_T-C-F6	1.20 (30.5)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.28 (7.1)
1/2	_T-C-F8	1.42 (36.1)	0.90 (22.9)	0.69 (17.5)	0.81 (20.6)	0.41 (10.4)
5/8	_T-C-F10	1.43 (36.3)	0.96 (24.4)	1.00 (25.4)	1.06 (27.0)	0.50 (12.7)
3/4	_T-C-F12	1.57 (39.9)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.62 (15.7)
7/8	_T-C-F14	1.76 (44.7)	1.02 (25.9)	1.25 (31.8)	1.37 (34.9)	0.72 (18.3)
1	_T-C-F16	1.93 (49.0)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)	0.88 (22.4)

Metric Tube						
T - Tube O.D.(mm)	Basic Ordering Number	Dimension, mm (in.)				
		L	C	D	F	E
3	_T-C-M3	22.3 (0.88)	12.9 (0.51)	12.0 (0.47)	9.5 (0.37)	2.4 (0.09)
4	_T-C-M4	25.4 (1.00)	13.7 (0.54)	12.0 (0.47)	12.7 (0.50)	2.4 (0.09)
6	_T-C-M6	27.0 (1.06)	15.3 (0.60)	14.0 (0.55)	12.7 (0.50)	4.8 (0.19)
8	_T-C-M8	29.9 (1.18)	16.2 (0.64)	16.0 (0.63)	15.9 (0.63)	6.4 (0.25)
10	_T-C-M10	33.5 (1.32)	17.2 (0.68)	19.0 (0.75)	20.6 (0.81)	7.9 (0.31)
12	_T-C-M12	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	9.5 (0.37)
16	_T-C-M16	37.0 (1.46)	24.4 (0.96)	25.0 (0.98)	23.8 (0.94)	12.7 (0.50)
18	_T-C-M18	38.3 (1.51)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)	15.1 (0.59)
20	_T-C-M20	44.6 (1.76)	26.0 (1.02)	32.0 (1.26)	34.9 (1.37)	15.9 (0.63)
22	_T-C-M22	44.7 (1.76)	26.0 (1.02)	32.0 (1.26)	34.9 (1.37)	18.3 (0.72)
25	_T-C-MT25	49.2 (1.94)	31.3 (1.23)	38.0 (1.50)	34.9 (1.37)	21.8 (0.86)

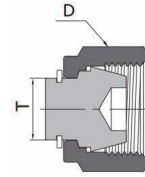
CAPS



Fractional Tube					
T - Tube O.D.(in.)	Basic Ordering Number	Dimension, in. (mm)			
		L	C	D	F
1/16	_T-TC-F1	0.59 (15.0)	0.34 (8.6)	0.31 (7.9)	0.31 (7.9)
1/8	_T-TC-F2	0.79 (20.1)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)
3/16	_T-TC-F3	0.84 (21.3)	0.54 (13.7)	0.50 (12.7)	0.44 (11.1)
1/4	_T-TC-F4	0.92 (23.4)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)
5/16	_T-TC-F5	0.96 (24.4)	0.64 (16.3)	0.63 (15.9)	0.56 (14.3)
3/8	_T-TC-F6	1.01 (25.7)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)
1/2	_T-TC-F8	1.15 (29.2)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)
5/8	_T-TC-F10	1.18 (30.0)	0.96 (24.4)	1.00 (25.4)	0.94 (23.8)
3/4	_T-TC-F12	1.24 (31.5)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)
7/8	_T-TC-F14	1.34 (34.0)	1.02 (25.9)	1.25 (31.8)	1.19 (30.2)
1	_T-TC-F16	1.51 (38.4)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)
1 1/8	_T-TC-F18	1.51 (38.4)	1.23 (31.2)	1.81 (46.0)	1.63 (41.3)
1 1/4	_T-TC-F20	2.10 (53.3)	1.62 (41.1)	1.87 (47.6)	1.75 (44.5)
1 1/2	_T-TC-F24	2.54 (64.5)	1.97 (50.0)	2.25 (57.2)	2.13 (54.0)

Metric Tube					
T - Tube O.D.(mm)	Basic Ordering Number	Dimension, mm (in.)			
		L	C	D	F
2	_T-TC-M2	20.1 (0.79)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)
3	_T-TC-M3	20.1 (0.79)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)
4	_T-TC-M4	21.3 (0.84)	13.7 (0.54)	12.0 (0.47)	12.0 (0.47)
6	_T-TC-M6	23.1 (0.91)	15.3 (0.60)	14.0 (0.55)	14.0 (0.55)
8	_T-TC-M8	24.5 (0.96)	16.2 (0.64)	16.0 (0.63)	15.0 (0.59)
10	_T-TC-M10	26.6 (1.05)	17.2 (0.68)	19.0 (0.75)	18.0 (0.71)
12	_T-TC-M12	29.1 (1.15)	22.8 (0.90)	22.0 (0.87)	22.0 (0.87)
14	_T-TC-M14	29.9 (1.18)	24.4 (0.96)	22.0 (0.87)	24.0 (0.94)
15	_T-TC-M15	29.9 (1.18)	24.4 (0.96)	25.0 (0.98)	24.0 (0.94)
16	_T-TC-M16	29.9 (1.18)	24.4 (0.96)	25.0 (0.98)	24.0 (0.94)
18	_T-TC-M18	31.4 (1.24)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)
20	_T-TC-M20	34.0 (1.34)	26.0 (1.02)	32.0 (1.26)	30.0 (1.18)
22	_T-TC-M22	34.0 (1.34)	26.0 (1.02)	32.0 (1.26)	30.0 (1.18)
25	_T-TC-M25	38.5 (1.52)	31.3 (1.23)	38.0 (1.50)	35.0 (1.38)
28	_T-TC-M28	48.5 (1.91)	36.6 (1.44)	46.0 (1.81)	41.0 (1.61)
30	_T-TC-M30	53.4 (2.10)	39.6 (1.56)	50.0 (1.97)	46.0 (1.81)
32	_T-TC-M32	55.8 (2.20)	42.0 (1.65)	50.0 (1.97)	46.0 (1.81)
38	_T-TC-M38	65.4 (2.57)	49.4 (1.94)	60.0 (2.36)	55.0 (2.17)

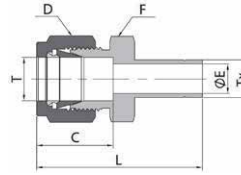
PLUGS



Fractional Tube		
T - Tube O.D.(in.)	Basic Ordering Number	Dimension, in. (mm)
		D
1/16	_T-TP-F1	0.31 (7.9)
1/8	_T-TP-F2	0.44 (11.1)
3/16	_T-TP-F3	0.50 (12.7)
1/4	_T-TP-F4	0.56 (14.3)
5/16	_T-TP-F5	0.63 (15.9)
3/8	_T-TP-F6	0.69 (17.5)
1/2	_T-TP-F8	0.87 (22.2)
5/8	_T-TP-F10	1.00 (25.4)
3/4	_T-TP-F12	1.13 (28.6)
7/8	_T-TP-F14	1.25 (31.8)
1	_T-TP-F16	1.50 (38.1)
1 1/4	_T-TP-F20	1.87 (47.6)
1 1/2	_T-TP-F24	2.25 (57.2)

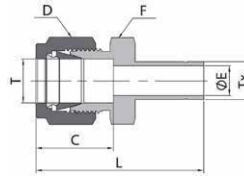
Metric Tube		
T - Tube O.D.(mm)	Basic Ordering Number	Dimension, mm (in.)
		D
2	_T-TP-M2	12.0 (0.47)
3	_T-TP-M3	12.0 (0.47)
4	_T-TP-M4	12.0 (0.47)
6	_T-TP-M6	14.0 (0.55)
8	_T-TP-M8	16.0 (0.63)
10	_T-TP-M10	19.0 (0.75)
12	_T-TP-M12	22.0 (0.87)
14	_T-TP-M14	25.0 (0.98)
15	_T-TP-M15	25.0 (0.98)
16	_T-TP-M16	25.0 (0.98)
18	_T-TP-M18	30.0 (1.18)
20	_T-TP-M20	32.0 (1.26)
22	_T-TP-M22	32.0 (1.26)
25	_T-TP-M25	38.0 (1.50)
28	_T-TP-M28	46.0 (1.81)
30	_T-TP-M30	50.0 (1.97)
32	_T-TP-M32	50.0 (1.97)
38	_T-TP-M38	60.0 (2.36)

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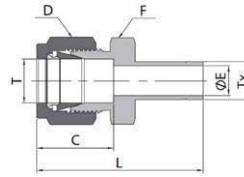
Fractional Tube							
T - Tube O.D. (in.)	Tx-Tube O.D.(in.)	Basic Ordering Number	Dimension, in. (mm)				
			L	C	D	F	E
3/16	1/8	_T-RD-F1-FT2	1.15 (29.2)	0.34 (8.6)	0.31 (7.9)	0.31 (7.9)	0.05 (1.3)
1/16	3/16	_T-RD-F1-FT3	1.18 (30.0)	0.34 (8.6)	0.31 (7.9)	0.31 (7.9)	0.05 (1.3)
1/16	1/4	_T-RD-F1-FT4	1.24 (31.5)	0.34 (8.6)	0.31 (7.9)	0.31 (7.9)	0.05 (1.3)
1/8	1/16	_T-RD-F2-FT1	1.14 (29.0)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)	0.03 (0.8)
1/8	1/8	_T-RD-F2-FT2	1.32 (33.5)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)	0.08 (2.0)
1/8	3/16	_T-RD-F2-FT3	1.35 (34.3)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)	0.09 (2.3)
1/8	1/4	_T-RD-F2-FT4	1.42 (36.1)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)	0.09 (2.3)
1/8	3/8	_T-RD-F2-FT6	1.48 (37.6)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)	0.09 (2.3)
1/8	1/2	_T-RD-F2-FT8	1.74 (44.2)	0.50 (12.7)	0.44 (11.1)	0.56 (14.3)	0.09 (2.3)
3/16	1/8	_T-RD-F3-FT2	1.37 (34.8)	0.54 (13.7)	0.50 (12.7)	0.44 (11.1)	0.08 (2.0)
3/16	1/4	_T-RD-F3-FT4	1.46 (37.1)	0.54 (13.7)	0.50 (12.7)	0.44 (11.1)	0.12 (3.0)
1/4	1/8	_T-RD-F4-FT2	1.45 (36.8)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.08 (2.0)
1/4	3/16	_T-RD-F4-FT3	1.48 (37.6)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.12 (3.0)
1/4	1/4	_T-RD-F4-FT4	1.54 (39.1)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.17 (4.3)
1/4	5/16	_T-RD-F4-FT5	1.57 (39.9)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.19 (4.8)
1/4	3/8	_T-RD-F4-FT6	1.60 (40.6)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.19 (4.8)
1/4	1/2	_T-RD-F4-FT8	1.82 (46.2)	0.60 (15.2)	0.56 (14.3)	0.56 (14.3)	0.19 (4.8)
1/4	5/8	_T-RD-F4-FT0	1.89 (48.0)	0.60 (15.2)	0.56 (14.3)	0.69 (17.5)	0.19 (4.8)
1/4	3/4	_T-RD-F4-FT2	1.88 (47.8)	0.60 (15.2)	0.56 (14.3)	0.81 (20.6)	0.19 (4.8)
5/6	3/8	_T-RD-F5-FT6	1.65 (41.9)	0.64 (16.3)	0.63 (15.9)	0.56 (14.3)	0.25 (6.4)
5/16	1/2	_T-RD-F5-FT8	1.87 (47.5)	0.64 (16.3)	0.63 (15.9)	0.56 (14.3)	0.25 (6.4)
3/8	1/4	_T-RD-F6-FT4	1.63 (41.4)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.17 (4.3)
3/8	3/8	_T-RD-F6-FT6	1.70 (43.2)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.27 (6.9)
3/8	1/2	_T-RD-F6-FT8	1.91 (48.5)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.28 (7.1)
3/8	5/8	_T-RD-F6-FT0	1.98 (50.3)	0.66 (16.8)	0.69 (17.5)	0.69 (17.5)	0.28 (7.1)
3/8	3/4	_T-RD-F6-FT2	1.98 (50.3)	0.66 (16.8)	0.69 (17.5)	0.81 (20.6)	0.28 (7.1)
1/2	1/4	_T-RD-F8-FT4	1.77 (45.0)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.17 (4.3)
1/2	3/8	_T-RD-F8-FT6	1.84 (46.7)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.27 (6.9)
1/2	1/2	_T-RD-F8-FT8	2.06 (52.3)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.37 (9.4)
1/2	5/8	_T-RD-F8-FT0	2.12 (53.8)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.41 (10.4)
1/2	3/4	_T-RD-F8-FT2	2.12 (53.8)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.41 (10.4)
1/2	1	_T-RD-F8-FT6	2.37 (60.2)	0.90 (22.9)	0.87 (22.2)	1.06 (27.0)	0.41 (10.4)
5/8	3/4	_T-RD-F10-F2	2.15 (54.6)	0.96 (24.4)	1.00 (25.4)	0.94 (23.8)	0.50 (12.7)
5/8	7/8	_T-RD-F10-FT14	2.21 (56.1)	0.96 (24.4)	1.00 (25.4)	0.94 (23.8)	0.50 (12.7)
5/8	1	_T-RD-F10-FT16	2.40 (61.0)	0.96 (24.4)	1.00 (25.4)	1.06 (27.0)	0.50 (12.7)
3/4	3/4	_T-RD-F12-FT12	2.15 (54.6)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.58 (14.7)
3/4	1	_T-RD-F12-FT16	2.46 (62.5)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.62 (15.7)
1	1 1/4	_T-RD-F16-FT20	3.17 (80.5)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)	0.88 (22.4)
1	1 1/2	_T-RD-F16-FT24	3.51 (89.2)	1.23 (31.2)	1.50 (38.1)	1.63 (41.3)	0.88 (22.4)
1	2	_T-RD-F16-FT32	4.43 (112.5)	1.23 (31.2)	1.50 (38.1)	2.13 (54.0)	0.96 (24.4)
1 1/4	1 1/2	_T-RD-F20-FT24	4.10 (104.1)	1.62 (41.1)	2.25 (57.2)	1.87 (47.6)	1.09 (27.7)

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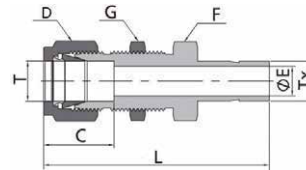
Metric Tube							
T - Tube O.D. (mm)	Tx-Tube O.D.(mm)	Basic Ordering Number	Dimension, mm (in.)				
			L	C	D	F	E
2	3	_T-RD-M2-MT3	33.5 (1.32)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)	1.7 (0.07)
3	4	_T-RD-M3-MT4	35.0 (1.38)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)	2.4 (0.09)
3	6	_T-RD-M3-MT6	36.1 (1.42)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)	2.4 (0.09)
3	10	_T-RD-M3-MT10	38.4 (1.51)	12.9 (0.51)	12.0 (0.47)	14.0 (0.55)	2.4 (0.09)
4	6	_T-RD-M4-MT6	37.1 (1.46)	13.7 (0.54)	12.0 (0.47)	12.0 (0.47)	2.4 (0.09)
6	3	_T-RD-M6-MT3	36.9 (1.45)	15.3 (0.60)	14.0 (0.55)	14.0 (0.55)	1.9 (0.07)
6	8	_T-RD-M6-MT8	39.9 (1.57)	15.3 (0.60)	14.0 (0.55)	14.0 (0.55)	4.8 (0.19)
6	10	_T-RD-M6-MT10	40.7 (1.60)	15.3 (0.60)	14.0 (0.55)	14.0 (0.55)	4.8 (0.19)
6	12	_T-RD-M6-MT12	46.3 (1.82)	15.3 (0.60)	14.0 (0.55)	14.0 (0.55)	4.8 (0.19)
6	18	_T-RD-M6-MT18	49.6 (1.95)	15.3 (0.60)	14.0 (0.55)	22.0 (0.87)	4.8 (0.19)
8	6	_T-RD-M8-MT6	40.3 (1.59)	16.2 (0.64)	16.0 (0.63)	15.0 (0.59)	4.1 (0.16)
8	10	_T-RD-M8-MT10	42.0 (1.65)	16.2 (0.64)	16.0 (0.63)	15.0 (0.59)	6.4 (0.25)
8	12	_T-RD-M8-MT12	47.6 (1.87)	16.2 (0.64)	16.0 (0.63)	15.0 (0.59)	6.4 (0.25)
10	6	_T-RD-M10-MT6	42.4 (1.67)	17.2 (0.68)	19.0 (0.75)	18.0 (0.71)	4.1 (0.16)
10	8	_T-RD-M10-MT8	43.4 (1.71)	17.2 (0.68)	19.0 (0.75)	18.0 (0.71)	5.6 (0.22)
10	12	_T-RD-M10-MT12	49.8 (1.96)	17.2 (0.68)	19.0 (0.75)	18.0 (0.71)	7.9 (0.31)
10	15	_T-RD-M10-MT15	51.3 (2.02)	17.2 (0.68)	19.0 (0.75)	18.0 (0.71)	7.9 (0.31)
10	18	_T-RD-M10-MT18	51.3 (2.02)	17.2 (0.68)	19.0 (0.75)	22.0 (0.87)	7.9 (0.31)
12	6	_T-RD-M12-MT6	44.9 (1.77)	22.8 (0.90)	22.0 (0.87)	22.0 (0.87)	4.1 (0.16)
12	8	_T-RD-M12-MT8	45.9 (1.81)	22.8 (0.90)	22.0 (0.87)	22.0 (0.87)	5.6 (0.22)
12	10	_T-RD-M12-MT10	46.7 (1.84)	22.8 (0.90)	22.0 (0.87)	22.0 (0.87)	7.1 (0.28)
12	16	_T-RD-M12-MT16	53.8 (2.12)	22.8 (0.90)	22.0 (0.87)	22.0 (0.87)	9.5 (0.37)
12	18	_T-RD-M12-MT18	53.8 (2.12)	22.8 (0.90)	22.0 (0.87)	22.0 (0.87)	9.5 (0.37)
12	20	_T-RD-M12-MT20	56.1 (2.21)	22.8 (0.90)	22.0 (0.87)	22.0 (0.87)	9.5 (0.37)
12	22	_T-RD-M12-MT22	56.1 (2.21)	22.8 (0.90)	22.0 (0.87)	24.0 (0.94)	9.5 (0.37)
12	25	_T-RD-M12-MT25	62.4 (2.46)	22.8 (0.90)	22.0 (0.87)	27.0 (1.06)	9.5 (0.37)
16	12	_T-RD-M16-MT12	53.0 (2.09)	24.4 (0.96)	25.0 (0.98)	24.0 (0.94)	8.8 (0.35)
18	12	_T-RD-M18-MT12	54.6 (2.15)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)	8.8 (0.35)
18	16	_T-RD-M18-MT16	56.1 (2.21)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)	12.0 (0.47)
18	20	_T-RD-M18-MT20	57.6 (2.27)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)	15.1 (0.59)
18	22	_T-RD-M18-MT22	57.6 (2.27)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)	15.1 (0.59)
18	25	_T-RD-M18-MT25	62.4 (2.46)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)	15.1 (0.59)
20	16	_T-RD-M20-MT16	57.9 (2.28)	26.0 (1.02)	32.0 (1.26)	30.0 (1.18)	12.0 (0.47)
20	18	_T-RD-M20-MT18	57.9 (2.28)	26.0 (1.02)	32.0 (1.26)	30.0 (1.18)	13.9 (0.55)
20	22	_T-RD-M20-MT22	59.4 (2.34)	26.0 (1.02)	32.0 (1.26)	30.0 (1.18)	15.9 (0.63)
20	25	_T-RD-M20-MT25	64.2 (2.53)	26.0 (1.02)	32.0 (1.26)	30.0 (1.18)	15.8 (0.62)
22	18	_T-RD-M22-MT18	57.9 (2.28)	26.0 (1.02)	32.0 (1.26)	30.0 (1.18)	13.9 (0.55)
22	20	_T-RD-M22-MT20	59.4 (2.34)	26.0 (1.02)	32.0 (1.26)	30.0 (1.18)	15.5 (0.61)
22	25	_T-RD-M22-MT25	64.2 (2.53)	26.0 (1.02)	32.0 (1.26)	30.0 (1.18)	18.3 (0.72)
25	18	_T-RD-M25-MT18	63.1 (2.48)	31.3 (1.23)	38.0 (1.50)	35.0 (1.38)	13.9 (0.55)
25	20	_T-RD-M25-MT20	64.6 (2.54)	31.3 (1.23)	38.0 (1.50)	35.0 (1.38)	15.5 (0.61)

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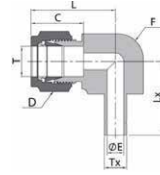
Metric Tube to Fractional Tube							
T - Tube O.D. (mm)	Tx-Tube O.D.(in.)	Basic Ordering Number	Dimension, in. (mm)				
			L	C	D	F	E
2	31/8	_T-RD-M2-FT2	33.5 (1.32)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)	1.7 (0.07)
3	1/8	_T-RD-M3-FT2	33.5 (1.32)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)	2.0 (0.08)
3	1/4	_T-RD-M3-FT4	36.1 (1.42)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)	2.4 (0.09)
4	1/4	_T-RD-M4-FT4	37.1 (1.46)	13.7 (0.54)	12.0 (0.47)	12.0 (0.47)	2.4 (0.09)
6	1/8	_T-RD-M6-FT2	36.9 (1.45)	15.3 (0.60)	14.0 (0.55)	14.0 (0.55)	2.0 (0.08)
6	1/4	_T-RD-M6-FT4	39.2 (1.54)	15.3 (0.60)	14.0 (0.55)	14.0 (0.55)	4.4 (0.17)
6	5/16	_T-RD-M6-FT5	39.9 (1.57)	15.3 (0.60)	14.0 (0.55)	14.0 (0.55)	4.8 (0.19)
6	3/8	_T-RD-M6-FT6	40.7 (1.60)	15.3 (0.60)	14.0 (0.55)	14.0 (0.55)	4.8 (0.19)
6	1/2	_T-RD-M6-FT8	46.3 (1.82)	15.3 (0.60)	14.0 (0.55)	14.0 (0.55)	4.8 (0.19)
8	1/4	_T-RD-M8-FT4	40.3 (1.59)	16.2 (0.64)	16.0 (0.63)	15.0 (0.59)	4.4 (0.17)
8	3/8	_T-RD-M8-FT6	42.0 (1.65)	16.2 (0.64)	16.0 (0.63)	15.0 (0.59)	6.4 (0.25)
8	1/2	_T-RD-M8-FT8	47.6 (1.87)	16.2 (0.64)	16.0 (0.63)	15.0 (0.59)	6.4 (0.25)
10	3/8	_T-RD-M10-FT6	44.4 (1.75)	17.2 (0.68)	19.0 (0.75)	18.0 (0.71)	6.8 (0.27)
10	1/2	_T-RD-M10-FT8	49.8 (1.96)	17.2 (0.68)	19.0 (0.75)	18.0 (0.71)	7.9 (0.31)
12	1/2	_T-RD-M12-FT8	52.3 (2.06)	22.8 (0.90)	22.0 (0.87)	22.0 (0.87)	9.3 (0.37)
12	3/4	_T-RD-M12-FT12	53.8 (2.12)	22.8 (0.90)	22.0 (0.87)	22.0 (0.87)	9.5 (0.37)
18	3/4	_T-RD-M18-FT12	56.1 (2.21)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)	14.7 (0.58)
18	1	_T-RD-M18-FT16	62.4 (2.46)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)	15.1 (0.59)
25	1	_T-RD-M25-FT16	69.5 (2.74)	31.3 (1.23)	38.0 (1.50)	35.0 (1.38)	20.2 (0.80)

BULKHEAD REDUCERS



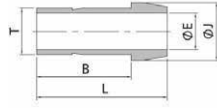
Fractional Tube								
T - Tube O.D. (in.)	Tx-Tube O.D.(in.)	Basic Ordering Number	Dimension, in. (mm)					
			L	C	D	F	G	E
1/8	1/8	_T-BR-F2-FT2	1.95 (49.5)	0.50 (12.7)	0.44 (11.1)	0.50 (12.7)	0.50 (12.7)	0.08 (2.0)
1/4	1/4	_T-BR-F4-FT4	2.20 (55.9)	0.60 (15.2)	0.56 (14.3)	0.63 (15.9)	0.63 (15.9)	0.17 (4.3)
3/8	3/8	_T-BR-F6-FT6	2.41 (61.2)	0.66 (16.8)	0.69 (17.5)	0.75 (19.1)	0.75 (19.1)	0.27 (6.9)
1/2	1/2	_T-BR-F8-FT8	2.87 (72.9)	0.90 (22.9)	0.87 (22.2)	0.94 (23.8)	0.94 (23.8)	0.37 (9.4)
5/8	5/8	_T-BR-F10-FT10	2.96 (75.2)	0.96 (24.4)	1.00 (25.4)	1.06 (27.0)	1.06 (27.0)	0.47 (11.9)
3/4	3/4	_T-BR-F12-FT12	3.21 (81.5)	0.96 (24.4)	1.13 (28.6)	1.19 (30.2)	1.19 (30.2)	0.58 (14.7)
1	1	_T-BR-F16-FT16	3.95 (100.3)	1.23 (31.2)	1.50 (38.1)	1.63 (41.3)	1.63 (41.3)	0.80 (20.3)

REDUCER ELBOWS

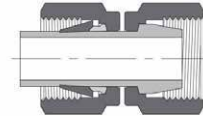


Metric Tube to Fractional Tube								
T - Tube O.D. (mm)	Tx-Tube O.D.(mm)	Basic Ordering Number	Dimension, mm (in.)					
			L	C	D	F	G	E
6	6	_T-LR-M6-MT6	27.0 (1.06)	27.0 (1.06)	27.0 (1.06)	27.0 (1.06)	27.0 (1.06)	27.0 (1.06)
12	12	_T-LR-M12-MT12	38.1 (1.50)	38.1 (1.50)	38.1 (1.50)	38.1 (1.50)	38.1 (1.50)	38.1 (1.50)

PORT CONNECTORS



1* /25 mm and below

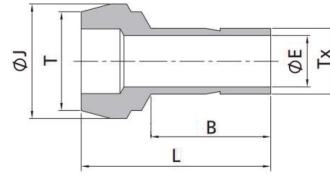


1 1/4\"/>

Fractional Tube					
T - Tube O.D. (in.)	Basic Ordering Number	Dimension, in. (mm)			
		L	F	B	E
1/16	_T-P-FT1	0.54 (13.7)	0.42 (10.7)	0.03 (0.8)	0.13 (3.3)
1/8	_T-P-FT2	0.88 (22.4)	0.62 (15.7)	0.08 (2.0)	0.24 (6.1)
1/4	_T-P-FT4	0.97 (24.6)	0.74 (18.8)	0.17 (4.3)	0.37 (9.4)
5/16	_T-P-FT5	1.02 (25.9)	0.79 (20.1)	0.22 (5.6)	0.43 (10.9)
3/8	_T-P-FT6	1.03 (26.2)	0.80 (20.3)	0.27 (6.9)	0.50 (12.7)
1/2	_T-P-FT8	1.41 (35.8)	1.02 (25.9)	0.37 (9.4)	0.62 (15.7)
5/8	_T-P-FT10	1.64 (41.7)	1.11 (28.1)	0.47 (11.9)	0.81 (20.5)
3/4	_T-P-FT12	1.65 (41.9)	1.09 (27.7)	0.58 (14.7)	0.87 (22.1)
1	_T-P-FT16	1.89 (48.0)	1.36 (34.5)	0.80 (20.3)	1.12 (28.4)
1 1/4	_T-P-FT20	2.72 (69.1)	1.99 (50.6)	1.02 (25.9)	1.47 (37.4)
1 1/2	_T-P-FT24	3.31 (84.1)	2.34 (59.4)	1.25 (31.8)	1.80 (45.8)

Metric Tube					
T - Tube O.D. (mm)	Basic Ordering Number	Dimension, mm (in.)			
		L	F	B	E
3	_T-P-MT3	22.2 (0.87)	15.7 (0.62)	1.9 (0.07)	6.0 (0.24)
6	_T-P-MT6	24.6 (0.97)	18.7 (0.74)	4.1 (0.16)	9.0 (0.35)
8	_T-P-MT8	25.9 (1.02)	20.0 (0.79)	5.6 (0.22)	11.0 (0.43)
10	_T-P-MT10	26.1 (1.03)	20.2 (0.80)	7.1 (0.28)	13.1 (0.52)
12	_T-P-MT12	35.8 (1.41)	26.0 (1.02)	8.8 (0.35)	15.0 (0.59)
15	_T-P-MT15	37.8 (1.49)	27.6 (1.09)	11.2 (0.44)	19.6 (0.77)
16	_T-P-MT16	37.8 (1.49)	27.6 (1.09)	12.0 (0.47)	20.6 (0.81)
18	_T-P-MT18	37.8 (1.49)	27.7 (1.09)	13.9 (0.55)	21.0 (0.83)
20	_T-P-MT20	39.4 (1.55)	29.2 (1.15)	15.5 (0.61)	24.6 (0.97)
25	_T-P-MT25	49.3 (1.94)	34.5 (1.36)	19.9 (0.78)	31.2 (1.23)
28	_T-P-MT28	63.5 (2.5)	48.3 (1.90)	22.5 (0.89)	34.4 (1.35)
30	_T-P-MT30	67.6 (2.66)	52.2 (2.06)	24.3 (0.96)	37.4 (1.47)
32	_T-P-MT32	69.7 (2.74)	52.4 (2.06)	26.5 (1.04)	39.4 (1.55)
38	_T-P-MT38	81.9 (3.22)	61.4 (2.42)	31.6 (1.24)	45.8 (1.80)

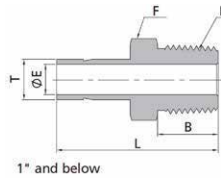
REDUCING PORT CONNECTORS



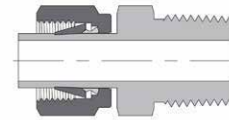
Fractional Tube						
T - Tube O.D. (in.)	Tx-Tube O.D.(in.)	Basic Ordering Number	Dimension, in. (mm)			
			L	B	E	J
1/8	1/16	_T-RP-F2-FT1	0.68 (17.3)	0.34 (8.6)	0.03 (0.8)	0.24 (6.1)
1/4	1/16	_T-RP-F4-FT1	0.71 (18.0)	0.34 (8.6)	0.03 (0.8)	0.37 (9.4)
1/4	1/8	_T-RP-F4-FT2	0.89 (22.6)	0.53 (13.5)	0.08 (2.0)	0.37 (9.4)
3/8	1/8	_T-RP-F6-FT2	0.91 (23.1)	0.53 (13.5)	0.08 (2.0)	0.50 (12.7)
3/8	1/4	_T-RP-F6-FT4	0.98 (24.9)	0.62 (15.7)	0.17 (4.3)	0.50 (12.7)
1/2	1/4	_T-RP-F8-FT4	1.15 (29.2)	0.62 (15.7)	0.17 (4.3)	0.62 (15.7)
1/2	3/8	_T-RP-F8-FT6	1.20 (30.5)	0.69 (17.5)	0.27 (6.9)	0.62 (15.7)
3/4	1/2	_T-RP-F12-FT8	1.49 (37.8)	0.91 (23.1)	0.37 (9.4)	0.87 (22.1)
1	1/2	_T-RP-F16-FT8	1.69 (42.9)	0.96 (24.4)	0.37 (9.4)	1.12 (28.5)
1	3/4	_T-RP-F16-FT12	1.72 (43.7)	1.02 (25.9)	0.58 (14.7)	1.12 (28.5)

Metric Tube						
T - Tube O.D. (mm)	Tx-Tube O.D.(mm)	Basic Ordering Number	Dimension, mm (in.)			
			L	B	E	J
6	3	_T-RPCM6-MT3	22.6 (0.89)	13.5 (0.53)	1.9 (0.07)	9.0 (0.35)
8	6	_T-RP-M8-MT6	24.7 (0.97)	15.7 (0.62)	4.1 (0.16)	11.0 (0.43)
10	6	_T-RP-M10-MT6	25.0 (0.98)	15.7 (0.62)	4.1 (0.16)	13.1 (0.52)
10	8	_T-RP-M10-MT8	26.3 (1.04)	17.0 (0.67)	5.6 (0.22)	13.1 (0.52)
12	6	_T-RP-M12-MT6	29.6 (1.17)	15.7 (0.62)	4.1 (0.16)	15.0 (0.59)
12	8	_T-RP-M12-MT8	29.8 (1.17)	16.8 (0.66)	5.6 (0.22)	15.0 (0.59)
12	10	_T-RP-M12-MT10	30.4 (1.20)	17.5 (0.69)	7.1 (0.28)	15.0 (0.59)
16	12	_T-RP-M16-MT12	36.2 (1.43)	23.1 (0.91)	8.8 (0.35)	19.0 (0.75)
28	25	_T-RP-M28-MT25	56.5 (2.22)	33.0 (1.30)	19.8 (0.78)	34.3 (1.35)
32	25	_T-RP-M32-MT25	60.3 (2.37)	33.0 (1.30)	19.8 (0.78)	39.5 (1.56)
38	25	_T-RP-M38-MT25	65.8 (2.59)	33.0 (1.30)	19.8 (0.78)	47.1 (1.85)

MALE ADAPTERS



1" and below



1 1/4" and above

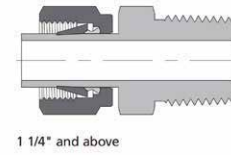
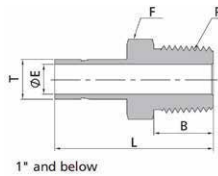
Fractional Tube to NPT Thread

T - Tube O.D. (in.)	P-NPT Size	Basic Ordering Number	Dimension, in. (mm)			
			L	B	E	F
1/16	1/8	_T-MAD-FT1-N2	1.00 (25.4)	0.38 (9.7)	0.03 (0.8)	0.44 (11.1)
1/8	1/8	_T-MAD-FT2-N2	1.16 (29.5)	0.38 (9.7)	0.08 (2.0)	0.44 (11.1)
1/8	1/4	_T-MAD-FT2-N4	1.37 (34.8)	0.56 (14.2)	0.08 (2.0)	0.56 (14.3)
3/16	1/8	_T-MAD-FT3-N2	1.19 (30.2)	0.38 (9.7)	0.12 (3.0)	0.44 (11.1)
3/16	1/4	_T-MAD-FT3-N4	1.40 (35.6)	0.56 (14.2)	0.12 (3.0)	0.56 (14.3)
1/4	1/8	_T-MAD-FT4-N2	1.25 (31.8)	0.38 (9.7)	0.17 (4.3)	0.44 (11.1)
1/4	1/4	_T-MAD-FT4-N4	1.46 (37.1)	0.56 (14.2)	0.17 (4.3)	0.56 (14.3)
1/4	3/8	_T-MAD-FT4-N6	1.49 (37.8)	0.56 (14.2)	0.17 (4.3)	0.69 (17.5)
1/4	1/2	_T-MAD-FT4-N8	1.71 (43.4)	0.75 (19.1)	0.17 (4.3)	0.87 (22.2)
5/16	1/8	_T-MAD-FT5-N2	1.29 (32.8)	0.38 (9.7)	0.19 (4.8)	0.44 (11.1)
5/16	1/4	_T-MAD-FT5-N4	1.50 (38.1)	0.56 (14.2)	0.22 (5.6)	0.56 (14.3)
5/16	3/8	_T-MAD-FT5-N6	1.53 (38.9)	0.56 (14.2)	0.22 (5.6)	0.69 (17.5)
5/16	1/2	_T-MAD-FT5-N8	1.74 (44.2)	0.75 (19.1)	0.22 (5.6)	0.87 (22.2)
3/8	1/8	_T-MAD-FT6-N2	1.32 (33.5)	0.38 (9.7)	0.19 (4.8)	0.44 (11.1)
3/8	1/4	_T-MAD-FT6-N4	1.53 (38.9)	0.56 (14.2)	0.27 (6.9)	0.56 (14.3)
3/8	3/8	_T-MAD-FT6-N6	1.56 (39.6)	0.56 (14.2)	0.27 (6.9)	0.69 (17.5)
3/8	1/2	_T-MAD-FT6-N8	1.78 (45.2)	0.75 (19.1)	0.27 (6.9)	0.87 (22.2)
1/2	1/4	_T-MAD-FT8-N4	1.75 (44.5)	0.56 (14.2)	0.28 (7.1)	0.56 (14.3)
1/2	3/8	_T-MAD-FT8-N6	1.78 (45.2)	0.56 (14.2)	0.37 (9.4)	0.69 (17.5)
1/2	1/2	_T-MAD-FT8-N8	2.00 (50.8)	0.75 (19.1)	0.37 (9.4)	0.87 (22.2)
5/8	1/2	_T-MAD-FT10-N8	2.06 (52.3)	0.75 (19.1)	0.47 (11.9)	0.87 (22.2)
3/4	1/2	_T-MAD-FT12-N8	2.06 (52.3)	0.75 (19.1)	0.47 (11.9)	0.87 (22.2)
3/4	3/4	_T-MAD-FT12-N12	2.06 (52.3)	0.75 (19.1)	0.58 (14.7)	1.06 (27.0)
3/4	1	_T-MAD-FT12-N16	2.41 (61.2)	0.94 (23.9)	0.81 (20.7)	1.37 (34.9)
1	3/4	_T-MAD-FT16-N12	2.31 (58.7)	0.75 (19.1)	0.62 (15.7)	1.06 (27.0)
1	1	_T-MAD-FT16-N16	2.60 (66.0)	0.94 (23.9)	0.80 (20.3)	1.37 (34.9)
1 1/4	1 1/4	_T-MAD-FT20-N20	3.16 (80.3)	0.94 (23.9)	1.02 (25.9)	1.75 (44.5)
1 1/2	1 1/2	_T-MAD-FT24-N24	3.72 (94.5)	1.03 (26.2)	1.25 (31.8)	2.13 (54.0)

Fractional Tube to RT Thread

T - Tube O.D. (in.)	P-RT Size	Basic Ordering Number	Dimension, in. (mm)			
			L	B	E	F
1/8	1/8	_T-MAD-FTD2-RT2	1.00 (25.4)	0.38 (9.7)	0.03 (0.8)	0.44 (11.1)
1/8	1/4	_T-MAD-FTD2-RT4	1.16 (29.5)	0.38 (9.7)	0.08 (2.0)	0.44 (11.1)
1/4	1/8	_T-MAD-FTD4-RT2	1.37 (34.8)	0.56 (14.2)	0.08 (2.0)	0.56 (14.3)
1/4	1/4	_T-MAD-FTD4-RT4	1.19 (30.2)	0.38 (9.7)	0.12 (3.0)	0.44 (11.1)
1/4	3/8	_T-MAD-FTD4-RT6	1.40 (35.6)	0.56 (14.2)	0.12 (3.0)	0.56 (14.3)
1/4	1/2	_T-MAD-FTD4-RT8	1.25 (31.8)	0.38 (9.7)	0.17 (4.3)	0.44 (11.1)
5/16	1/8	_T-MAD-FTD5-RT2	1.46 (37.1)	0.56 (14.2)	0.17 (4.3)	0.56 (14.3)
5/16	1/4	_T-MAD-FTD5-RT4	1.49 (37.8)	0.56 (14.2)	0.17 (4.3)	0.69 (17.5)
3/8	1/4	_T-MAD-FTD6-RT4	1.71 (43.4)	0.75 (19.1)	0.17 (4.3)	0.87 (22.2)
3/8	3/8	_T-MAD-FTD6-RT6	1.29 (32.8)	0.38 (9.7)	0.19 (4.8)	0.44 (11.1)
3/8	1/2	_T-MAD-FTD6-RT8	1.50 (38.1)	0.56 (14.2)	0.22 (5.6)	0.56 (14.3)
1/2	1/4	_T-MAD-FTD8-RT4	1.53 (38.9)	0.56 (14.2)	0.22 (5.6)	0.69 (17.5)
1/2	3/8	_T-MAD-FTD8-RT6	1.74 (44.2)	0.75 (19.1)	0.22 (5.6)	0.87 (22.2)
1/2	1/2	_T-MAD-FTD8-RT8	1.32 (33.5)	0.38 (9.7)	0.19 (4.8)	0.44 (11.1)
5/8	3/8	_T-MAD-FTD10-RT6	1.53 (38.9)	0.56 (14.2)	0.27 (6.9)	0.56 (14.3)
5/8	1/2	_T-MAD-FTD10-RT8	1.56 (39.6)	0.56 (14.2)	0.27 (6.9)	0.69 (17.5)
3/4	3/4	_T-MAD-FTD12-RT12	1.78 (45.2)	0.75 (19.1)	0.27 (6.9)	0.87 (22.2)
1	1	_T-MAD-FTD16-RT16	1.75 (44.5)	0.56 (14.2)	0.28 (7.1)	0.56 (14.3)

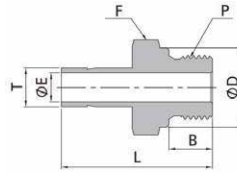
MALE ADAPTERS



Metric Tube to NPT Thread						
T - Tube O.D. (mm)	P-NPT Size	Basic Ordering Number	Dimension, mm (in.)			
			L	B	E	F
3	1/8	_T-MAD-MT3-N2	29.4 (1.16)	9.7 (0.38)	1.8 (0.07)	12.0(0.47)
4	1/8	_T-MAD-MT4-N2	29.4 (1.16)	9.7 (0.38)	2.0 (0.08)	12.0 (0.47)
6	1/8	_T-MAD-MT6-N2	32.8 (1.29)	9.7 (0.38)	4.1 (0.16)	12.0 (0.47)
6	1/4	_T-MAD-MT6-N4	38.1 (1.50)	14.2 (0.56)	4.1 (0.16)	14.0 (0.55)
6	3/8	_T-MAD-MT6-N6	39.2 (1.54)	14.2 (0.56)	4.1 (0.16)	18.0 (0.71)
6	1/2	_T-MAD-MT6-N8	42.1 (1.66)	19.1 (0.75)	4.1 (0.16)	22.0 (0.87)
8	1/4	_T-MAD-MT8-N4	39.1 (1.54)	14.2 (0.56)	5.6 (0.22)	14.0 (0.55)
8	3/8	_T-MAD-MT8-N6	39.9 (1.57)	14.2 (0.56)	5.6 (0.22)	19.0 (0.75)
10	1/4	_T-MAD-MT10-N4	39.9 (1.57)	14.2 (0.56)	7.1 (0.28)	14.0 (0.55)
10	3/8	_T-MAD-MT10-N6	40.6 (1.60)	14.2 (0.56)	7.1 (0.28)	18.0 (0.71)
10	1/2	_T-MAD-MT10-N8	46.2 (1.82)	19.1 (0.75)	7.1 (0.28)	22.0 (0.87)
12	1/4	_T-MAD-MT12-N4	46.5 (1.83)	14.2 (0.56)	7.1 (0.28)	14.0 (0.55)
12	3/8	_T-MAD-MT12-N6	46.2 (1.82)	14.2 (0.56)	8.8 (0.35)	18.0 (0.71)
12	1/2	_T-MAD-MT12-N8	52.1 (2.05)	19.1 (0.75)	8.8 (0.35)	22.0 (0.87)
16	1/2	_T-MAD-MT16-N8	50.8 (2.00)	19.1 (0.75)	12.7 (0.50)	22.0 (0.87)
16	3/4	_T-MAD-MT16-N12	51.6 (2.03)	19.1 (0.75)	12.7 (0.50)	27.0 (1.06)
18	1/2	_T-MAD-MT18-N8	50.8 (2.00)	19.1 (0.75)	12.7 (0.50)	27.0 (1.06)
18	3/4	_T-MAD-MT18-N12	51.6 (2.03)	19.1 (0.75)	14.0 (0.55)	27.0 (1.06)
20	1/2	_T-MAD-MT20-N8	51.8 (2.04)	19.1 (0.75)	11.9 (0.47)	22.0 (0.87)
20	3/4	_T-MAD-MT20-N12	52.4 (2.06)	19.1 (0.75)	15.1 (0.59)	27.0 (1.06)
25	1	_T-MAD-MT25-N16	65.9 (2.59)	23.9 (0.94)	19.8 (0.78)	35.0 (1.38)
28	1	_T-MAD-MT28-N16	74.4 (2.93)	23.9 (0.94)	22.2 (0.87)	35.0 (1.38)
28	1 1/4	_T-MAD-MT28-N20	76.2 (3.00)	23.9 (0.94)	22.5 (0.89)	46.0 (1.81)
30	1	_T-MAD-MT30-N16	79.2 (3.12)	23.9 (0.94)	22.2 (0.87)	41.0 (1.61)
30	1 1/4	_T-MAD-MT30-N20	80.0 (3.15)	23.9 (0.94)	24.3 (0.96)	46.0 (1.81)
32	1 1/4	_T-MAD-MT32-N20	81.0 (3.19)	23.9 (0.94)	26.5 (1.04)	46.0 (1.81)
38	1 1/2	_T-MAD-MT38-N24	92.2 (3.63)	26.2 (1.03)	31.6 (1.24)	55.0 (2.17)
1 1/2	1 1/2	_T-MAD-MT24-N24	3.72 (94.5)	1.03 (26.2)	1.25 (31.8)	2.13 (54.0)

Metric Tube to RT Thread						
T - Tube O.D. (mm)	P-RT Size	Basic Ordering Number	Dimension, mm (mm)			
			L	B	E	F
3	1/8	_T-MAD-MT3-RT2	29.4 (1.16)	9.7 (0.38)	1.8 (0.07)	12.0 (0.47)
4	1/8	_T-MAD-MT4-RT2	29.4 (1.16)	9.7 (0.38)	2.0 (0.08)	12.0 (0.47)
6	1/8	_T-MAD-MT6-RT2	32.8 (1.29)	9.7 (0.38)	4.1 (0.16)	12.0 (0.47)
6	1/4	_T-MAD-MT6-RT4	38.1 (1.50)	14.2 (0.56)	4.1 (0.16)	14.0 (0.55)
8	1/4	_T-MAD-MT8-RT4	39.1 (1.54)	14.2 (0.56)	5.6 (0.22)	14.0 (0.55)
8	3/8	_T-MAD-MT8-RT6	39.9 (1.57)	14.2 (0.56)	5.6 (0.22)	18.0 (0.71)
10	1/4	_T-MAD-MT10-RT4	39.9 (1.57)	14.2 (0.56)	7.1 (0.28)	14.0 (0.55)
10	3/8	_T-MAD-MT10-RT6	40.6 (1.60)	14.2 (0.56)	7.1 (0.28)	18.0 (0.71)
10	1/2	_T-MAD-MT10-RT8	44.5 (1.75)	19.1 (0.75)	7.5 (0.30)	22.0 (0.87)
12	1/4	_T-MAD-MT12-RT4	46.5 (1.83)	14.2 (0.56)	7.1 (0.28)	16.0 (0.63)
12	3/8	_T-MAD-MT12-RT6	46.2 (1.82)	14.2 (0.56)	8.8 (0.35)	18.0 (0.71)
12	1/2	_T-MAD-MT12-RT8	51.8 (2.04)	19.1 (0.75)	8.8 (0.35)	22.0 (0.87)
16	1/2	_T-MAD-MT16-RT8	50.8 (2.00)	19.1 (0.75)	12.7 (0.50)	22.0 (0.87)
18	3/4	_T-MAD-MT18-RT12	51.6 (2.03)	19.1 (0.75)	14.0 (0.55)	27.0 (1.06)
20	3/4	_T-MAD-MT20-RT12	52.4 (2.06)	19.1 (0.75)	15.1 (0.59)	27.0 (1.06)
25	1	_T-MAD-MT25-RT16	65.9 (2.59)	23.9 (0.94)	19.8 (0.78)	35.0 (1.38)
28	1	_T-MAD-MT28-RT16	74.7 (2.94)	23.9 (0.94)	22.2 (0.87)	35.0 (1.38)
28	1 1/4	_T-MAD-MT28-RT20	76.2 (3.00)	23.9 (0.94)	22.5 (0.89)	46.0 (1.81)
30	1 1/4	_T-MAD-MT30-RT20	80.0 (3.15)	23.9 (0.94)	24.3 (0.96)	46.0 (1.81)
32	1 1/4	_T-MAD-MT32-RT20	81.0 (3.19)	23.9 (0.94)	26.5 (1.04)	46.0 (1.81)

MALE ADAPTERS



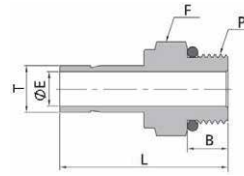
Fractional Tube to ISO Parallel Thread

T - Tube O.D. (in.)	P-RP Size	Basic Ordering Number	Dimension, in. (mm)				
			L	B	E	F	D
1/8	1/8	_T-MAD-FT2-RS2	1.22 (31.0)	0.28 (7.1)	0.08 (2.0)	0.56 (14.3)	0.54 (13.7)
1/8	1/4	_T-MAD-FT2-RS4	1.41 (35.8)	0.44 (11.2)	0.08 (2.0)	0.75 (19.1)	0.70 (17.8)
1/4	1/8	_T-MAD-FT4-RS2	1.31 (33.3)	0.28 (7.1)	0.16 (4.1)	0.56 (14.3)	0.54 (13.7)
1/4	1/4	_T-MAD-FT4-RS4	1.50 (38.1)	0.44 (11.2)	0.17 (4.3)	0.75 (19.1)	0.70 (17.8)
3/8	1/8	_T-MAD-FT6-RS2	1.34 (34.0)	0.28 (7.1)	0.05 (1.3)	0.56 (14.3)	0.54 (13.7)
3/8	1/4	_T-MAD-FT6-RS4	1.57 (39.9)	0.44 (11.2)	0.23 (5.8)	0.75 (19.1)	0.70 (17.8)
3/8	3/8	_T-MAD-FT6-RS6	1.60 (40.6)	0.44 (11.2)	0.27 (6.9)	0.87 (22.2)	0.85 (21.6)
3/8	1/2	_T-MAD-FT6-RS8	1.69 (42.9)	0.56 (14.2)	0.28 (7.1)	1.06 (27.0)	1.02 (25.9)
1/2	1/4	_T-MAD-FT8-RS4	1.79 (45.5)	0.44 (11.2)	0.23 (5.8)	0.75 (19.1)	0.70 (17.8)
1/2	3/8	_T-MAD-FT8-RS6	1.82 (46.2)	0.44 (11.2)	0.31 (7.9)	0.87 (22.2)	0.85 (21.6)
1/2	1/2	_T-MAD-FT8-RS8	1.94 (49.2)	0.56 (14.2)	0.37 (9.4)	1.06 (27.0)	1.02 (25.9)
5/8	1/2	_T-MAD-FT10-RS8	1.97 (50.0)	0.56 (14.2)	0.47 (11.9)	1.06 (27.0)	1.02 (25.9)
3/4	3/4	_T-MAD-FT12-RS12	2.16 (54.9)	0.63 (16.0)	0.58 (14.7)	1.31 (33.3)	1.26 (32.0)
1	1	_T-MAD-FT16-RS16	2.54 (64.5)	0.72 (18.3)	0.80 (20.3)	1.63 (41.3)	1.53 (38.9)

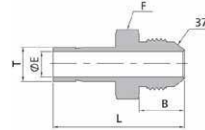
Metric Tube to ISO Parallel Thread

T - Tube O.D. (mm)	P-RS Size	Basic Ordering Number	Dimension, mm (in.)				
			L	B	E	F	D
3	1/8	_T-MAD-MT3-RS2	31.0 (1.22)	7.1 (0.28)	1.8 (0.07)	14.0 (0.55)	13.7 (0.54)
4	1/8	_T-MAD-MT4-RS2	31.8 (1.25)	7.1 (0.28)	2.0 (0.08)	14.0 (0.55)	13.7 (0.54)
6	1/8	_T-MAD-MT6-RS2	34.3 (1.35)	7.1 (0.28)	4.0 (0.16)	14.0 (0.55)	13.7 (0.54)
6	1/4	_T-MAD-MT6-RS4	39.1 (1.54)	11.2 (0.44)	4.1 (0.16)	19.0 (0.75)	17.8 (0.70)
8	1/4	_T-MAD-MT8-RS4	40.1 (1.58)	11.2 (0.44)	5.6 (0.22)	19.0 (0.75)	17.8 (0.70)
10	1/4	_T-MAD-MT10-RS4	40.9 (1.61)	11.2 (0.44)	5.9 (0.23)	19.0 (0.75)	17.8 (0.70)
10	3/8	_T-MAD-MT10-RS6	41.7 (1.64)	11.2 (0.44)	7.1 (0.28)	22.0 (0.87)	21.6 (0.85)
10	1/2	_T-MAD-MT10-RS8	44.7 (1.76)	14.2 (0.56)	7.1 (0.28)	27.0 (1.06)	25.9 (1.02)
12	1/4	_T-MAD-MT12-RS4	46.7 (1.84)	11.2 (0.44)	5.9 (0.23)	19.0 (0.75)	17.8 (0.70)
12	3/8	_T-MAD-MT12-RS6	47.2 (1.86)	11.2 (0.44)	7.9 (0.31)	22.0 (0.87)	21.6 (0.85)
12	1/2	_T-MAD-MT12-RS8	50.5 (1.99)	14.2 (0.56)	8.8 (0.35)	27.0 (1.06)	25.9 (1.02)
16	1/2	_T-MAD-MT16-RS8	50.8 (2.00)	14.2 (0.56)	11.9 (0.47)	27.0 (1.06)	25.9 (1.02)
18	3/4	_T-MAD-MT18-RS12	55.9 (2.20)	16.0 (0.63)	13.9 (0.55)	35.0 (1.38)	32.0 (1.26)
20	3/4	_T-MAD-MT20-RS12	57.0 (2.24)	16.0 (0.63)	15.1 (0.59)	33.0 (1.30)	32.0 (1.26)
25	1	_T-MAD-MT25-RS16	65.1 (2.56)	18.3 (0.72)	19.8 (0.78)	41.0 (1.61)	38.9 (1.53)

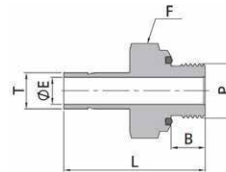
MALE ADAPTERS



Fractional Tube to SAE/MS Thread						
T - Tube O.D. (in.)	P-SAE/MS Size	Basic Ordering Number	Dimension, in. (mm)			
			L	B	E	F
1/8	5/16-24	_T-MAD-FT2-ST5	1.20 (30.5)	0.30 (7.6)	0.08 (2.0)	0.44 (11.1)
1/4	7/16-20	_T-MAD-FT4-ST7	1.39 (35.3)	0.36 (9.1)	0.17 (4.3)	0.56 (14.3)
3/8	7/16-20	_T-MAD-FT6-ST7	1.46 (37.1)	0.36 (9.1)	0.20 (5.1)	0.56 (14.3)
3/8	9/16-18	_T-MAD-FT6-ST9	1.52 (38.6)	0.39 (9.9)	0.27 (6.9)	0.69 (17.5)
3/8	3/4-16	_T-MAD-FT6-ST12	1.60 (40.6)	0.44 (11.2)	0.27 (6.9)	0.87 (22.2)
1/2	9/16-18	_T-MAD-FT8-ST9	1.74 (44.2)	0.39 (9.9)	0.28 (7.1)	0.69 (17.5)
1/2	3/4-16	_T-MAD-FT8-ST12	1.82 (46.2)	0.44 (11.2)	0.37 (9.4)	0.87 (22.2)
5/8	7/8-14	_T-MAD-FT10-ST14	1.94 (49.3)	0.50 (12.7)	0.47 (11.9)	1.00 (25.4)
3/4	1 1/16-12	_T-MAD-FT12-ST17	2.10 (53.3)	0.59 (15.0)	0.58 (14.7)	1.25 (31.8)
1	1 5/16-12	_T-MAD-FT16-ST21	2.41 (61.2)	0.59 (15.0)	0.80 (20.3)	1.50 (38.1)

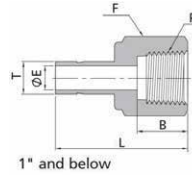


Fractional Tube to Flared						
T - Tube O.D. (in.)	Tube Flared Size	Basic Ordering Number	Dimension, in. (mm)			
			L	B	E	F
1/4	5/4	_T-MAD-FT4-AN4	1.46 (37.1)	0.55 (14.0)	0.17 (4.3)	0.50 (12.7)
3/8	1/4	_T-MAD-FT6-AN4	1.53 (38.9)	0.55 (14.0)	0.17 (4.3)	0.50 (12.7)
3/8	3/8	_T-MAD-FT6-AN6	1.56 (39.6)	0.56 (14.2)	0.27 (6.9)	0.63 (15.9)
1/2	1/2	_T-MAD-FT8-AN8	1.91 (48.5)	0.66 (16.8)	0.37 (9.4)	0.81 (20.6)
3/4	3/4	_T-MAD-FT12-AN12	2.21 (56.1)	0.86 (21.8)	0.58 (14.7)	1.13 (28.6)
1	1	_T-MAD-FT16-AN16	2.58 (65.5)	0.91 (23.1)	0.80 (20.3)	1.37 (34.9)

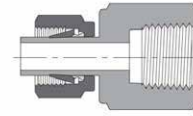


Fractional Tube to SAE/MS Thread						
T - Tube O.D. (in.)	P-SAE/MS Size	Basic Ordering Number	Dimension, in. (mm)			
			L	B	E	F
1/8	5/16-24	_T-MAD-FT2-OS5	1.28 (32.5)	0.34 (8.6)	0.08 (2.0)	0.56 (14.3)
3/16	3/8-24	_T-MAD-FT3-OS6	1.38 (35.1)	0.38 (9.7)	0.12 (3.0)	0.63 (15.9)
1/4	7/16-20	_T-MAD-FT4-OS7	1.54 (39.1)	0.41 (10.4)	0.17 (4.3)	0.75 (19.1)
5/16	1/2-20	_T-MAD-FT5-OS8	1.64 (41.7)	0.44 (11.2)	0.22 (5.6)	0.87 (22.2)
3/8	9/16-18	_T-MAD-FT6-OS9	1.70 (43.2)	0.47 (11.9)	0.27 (6.9)	0.94 (23.8)
1/2	3/4-16	_T-MAD-FT8-OS12	1.95 (49.5)	0.47 (11.9)	0.37 (9.4)	1.13 (28.6)

FEMALE ADAPTERS



1" and below



1 1/4" and above

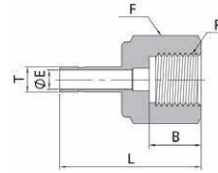
Fractional Tube to NPT Thread

T - Tube O.D. (in.)	P-NPT Size	Basic Ordering Number	Dimension, in. (mm)			
			L	B	E	F
1/16	1/8	_T-FAD-FT1-N2	1.07 (27.2)	0.41 (10.4)	0.03 (0.8)	0.56 (14.3)
1/8	1/8	_T-FAD-FT2-N2	1.24 (31.5)	0.41 (10.4)	0.08 (2.0)	0.56 (14.3)
1/8	1/4	_T-FAD-FT2-N4	1.39 (35.3)	0.59 (15.0)	0.08 (2.0)	0.75 (19.1)
3/16	1/8	_T-FAD-FT3-N2	1.25 (31.8)	0.41 (10.4)	0.11 (2.9)	0.56 (14.3)
3/16	1/4	_T-FAD-FT3-N4	1.41 (35.8)	0.59 (15.0)	0.12 (3.0)	0.75 (19.1)
1/4	1/8	_T-FAD-FT4-N2	1.30 (33.0)	0.41 (10.4)	0.17 (4.3)	0.56 (14.3)
1/4	1/4	_T-FAD-FT4-N4	1.46 (37.1)	0.59 (15.0)	0.17 (4.3)	0.75 (19.1)
1/4	3/8	_T-FAD-FT4-N6	1.55 (39.4)	0.59 (15.0)	0.17 (4.3)	0.87 (22.2)
1/4	1/2	_T-FAD-FT4-N8	1.79 (45.5)	0.78 (19.8)	0.17 (4.3)	1.06 (27.0)
5/16	1/8	_T-FAD-FT5-FN2	1.34 (34.0)	0.41 (10.4)	0.22 (5.6)	0.56 (14.3)
5/16	1/4	_T-FAD-FT5-N4	1.48 (37.6)	0.59 (15.0)	0.22 (5.6)	0.75 (19.1)
5/16	3/8	_T-FAD-FT5-N6	1.59 (40.4)	0.59 (15.0)	0.22 (5.6)	0.87 (22.2)
3/8	1/8	_T-FAD-FT6-N2	1.35 (34.3)	0.41 (10.4)	0.27 (6.9)	0.56 (14.3)
3/8	1/4	_T-FAD-FT6-N4	1.50 (38.1)	0.59 (15.0)	0.27 (6.9)	0.75 (19.1)
3/8	3/8	_T-FAD-FT6-N6	1.59 (40.4)	0.59 (15.0)	0.27 (6.9)	0.87 (22.2)
3/8	1/2	_T-FAD-FT6-N8	1.84 (46.7)	0.78 (19.8)	0.27 (6.9)	1.06 (27.0)
1/2	1/4	_T-FAD-FT8-N4	1.71 (43.4)	0.59 (15.0)	0.37 (9.4)	0.75 (19.1)
1/2	3/8	_T-FAD-FT8-N6	1.79 (45.5)	0.59 (15.0)	0.37 (9.4)	0.87 (22.2)
1/2	1/2	_T-FAD-FT8-N8	2.04 (51.8)	0.78 (19.8)	0.37 (9.4)	1.06 (27.0)
5/8	3/8	_T-FAD-FT10-N6	1.86 (47.2)	0.59 (15.0)	0.47 (11.9)	0.87 (22.2)
5/8	1/2	_T-FAD-FT10-N8	2.09 (53.1)	0.78 (19.8)	0.47 (11.9)	1.06 (27.0)
3/4	1/2	_T-FAD-FT12-N8	2.08 (52.8)	0.78 (19.8)	0.58 (14.7)	1.06 (27.0)
3/4	3/4	_T-FAD-FT12-N12	2.16 (54.9)	0.81 (20.6)	0.58 (14.7)	1.31 (33.3)
3/4	1	_T-FAD-FT12-N16	2.30 (58.4)	1.00 (25.4)	0.58 (14.7)	1.63 (41.3)
7/8	3/4	_T-FAD-FT14-N12	2.22 (56.4)	0.81 (20.6)	0.58 (14.7)	1.31 (33.3)
1	3/4	_T-FAD-FT16-N12	2.39 (60.7)	0.81 (20.6)	0.80 (20.3)	1.31 (33.3)
1	1	_T-FAD-FT16-N16	2.53 (64.3)	1.00 (25.4)	0.80 (20.3)	1.63 (41.3)
1 1/4	1 1/4	_T-FAD-FT20-N20	3.06 (77.7)	1.00 (25.4)	1.02 (25.9)	2.13 (54.0)
1 1/2	1 1/2	_T-FAD-FT24-N24	3.50 (88.9)	1.09 (27.7)	1.25 (31.8)	2.37 (60.3)

Fractional Tube to ISO Parallel Thread

T - Tube O.D. (in.)	P-RT Size	Basic Ordering Number	Dimension, in. (mm)			
			L	B	E	F
1/4	1/8	_T-FAD-FT4-RT2	1.30 (33.0)	0.41 (10.4)	0.17 (4.3)	0.56 (14.3)
1/4	1/4	_T-FAD-FT4-RT4	1.45 (36.8)	0.59 (15.0)	0.17 (4.3)	0.75 (19.1)
3/8	1/4	_T-FAD-FT6-RT4	1.50 (38.1)	0.59 (15.0)	0.27 (6.9)	0.75 (19.1)
3/8	3/8	_T-FAD-FT6-RT6	1.59 (40.4)	0.59 (15.0)	0.27 (6.9)	0.87 (22.2)
1/2	1/4	_T-FAD-FT8-RT4	1.71 (43.4)	0.59 (15.0)	0.37 (9.4)	0.75 (19.1)
1/2	3/8	_T-FAD-FT8-RT6	1.80 (45.7)	0.59 (15.0)	0.37 (9.4)	0.87 (22.2)
1/2	1/2	_T-FAD-FT8-RT8	2.05 (52.1)	0.78 (19.8)	0.37 (9.4)	1.06 (27.0)

FEMALE ADAPTERS



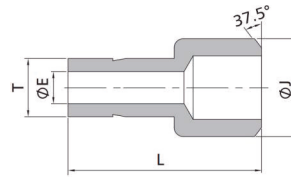
Metric Tube to ISO Parallel Thread

T - Tube O.D. (mm)	P-BSP Size	Basic Ordering Number	Dimension, mm (in.)			
			L	B	E	F
3	1/8	_T-FAD-MT3-N2	28.8 (1.13)	10.4 (0.41)	1.3 (0.05)	14.0 (0.55)
4	1/8	_T-FAD-MT4-N2	33.3 (1.31)	10.4 (0.41)	2.0 (0.08)	14.0 (0.55)
6	1/8	_T-FAD-MT6-N2	32.5 (1.28)	10.4 (0.41)	4.1 (0.16)	14.0 (0.55)
6	1/4	_T-FAD-MT6-N4	37.1 (1.46)	15.0 (0.59)	4.1 (0.16)	19.0 (0.75)
8	1/8	_T-FAD-MT8-N2	35.1 (1.38)	10.4 (0.41)	6.4 (0.25)	14.0 (0.55)
8	1/4	_T-FAD-MT8-N4	37.6 (1.48)	15.0 (0.59)	5.6 (0.22)	19.0 (0.75)
8	3/8	_T-FAD-MT8-N6	36.5 (1.44)	15.0 (0.59)	6.4 (0.25)	22.0 (0.87)
10	1/4	_T-FAD-MT10-N4	38.1 (1.50)	15.0 (0.59)	7.1 (0.28)	19.0 (0.75)
10	3/8	_T-FAD-MT10-N6	40.1 (1.58)	15.0 (0.59)	7.1 (0.28)	22.0 (0.87)
10	1/2	_T-FAD-MT10-N8	46.5 (1.83)	19.8 (0.78)	7.1 (0.28)	27.0 (1.06)
12	1/4	_T-FAD-MT12-N4	43.7 (1.72)	15.0 (0.59)	8.8 (0.35)	19.0 (0.75)
12	3/8	_T-FAD-MT12-N6	42.9 (1.69)	15.0 (0.59)	9.1 (0.36)	22.0 (0.87)
12	1/2	_T-FAD-MT12-N8	52.3 (2.06)	19.8 (0.78)	8.8 (0.35)	27.0 (1.06)
16	1/2	_T-FAD-MT16-N8	49.2 (1.94)	19.8 (0.78)	12.7 (0.50)	27.0 (1.06)
18	3/4	_T-FAD-MT18-N12	52.4 (2.06)	20.6 (0.81)	14.0 (0.55)	32.0 (1.26)
20	1/2	_T-FAD-MT20-N8	50.0 (1.97)	19.8 (0.78)	15.0 (0.59)	27.0 (1.06)
20	3/4	_T-FAD-MT20-N12	53.2 (2.09)	20.6 (0.81)	15.1 (0.59)	32.0 (1.26)
25	1	_T-FAD-MT25-N16	66.7 (2.63)	25.4 (1.00)	19.8 (0.78)	41.0 (1.61)

Metric Tube to ISO Parallel Thread

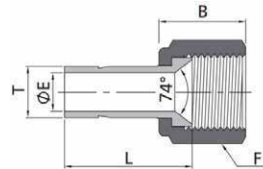
T - Tube O.D. (mm)	P-RT Size	Basic Ordering Number	Dimension, mm (in.)			
			L	B	E	F
3	1/8	_T-FAD-MT3-TR2	27.8 (1.09)	10.4 (0.41)	1.8 (0.07)	14.0 (0.55)
4	1/8	_T-FAD-MT4-TR2	28.6 (1.13)	10.4 (0.41)	2.0 (0.08)	14.0 (0.55)
6	1/8	_T-FAD-MT6-TR2	33.0 (1.30)	10.4 (0.41)	4.1 (0.16)	14.0 (0.55)
8	1/4	_T-FAD-MT8-TR4	37.6 (1.48)	15.0 (0.59)	5.6 (0.22)	19.0 (0.75)
10	1/4	_T-FAD-MT10-TR4	38.1 (1.50)	15.0 (0.59)	7.1 (0.28)	19.0 (0.75)
10	3/8	_T-FAD-MT10-TR6	36.5 (1.44)	15.0 (0.59)	7.5 (0.30)	22.0 (0.87)
10	1/2	_T-FAD-MT10-TR8	41.3 (1.63)	19.8 (0.78)	7.5 (0.30)	27.0 (1.06)
12	1/4	_T-FAD-MT12-TR4	40.5 (1.59)	15.0 (0.59)	9.1 (0.36)	19.0 (0.75)
12	3/8	_T-FAD-MT12-TR6	43.7 (1.72)	15.0 (0.59)	9.1 (0.36)	22.0 (0.87)
12	1/2	_T-FAD-MT12-TR8	46.8 (1.84)	19.8 (0.78)	9.1 (0.36)	27.0 (1.06)
16	1/2	_T-FAD-MT16-TR8	48.4 (1.91)	19.8 (0.78)	12.7 (0.50)	27.0 (1.06)
18	3/4	_T-FAD-MT18-TR12	52.4 (2.06)	20.6 (0.81)	14.0 (0.55)	32.0 (1.26)
20	3/4	_T-FAD-MT20-TR12	53.2 (2.09)	20.6 (0.81)	15.1 (0.59)	32.0 (1.26)
25	1	_T-FAD-MT25-TR16	66.7 (2.63)	25.4 (1.00)	19.8 (0.78)	41.0 (1.61)

FEMALE ADAPTERS



Metric Tube to ISO Parallel Thread

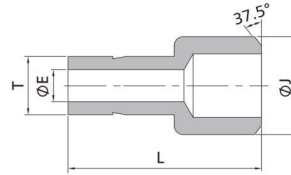
T - Tube O.D. (mm)	P-BSP Size	Basic Ordering Number	Dimension, mm (in.)			
			L	B	E	F
3	1/8	_T-FAD-MT3-RG2	28.6 (1.13)	6.5 (0.26)	1.6 (0.06)	14.0 (0.55)
3	1/4	_T-FAD-MT4-RG2	33.5 (1.32)	10.2 (0.40)	1.9 (0.07)	19.0 (0.75)
4	1/8	_T-FAD-MT6-RG2	29.4 (1.16)	6.5 (0.26)	2.0 (0.08)	14.0 (0.55)
6	1/8	_T-FAD-MT6-RG4	31.0 (1.22)	6.5 (0.26)	4.1 (0.16)	14.0 (0.55)
6	1/4	_T-FAD-MT8-RG2	35.3 (1.39)	10.2 (0.40)	4.1 (0.16)	19.0 (0.75)
6	3/8	_T-FAD-MT8-RG4	38.4 (1.51)	14.2 (0.56)	4.1 (0.16)	24.0 (0.94)
6	1/2	_T-FAD-MT8-RG6	42.9 (1.69)	18.0 (0.71)	4.1 (0.16)	27.0 (1.06)
8	1/4	_T-FAD-MT10-RG4	33.0 (1.30)	10.2 (0.40)	5.5 (0.22)	19.0 (0.75)
8	3/8	_T-FAD-MT10-RG6	38.9 (1.53)	14.2 (0.56)	5.6 (0.22)	24.0 (0.94)
8	1/2	_T-FAD-MT10-RG8	43.7 (1.72)	18.0 (0.71)	5.6 (0.22)	27.0 (1.06)
10	1/4	_T-FAD-MT12-RG4	43.5 (1.36)	10.2 (0.40)	5.5 (0.22)	19.0 (0.75)
10	3/8	_T-FAD-MT12-RG6	36.1 (1.42)	14.2 (0.56)	6.5 (0.26)	24.0 (0.94)
10	1/2	_T-FAD-MT12-RG8	41.1 (1.62)	18.0 (0.71)	7.1 (0.28)	27.0 (1.06)
12	1/4	_T-FAD-MT16-RG8	41.1 (1.62)	10.2 (0.40)	5.5 (0.22)	19.0 (0.75)
12	3/8	_T-FAD-MT18-RG12	44.7 (1.76)	14.2 (0.56)	6.5 (0.26)	24.0 (0.94)
12	1/2	_T-FAD-MT20-RG8	48.8 (1.92)	18.0 (0.71)	7.0 (0.28)	27.0 (1.06)
16	1/2	_T-FAD-MT20-RG12	49.0 (1.93)	18.0 (0.71)	7.0 (0.28)	27.0 (1.06)
18	1/2	_T-FAD-MT25-RG16	49.3 (1.94)	18.0 (0.71)	7.0 (0.28)	27.0 (1.06)



Fractional Tube to Fraed

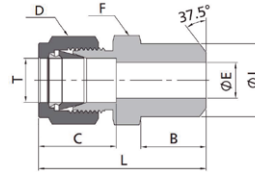
T - Tube O.D. (in.)	Tube Fraed Size	Basic Ordering Number	Dimension, in. (mm)			
			L	B	E	F
1/8	1/8	_T-FAD-FT3-AN2	0.88 (22.4)	0.55 (14.0)	0.09 (2.4)	0.37 (9.5)
1/8	1/4	_T-FAD-FT4-AN2	0.88 (22.4)	0.62 (15.8)	0.09 (2.4)	0.56 (14.3)
1/4	1/4	_T-FAD-FT6-AN2	0.96 (24.4)	0.62 (15.8)	0.18 (4.6)	0.56 (14.3)
3/8	3/8	_T-FAD-FT6-AN4	1.11 (28.1)	0.73 (18.5)	0.28 (7.1)	0.69 (17.5)
1/2	1/2	_T-FAD-FT8-AN2	1.42 (36.1)	0.85 (21.6)	0.39 (9.9)	0.87 (22.2)
3/4	3/4	_T-FAD-FT8-AN4	1.49 (37.8)	1.03 (26.2)	0.58 (14.7)	1.25 (31.8)

WELD ADAPTERS



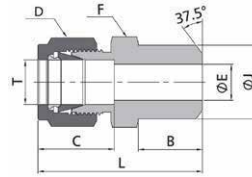
Fractional Tube to Pipe Weld					
T - Tube O.D. (in.)	Pipe Weld Size	Basic Ordering Number	Dimension, in. (mm)		
			L	J	E
1/4	1/4	_T-WA-FT4-PW4	1.14 (29.0)	0.54 (13.7)	0.17 (4.3)
3/8	1/2	_T-WA-FT6-PW8	1.46 (37.1)	0.84 (21.3)	0.27 (6.9)
1/2	1/2	_T-WA-FT8-PW8	1.66 (42.2)	0.84 (21.3)	0.37 (9.4)
1/2	3/4	_T-WA-FT8-PW12	1.68 (42.7)	1.05 (26.7)	0.37 (9.4)
3/4	3/4	_T-WA-FT12-PW12	1.87 (47.5)	1.05 (26.7)	0.58 (14.7)

WELD CONNECTORS



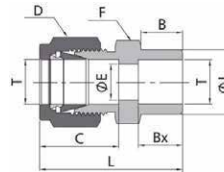
Fractional Tube to Pipe Butt Weld									
T - Tube O.D. (in.)	Pipe Weld Size	Basic Ordering Number	Dimension, in. (mm)						
			L	C	D	F	E	B	J
1/8	1/8	_T-WC-F2-PB2	1.20 (30.5)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)	0.09 (2.3)	0.38 (9.7)	0.41 (10.3)
3/16	1/8	_T-WC-F3-PB2	1.23 (31.2)	0.54 (13.7)	0.50 (12.7)	0.44 (11.1)	0.12 (3.0)	0.38 (9.7)	0.41 (10.3)
1/4	1/8	_T-WC-F4-PB2	1.29 (32.8)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.19 (4.8)	0.38 (9.7)	0.41 (10.3)
1/4	1/4	_T-WC-F4-PB4	1.49 (37.8)	0.60 (15.2)	0.56 (14.3)	0.56 (14.3)	0.19 (4.8)	0.56 (14.2)	0.54 (13.7)
5/16	1/8	_T-WC-F5-PB2	1.34 (34.0)	0.64 (16.3)	0.63 (15.9)	0.56 (14.3)	0.21 (5.3)	0.38 (9.7)	0.41 (10.3)
5/16	1/4	_T-WC-F5-PB4	1.52 (38.6)	0.64 (16.3)	0.63 (15.9)	0.56 (14.3)	0.25 (6.4)	0.56 (14.2)	0.54 (13.7)
3/8	1/4	_T-WC-F6-PB4	1.57 (39.9)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.28 (7.1)	0.56 (14.2)	0.54 (13.7)
3/8	3/8	_T-WC-F6-PB6	1.57 (39.9)	0.66 (16.8)	0.69 (17.5)	0.69 (17.5)	0.28 (7.1)	0.56 (14.2)	0.67 (17.1)
3/8	1/2	_T-WC-F6-PB8	1.82 (46.2)	0.66 (16.8)	0.69 (17.5)	0.87 (22.2)	0.28 (7.1)	0.75 (19.1)	0.84 (21.3)
3/8	3/4	_T-WC-F6-PB12	1.88 (47.8)	0.66 (16.8)	0.69 (17.5)	1.06 (27.0)	0.28 (7.1)	0.75 (19.1)	1.05 (26.7)
1/2	3/8	_T-WC-F8-PB6	1.71 (43.4)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.41 (10.4)	0.56 (14.2)	0.67 (17.1)
1/2	1/2	_T-WC-F8-PB8	1.93 (49.0)	0.90 (22.9)	0.87 (22.2)	0.87 (22.2)	0.41 (10.4)	0.75 (19.1)	0.84 (21.3)
1/2	3/4	_T-WC-F8-PB12	1.99 (50.5)	0.90 (22.9)	0.87 (22.2)	1.06 (27.0)	0.41 (10.4)	0.75 (19.1)	1.05 (26.7)
5/8	1/2	_T-WC-F10-PB8	1.93 (49.0)	0.96 (24.4)	1.00 (25.4)	0.94 (23.8)	0.50 (12.7)	0.75 (19.1)	0.84 (21.3)
3/4	1/2	_T-WC-F12-PB8	1.99 (50.5)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.55 (14.0)	0.75 (19.1)	0.84 (21.3)
3/4	3/4	_T-WC-F12-PB12	1.99 (50.5)	0.96 (24.4)	1.10 (28.0)	1.06 (27.0)	0.62 (15.7)	0.75 (19.1)	1.05 (26.7)
1	1	_T-WC-F16-PB16	2.45 (62.2)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)	0.88 (22.4)	0.94 (23.9)	1.31 (33.4)
1 1/4	1 1/4	_T-WC-F20-PB20	3.04 (77.2)	1.62 (41.1)	1.87 (47.6)	1.75 (44.5)	1.09 (27.7)	0.94 (23.9)	1.66 (42.2)
1 1/2	1 1/2	_T-WC-F24-PB24	3.50 (88.9)	1.97 (50.0)	2.25 (57.2)	2.13 (54.0)	1.34 (34.0)	1.03 (26.2)	1.90 (48.3)

WELD CONNECTORS



Metric Tube to Pipe Butt Weld

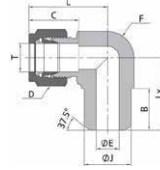
T - Tube O.D. (mm)	Pipe Weld Size	Basic Ordering Number	Dimension, mm (in.)						
			L	C	D	F	E	B	J
3	1/8	_T-WCM3-PB2	30.5 (1.20)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)	2.4 (0.09)	9.7 (0.38)	10.3 (0.41)
4	1/8	_T-WC-M4-PB2	31.5 (1.24)	13.7 (0.54)	12.0 (0.47)	12.0 (0.47)	2.4 (0.09)	9.7 (0.38)	10.3 (0.41)
6	1/8	_T-WC-M6-PB2	32.8 (1.29)	15.3 (0.60)	14.0 (0.55)	14.0 (0.55)	4.8 (0.19)	9.7 (0.38)	10.3 (0.41)
6	1/4	_T-WC-M6-PB4	37.9 (1.49)	15.3 (0.60)	14.0 (0.55)	14.0 (0.55)	4.8 (0.19)	14.2 (0.56)	13.7 (0.54)
8	1/8	_T-WC-M8-PB2	34.2 (1.35)	16.2 (0.64)	16.0 (0.63)	15.0 (0.59)	5.4 (0.21)	9.7 (0.38)	10.3 (0.41)
8	1/4	_T-WC-M8-PB4	38.7 (1.52)	16.2 (0.64)	16.0 (0.63)	15.0 (0.59)	6.4 (0.25)	14.2 (0.56)	13.7 (0.54)
8	1/2	_T-WC-M8-PB8	45.6 (1.80)	16.2 (0.64)	16.0 (0.63)	22.0 (0.87)	6.4 (0.25)	19.1 (0.75)	21.3 (0.84)
10	1/4	_T-WC-M10-PB4	40.9 (1.60)	17.2 (0.70)	19.0 (0.75)	18.0 (0.71)	7.5 (0.30)	14.2 (0.56)	13.7 (0.54)
10	3/8	_T-WC-M10-PB6	40.9 (1.60)	17.2 (0.70)	19.0 (0.75)	18.0 (0.71)	7.9 (0.31)	14.2 (0.56)	17.1 (0.67)
10	1/2	_T-WC-M10-PB8	46.5 (1.80)	17.2 (0.70)	19.0 (0.75)	22.0 (0.87)	7.9 (0.31)	19.1 (0.75)	21.3 (0.84)
12	1/4	_T-WC-M12-PB4	43.4 (1.70)	22.8 (0.90)	22.0 (0.87)	22.0 (0.87)	7.5 (0.30)	14.2 (0.56)	13.7 (0.54)
12	3/8	_T-WC-M12-PB6	43.4 (1.70)	22.8 (0.90)	22.0 (0.87)	22.0 (0.87)	9.5 (0.37)	14.2 (0.56)	17.1 (0.67)
12	1/2	_T-WC-M12-PB8	49.0 (1.90)	22.8 (0.90)	22.0 (0.87)	22.0 (0.87)	9.5 (0.37)	19.1 (0.75)	21.3 (0.84)
14	3/8	_T-WC-M14-PB6	44.1 (1.70)	24.4 (1.00)	25.0 (0.98)	24.0 (0.94)	10.7 (0.42)	14.2 (0.56)	17.1 (0.67)
15	1/2	_T-WC-M15-PB8	49.0 (1.90)	24.4 (1.00)	25.0 (0.98)	24.0 (0.94)	11.9 (0.47)	19.1 (0.75)	21.3 (0.84)
16	1/2	_T-WC-M16-PB8	49.0 (1.90)	24.4 (1.00)	25.0 (0.98)	24.0 (0.94)	12.7 (0.50)	19.1 (0.75)	21.3 (0.84)
18	1/2	_T-WC-M18-PB8	50.5 (2.00)	24.4 (1.00)	30.0 (1.18)	27.0 (1.06)	13.9 (0.55)	19.1 (0.75)	21.3 (0.84)
30	1 1/4	_T-WC-M30-PB20	77.2 (3.00)	39.6 (1.60)	50.0 (1.97)	46.0 (1.81)	26.2 (1.03)	23.9 (0.94)	42.2 (1.66)
32	1 1/4	_T-WC-M32-PB20	79.6 (3.10)	42.0 (1.70)	50.0 (1.97)	46.0 (1.81)	28.6 (1.13)	23.9 (0.94)	42.2 (1.66)
38	1 1/2	_T-WC-M38-PB24	91.6 (3.60)	49.4 (1.90)	60.0 (2.36)	55.0 (2.17)	33.7 (1.33)	26.2 (1.03)	48.3 (1.9)



Fractional Tube to Tube Socket Weld

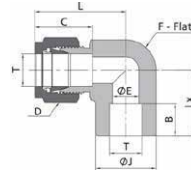
T - Tube O.D. (in.)	Basic Ordering Number	Dimension, mm (in.)							
		L	C	D	F	B	E	Bx	J
1/8	_T-WC-F2-SW2	1.14 (29.0)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)	0.34 (8.6)	0.09 (2.3)	0.10 (2.5)	0.31 (7.9)
3/16	_T-WC-F3-SW3	1.17 (29.7)	0.54 (13.7)	0.50 (12.7)	0.44 (11.1)	0.37 (9.5)	0.13 (3.3)	0.19 (4.8)	0.42 (10.7)
1/4	_T-WC-F4-SW4	1.32 (33.5)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.41 (10.4)	0.19 (4.8)	0.28 (7.1)	0.44 (11.2)
3/8	_T-WC-F6-SW6	1.48 (37.6)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.47 (11.9)	0.28 (7.1)	0.31 (7.9)	0.62 (15.7)
1/2	_T-WC-F8-SW8	1.62 (41.1)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.47 (11.9)	0.41 (10.4)	0.38 (9.7)	0.75 (19.1)
5/8	_T-WC-F10-SW10	1.65 (41.9)	0.96 (24.4)	1.00 (25.4)	0.94 (23.8)	0.47 (11.9)	0.50 (12.7)	0.41 (10.4)	0.92 (23.4)
3/4	_T-WC-F12-SW12	1.71 (43.4)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.47 (11.9)	0.62 (15.7)	0.44 (11.1)	1.05 (26.7)
1	_T-WC-F16-SW16	2.07 (52.6)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)	0.56 (14.2)	0.88 (22.4)	0.62 (15.7)	1.31 (33.3)

WELD ELBOWS



Fractional Tube to Pipe Butt Weld

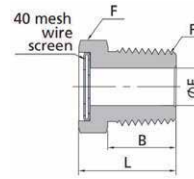
T - Tube O.D. (in.)	Pipe Weld Size	Basic Ordering Number	Dimension, in. (mm)							
			L	C	D	F	B	E	Lx	Lx
1/8	1/8	_T-LW-F2-PB2	0.92 (23.4)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)	0.38 (9.7)	0.09 (2.3)	0.72 (18.3)	0.41 (10.3)
3/16	1/8	_T-LW-F3-PB2	1.01 (25.7)	0.54 (13.7)	0.50 (12.7)	0.50 (12.7)	0.38 (9.7)	0.13 (3.3)	0.74 (18.8)	0.41 (10.3)
1/4	1/8	_T-LW-F4-PB2	1.06 (26.9)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.38 (9.7)	0.19 (4.8)	0.74 (18.8)	0.41 (10.3)
1/4	1/4	_T-LW-F4-PB4	1.06 (26.9)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.56 (14.2)	0.19 (4.8)	0.92 (23.4)	0.54 (13.7)
3/8	1/4	_T-LW-F6-PB4	1.20 (30.5)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.56 (14.2)	0.28 (7.1)	1.00 (25.4)	0.54 (13.7)
1/2	3/8	_T-LW-F8-PB6	1.37 (34.8)	0.90 (22.9)	0.87 (22.2)	0.75 (19.1)	0.56 (14.2)	0.41 (10.4)	1.13 (28.8)	0.67 (17.1)
1/2	1/2	_T-LW-F8-PB8	1.42 (36.1)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.75 (19.1)	0.41 (10.4)	1.30 (33.0)	0.84 (21.3)
5/8	1/2	_T-LW-F10-PB8	1.57 (39.9)	0.96 (24.4)	1.00 (25.4)	0.94 (23.8)	0.75 (19.1)	0.50 (12.7)	1.38 (35.1)	0.84 (21.3)
3/4	3/4	_T-LW-F12-PB12	1.94 (49.3)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.75 (19.1)	0.62 (15.7)	1.45 (36.8)	1.05 (26.7)
1	3/4	_T-LW-F16-PB12	1.94 (49.3)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)	0.75 (19.1)	0.88 (22.4)	1.65 (41.9)	1.05 (26.7)
1	1	_T-LW-F16-PB16	1.94 (49.3)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)	0.81 (20.6)	0.88 (22.4)	1.84 (46.7)	1.31 (33.4)



Fractional Tube to Tube Socket Weld

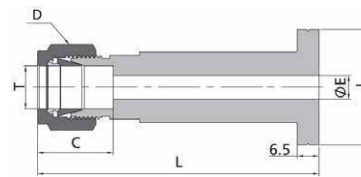
T - Tube O.D. (in.)	Basic Ordering Number	Dimension, in. (mm)							
		L	C	D	F	B	E	Lx	Lx
1/8	_T-LW-F2-SW2	0.66 (16.8)	0.50 (12.7)	0.44 (11.1)	0.37 (9.5)	0.10 (2.5)	0.09 (2.3)	0.63 (16.0)	0.38 (9.7)
3/16	_T-LW-F3-SW3	0.72 (18.3)	0.54 (13.7)	0.50 (12.7)	0.44 (11.1)	0.19 (4.8)	0.13 (3.3)	0.69 (17.5)	0.44 (11.2)
1/4	_T-LW-F4-SW4	1.06 (26.9)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.28 (7.1)	0.19 (4.8)	0.77 (19.6)	0.50 (12.7)
3/8	_T-LW-F6-SW6	1.20 (30.5)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.31 (7.9)	0.28 (7.1)	0.91 (23.1)	0.62 (15.7)
1/2	_T-LW-F8-SW8	1.42 (36.1)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.38 (9.7)	0.41 (10.4)	1.02 (25.9)	0.81 (20.6)
5/8	_T-LW-F10-SW10	1.16 (29.5)	0.96 (24.4)	1.00 (25.4)	1.06 (27.0)	0.41 (10.4)	0.50 (12.7)	1.16 (29.5)	0.94 (23.9)
3/4	_T-LW-F12-SW12	1.57 (39.9)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.44 (11.2)	0.62 (15.7)	1.17 (29.7)	1.06 (26.9)
1	_T-LW-F16-SW16	1.93 (49.0)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)	0.62 (15.7)	0.88 (22.4)	1.45 (36.8)	1.38 (35.1)

VENTS PROTECTORS



Fractional Tube to Tube Socket Weld					
T - Tube O.D. (in.)	Basic Ordering Number	Dimension, in. (mm)			
		L	C	D	F
1/8	_T-VP-N2	0.56 (14.2)	0.50 (12.7)	0.38 (9.7)	0.19 (4.8)
1/4	_T-VP-N4	0.78 (19.8)	0.56 (14.3)	0.56 (14.2)	0.28 (7.1)
3/8	_T-VP-N6	0.81 (20.6)	0.69 (17.5)	0.56 (14.2)	0.41 (10.4)
1/2	_T-VP-N8	1.03 (26.2)	0.87 (22.2)	0.75 (19.1)	0.50 (12.7)
3/4	_T-VP-N12	1.06 (26.9)	1.06 (27.0)	0.76 (19.2)	0.72 (18.3)
1	_T-VP-N16	1.37 (34.8)	1.37 (34.9)	0.94 (23.9)	0.88 (22.4)

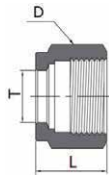
LAPPED FLANGE CONNECTORS



Fractional Tube							
T - Tube O.D. (in.)	Flange Seal	Basic Ordering Number	Dimension, in. (mm)				
			L	D	C	E	J
1/4	A	_T-LFC-F4A	3.18 (80.8)	0.56 (14.3)	0.60 (15.2)	0.60 (15.2)	1.36 (34.5)
1/4	B	_T-LFC-F4B	3.18 (80.8)	0.56 (14.3)	0.60 (15.2)	0.19 (4.8)	1.36 (34.5)
3/8	A	_T-LFC-F6A	3.26 (82.9)	0.69 (17.5)	0.66 (16.8)	0.28 (7.1)	1.36 (34.5)
3/8	B	_T-LFC-F6B	3.26 (82.9)	0.69 (17.5)	0.66 (16.8)	0.28 (7.1)	1.36 (34.5)
1/2	A	_T-LFC-F8A	3.35 (85.1)	0.87 (22.2)	0.90 (22.9)	0.31 (7.9)	1.36 (34.5)
1/2	B	_T-LFC-F8B	3.35 (85.1)	0.87 (22.2)	0.90 (22.9)	0.31 (7.9)	1.36 (34.5)

Metric Tube							
T - Tube O.D. (mm)	Flange Seal	Basic Ordering Number	Dimension, mm (in.)				
			L	D	C	E	J
10	A	_T-LFC-M10A	82.6 (3.25)	19.0 (0.75)	17.2 (0.68)	7.9 (0.31)	34.5 (1.36)
10	B	_T-LFC-M10B	82.6 (3.25)	19.0 (0.75)	17.2 (0.68)	7.9 (0.31)	34.5 (1.36)

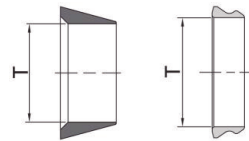
NUTS



Fractional Tube			
T - Tube O.D. (in.)	Basic Ordering Number	Dimension, in. (mm)	
		D	L
1/16	_T-N-F1	0.31 (7.9)	0.31 (7.9)
1/8	_T-N-F2	0.44 (11.1)	0.47 (11.9)
3/16	_T-N-F3	0.50 (12.7)	0.47 (11.9)
1/4	_T-N-F4	0.56 (14.3)	0.50 (12.7)
5/16	_T-N-F5	0.63 (15.9)	0.53 (13.5)
3/8	_T-N-F6	0.69 (17.5)	0.56 (14.2)
1/2	_T-N-F8	0.87 (22.2)	0.69 (17.5)
5/8	_T-N-F10	1.00 (25.4)	0.69 (17.5)
3/4	_T-N-F12	1.13 (28.6)	0.69 (17.5)
7/8	_T-N-F14	1.25 (31.8)	0.69 (17.5)
1	_T-N-F16	1.50 (38.1)	0.81 (20.6)
1 1/8	_T-N-F18	1.81 (46.0)	1.21 (30.8)
1 1/4	_T-N-F20	1.87 (47.6)	1.25 (31.8)
1 1/2	_T-N-F24	2.25 (57.2)	1.50 (38.1)

Metric Tube			
T - Tube O.D. (mm)	Basic Ordering Number	Dimension, mm (in.)	
		D	L
2	_T-N-M2	12.0 (0.47)	11.9 (0.47)
3	_T-N-M3	12.0 (0.47)	11.9 (0.47)
4	_T-N-M4	12.0 (0.47)	11.9 (0.47)
6	_T-N-M6	14.0 (0.55)	12.7 (0.50)
8	_T-N-M8	16.0 (0.63)	13.5 (0.53)
10	_T-N-M10	19.0 (0.75)	15.1 (0.59)
12	_T-N-M12	22.0 (0.87)	17.4 (0.69)
14	_T-N-M14	25.0 (0.98)	17.4 (0.69)
15	_T-N-M15	25.0 (0.98)	17.4 (0.69)
16	_T-N-M16	25.0 (0.98)	17.4 (0.69)
18	_T-N-M18	30.0 (1.18)	17.4 (0.69)
20	_T-N-M20	32.0 (1.26)	17.4 (0.69)
22	_T-N-M22	32.0 (1.26)	17.4 (0.69)
25	_T-N-M25	38.0 (1.50)	20.6 (0.81)
28	_T-N-M28	46.0 (1.81)	30.6 (1.20)
30	_T-TN-MT30	50.0 (1.97)	32.7 (1.29)
32	_T-TN-MT32	50.0 (1.97)	34.4 (1.35)
38	_T-TN-MT38	60.0 (2.36)	40.6 (1.60)

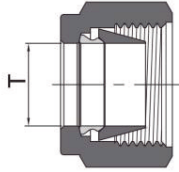
FRONT AND REAR FERRULES



Fabrical Tube	
T - Tube O.D. (in.)	Basic Ordering Number
1/16	_T-FRS-F1
1/8	_T-FRS-F2
3/16	_T-FRS-F3
1/4	_T-FRS-F4
5/16	_T-FRS-F5
3/8	_T-FRS-F6
1/2	_T-FRS-F8
5/8	_T-FRS-F10
3/4	_T-FRS-F12
7/8	_T-FRS-F14
1	_T-FRS-F16
1 1/8	_T-FRS-F18
1 1/4	_T-FRS-F20
1 1/2	_T-FRS-F24

Metric Tube	
T - Tube O.D. (mm)	Basic Ordering Number
2	_T-FRS-M2
3	_T-FRS-M3
4	_T-FRS-M4
6	_T-FRS-M6
8	_T-FRS-M8
10	_T-FRS-M10
12	_T-FRS-M12
14	_T-FRS-M14
15	_T-FRS-M15
16	_T-FRS-M16
18	_T-FRS-M18
20	_T-FRS-M20
22	_T-FRS-M22
25	_T-FRS-M25
28	_T-FRS-M28
30	_T-FRS-M30
32	_T-FRS-M32
38	_T-FRS-M38

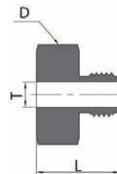
NUTS + FERRULES



Fractional Tube	
T - Tube O.D. (in.)	Basic Ordering Number
1/16	_T-NFR-F1
1/8	_T-NFR-F2
3/16	_T-NFR-F3
1/4	_T-NFR-F4
5/16	_T-NFR-F5
3/8	_T-NFR-F6
1/2	_T-NFR-F8
5/8	_T-NFR-F10
3/4	_T-NFR-F12
7/8	_T-NFR-F14
1	_T-NFR-F16
1 1/8	_T-NFR-F18*
1 1/4	_T-NFR-F20*
1 1/2	_T-NFR-F24*

Metric Tube	
T - Tube O.D. (mm)	Basic Ordering Number
2	_T-NFR-M2
3	_T-NFR-M3
4	_T-NFR-M4
6	_T-NFR-M6
8	_T-NFR-M8
10	_T-NFR-M10
12	_T-NFR-M12
14	_T-NFR-M14
15	_T-NFR-M15
16	_T-NFR-M16
18	_T-NFR-M18
20	_T-NFR-M20
22	_T-NFR-M22
25	_T-NFR-M25
28	_T-NFR-M28*
30	_T-NFR-M30*
32	_T-NFR-M32*
38	_T-NFR-M38*

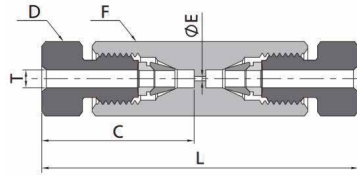
MALE NUTS



Fabrical Tube			
T - Tube O.D. (in.)	Basic Ordering Number	Dimension, in. (mm)	
		D	L
1/16	_T-TMN-F1	0.25 (6.4)	0.38 (9.7)
1/8	_T-TMN-F2	0.37 (9.5)	0.53 (13.5)
1/4	_T-TMN-F4	0.50 (12.7)	0.62 (15.7)
1/2	_T-TMN-F8	0.94 (23.8)	0.87 (22.1)

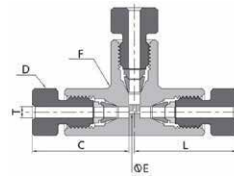
Metric Tube			
T - Tube O.D. (mm)	Basic Ordering Number	Dimension, mm (in.)	
		D	L
3	_T-TMN-M3	10.0 (0.39)	13.5 (0.53)
6	_T-TMN-M6	14.0 (0.55)	15.7 (0.62)
10	_T-TMN-M10	22.0 (0.87)	22.1 (0.87)
12	_T-TMN-M12	24.0 (0.94)	22,1 (0.87)

CHROMATOGRAPH STRAIGHT FITTINGS



Fractional Tube							
T - Tube O.D. (in.)	Basic Ordering Number	Dimension, in. (mm)					Dead Volumen
		L	C	E	D	F	
1/16	_T-CU-F1	1.26 (32.0)	0.61(15.5)	0.01(0.3)	0.25(6.4)	0.25(6.4)	6.6 × 10 ⁻⁵ cm ³

CHROMATOGRAPH TEE FITTINGS



Fractional Tube							
T - Tube O.D. (in.)	Basic Ordering Number	Dimension, in. (mm)					Dead Volumen
		L	C	E	D	F	
1/16	_T-CT-F1	0.66 (16.8)	0.61 (15.5)	0.01 (0.3)	0.25 (6.4)	0.37 (9.5)	6.6 × 10 ⁻⁴ cm ³

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