



Tube Fittings

ASTM A479 ASME SA479

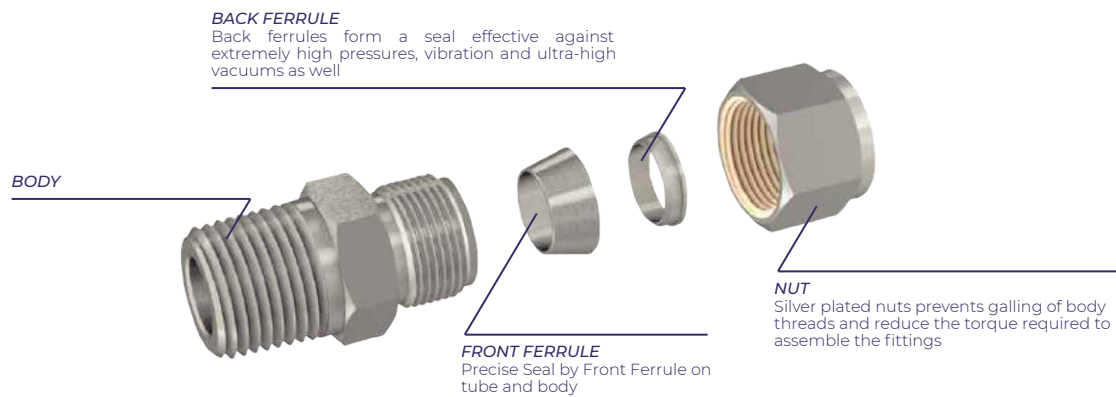


High quality products for
industrial & construction

DSG
VALVES & TUBE FITTINGS

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



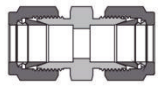
PRESSURE RATING

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

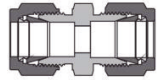
S D M-C F 8 N-8 S									
MATERIAL	MANUFACTURER	FITTING TYPE	PI TYPE	PI SIZE	P2 TYPE	P2 TYPE	NACE COMPLIANCE		
S 316SS	(D) DSG	U Unions	F Fractional Ferrule	1 1/6"	N NPT Thread	1 1/6"	S		
S4 304		UC Unions Conversion	M Metric Ferrule	2 1/8" OR 2mm	F Fractional Ferrule	2 1/8" OR 2mm			
B BRASS		UR Reducing Unions	FT Fractional Tube	3 3/16" OR 3mm	MN Metric NPT Thread	3 3/16" OR 3mm			
D5 DUPLEX 2205		MC Male Connectors	MT Metric Tube	4 1/4" OR 4mm	RT ISO Tapered Thread	4 1/4" OR 4mm			
D7 DUPLEX 2507		TCM Thermocouple Connectors		5 5/16"	RS ISO Parallel Thread	5 5/16"			
M ALLOY 400		FC Female Connectors		6 3/8" OR 6mm	RP ISO Parallel Thread	6 3/8" OR 6mm			
INC ALLOY 600		BU Bulkhead Unions		8 1/2" OR 8mm	ST SAE/MS Thread	8 1/2" OR 8mm			
A65 ALLOY 625		BUR Bulkhead Reducing Unions		10 5/8" OR 10mm	AN 37° Flare	10 5/8" OR 10mm			
A85 ALLOY 825		BMC Bulkhead Male Connectors		12 3/4" OR 12mm	OS O-Seal with SAE/MS	12 3/4" OR 12mm			
HC HASTELLOY C-276		BFC Bulkhead Female Connectors		14 7/8" OR 14mm	MS Metric Thread	14 7/8" OR 14mm			
TI TITANIO		LU Union Elbow		15 15mm	RC ISO Parallel Thread	15 15mm			
		LUR Union Reducing Elbows		16 1" OR 16mm	PP ISO Parallel Thread	16 1" OR 16mm			
		LM Male Elbows		18 1 1/8" OR 18mm	FT Fractional Tube	18 1 1/8" OR 18mm			
		MV Male Elbows 45°		20 1 1/4" OR 20mm	MT Metric Tube	20 1 1/4" OR 20mm			
		AME Adjustable Male Elbows		22 22mm	SN Tube Socket Weld	22 22mm			
		AMV Adjustable Male Elbows 45°		24 1 1/2" OR 24mm	PB Pipe Butt Weld	24 1 1/2" OR 24mm			
		LF Female Elbows		25 25mm	BP BSPP (RS)	25 25mm			
		TU Union Tees		28 28mm	BT BSPP (Only Metric)	28 28mm			
		TUR Reducing Union Tees		30 30mm	PW Pipe Weld	30 30mm			
		TMT Male Branch Tees		32 2" OR 32mm		32 2" OR 32mm			
		TMT Male Run Tees		38 38mm		38 38mm			
		TTA Adjustable Male Tees							
		TAT Adjustable Male Run Tees							
		TTF Female Branch Tees							
		TFT Female Run Tees							
		C Union Crosses							
		TC Caps							
		TP Plugs							
		RD Reducers							
		BR Bulkhead Reducers							
		LR Reducer Elbows							
		P Port Connectors							
		RP Reducing Port Connectors							
		MAD Male Adapters							
		FAD Female Adapters							
		WC Weld Connectors							
		LW Weld Elbows							
		VP Vent Protectors							
		LFC Lapped Flange Connectors							
		N Nuts							
		FRS Ferrules Front/Rear							
		NFR Nuts +Ferrules							
		CU Chromatograph Fittings							
		TMN Male Nuts							
		VMA Weld Adaptors							

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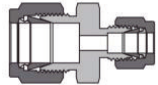
Unions **U**

06



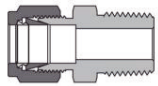
Conversion Unions **CU**

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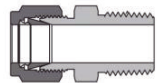
Reducing Unions **RU**

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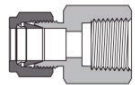
Male Connectors **MC**

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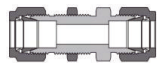
Thermocouple Connectors **TC**

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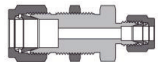
Female Connectors **CF**

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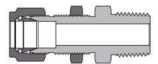
Bulkhead Unions **BU**

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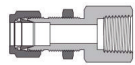
Bulkhead Reducing Unions **BRU**

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Bulkhead Male Connectors **BMC**

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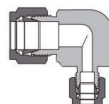
Bulkhead Female Connectors **BFC**

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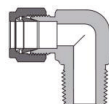
Union Elbows **LU**

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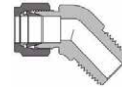
Union Reducing Elbows **LUR**

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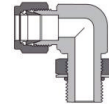
Male Elbows **LM**

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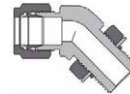
45° Male Elbows **MV**

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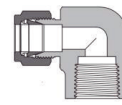
Adjustable Male Elbows **AME**

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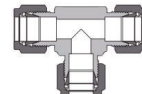
45° Adjustable Male Elbows **AMV**

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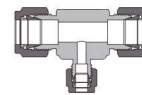
Female Elbows **LF**

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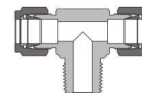
Union Tees **TU**

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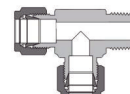
Reducing Union Tees **TUR**

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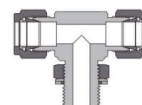
Male Branch Tees **TTM**

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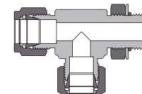
Male Run Tees **TMT**

42



Adjustable Male Branch Tees **TTA**

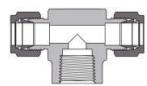
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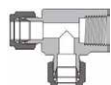
Adjustable Male Run Tees **TAT**

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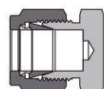
Female Branch Tees **TTF** 45



Female Run Tees **TFT** 46



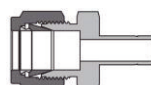
Union Crosses **C** 47



Caps **TC** 48



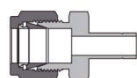
Plugs **TP** 49



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Bulkhead Reducers **BR** 52



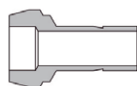
Reducer **RD** 51



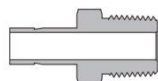
Reducer Elbows **LR** 53



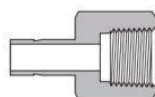
Port Connectors **P** 53



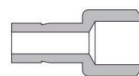
Reducing Port Connectors **RP** 54



Male Adapters **MAD** 55



Female Adapters **FAD** 59



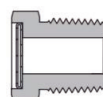
Weld Adapters **WA** 62



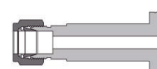
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Vent Protectors **VP** 65



Lapped Flange Connectors **LFC** 65



Nuts **N** 66



Front Ferrules **FRS** 66



Rear Ferrules



Nuts + Ferrules **NFR** 67



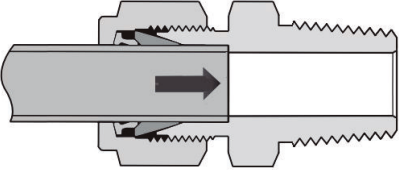
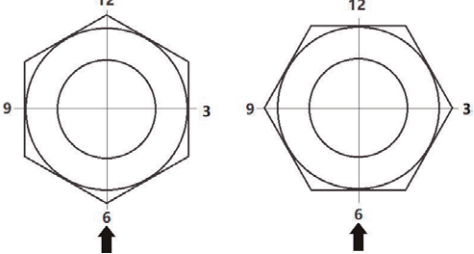
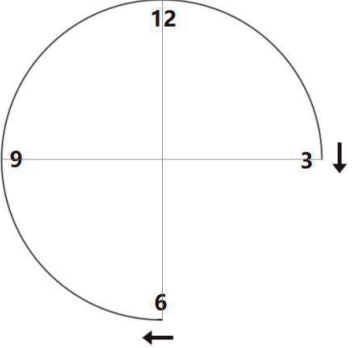
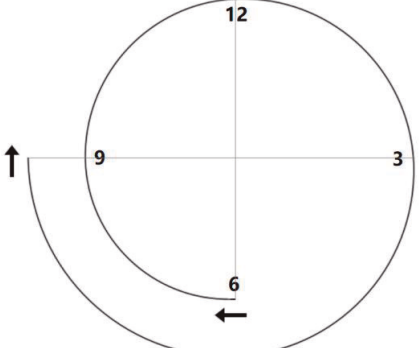
Male Nuts **MN** 67



Chromatograph Fittings **CU** 68

TUBE FITTINGS UP TO 1IN. / 25MM

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

 Fully insert the tube into the fitting and against the shoulder; rotate the nut finger-tight.	 Mark the nut at the 6 o'clock position.
 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.	 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.

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.

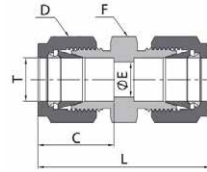
REASSEMBLY ALL-SIZES

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.

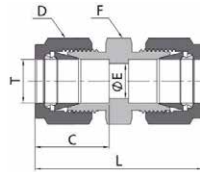
UNIONS



Fractional Tube						
T - Tube O.D. (in.)	Basic Ordering Number	Dimension, in. (mm)				
		L	C	D	F	E
1/16	_D-U-F1	0.99 (25.1)	0.34 (8.6)	0.31 (7.9)	0.44 (11.1)	0.05 (1.3)
1/8	_D-U-F2	1.40 (35.6)	0.54 (13.7)	0.44 (11.1)	0.44 (11.1)	0.09 (2.3)
3/16	_D-U-F3	1.47 (37.3)	0.60 (15.2)	0.50 (12.7)	0.50 (12.7)	0.12 (3.0)
1/4	_D-U-F4	1.61 (40.9)	0.64 (16.2)	0.56 (14.3)	0.50 (12.7)	0.19 (4.8)
5/16	_D-U-F5	1.69 (42.9)	0.66 (16.8)	0.63 (15.9)	0.56 (14.3)	0.25 (6.4)
3/8	_D-U-F6	1.77 (45.0)	0.90 (22.9)	0.69 (17.5)	0.63 (15.9)	0.28 (7.1)
1/2	_D-U-F8	2.02 (51.3)	0.96 (24.4)	0.87 (22.2)	0.81 (20.6)	0.41 (10.4)
5/8	_D-U-F10	2.05 (52.1)	1.02 (25.9)	1.00 (25.4)	0.94 (23.9)	0.50 (12.7)
3/4	_D-U-F12	2.11 (53.6)	1.23 (31.2)	1.13 (28.6)	1.06 (27.0)	0.62 (15.7)
7/8	_D-U-F14	2.17 (55.1)	1.23 (31.2)	1.25 (31.8)	1.37 (34.9)	0.72 (18.3)
1	_D-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	_D-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	_D-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	_D-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	_D-U-MT2	35.6 (1.40)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)	1.7 (0.07)
3	_D-U-MT3	35.3 (1.39)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)	2.4 (0.09)
4	_D-U-MT4	37.3 (1.47)	13.7 (0.54)	12.0 (0.47)	12.0 (0.47)	2.4 (0.09)
6	_D-U-MT6	41.0 (1.61)	15.3 (0.60)	14.0 (0.55)	14.0 (0.55)	4.8 (0.19)
8	_D-U-MT8	43.2 (1.70)	16.2 (0.64)	16.0 (0.63)	15.0 (0.59)	6.4 (0.25)
10	_D-U-MT10	46.2 (1.82)	17.2 (0.68)	19.0 (0.75)	18.0 (0.71)	7.9 (0.31)
12	_D-U-MT12	51.2 (2.02)	22.8 (0.90)	22.0 (0.87)	22.0 (0.87)	9.5 (0.37)
14	_D-U-MT14	52.0 (2.05)	24.4 (0.96)	25.0 (0.98)	24.0 (0.94)	11.1 (0.44)
15	_D-U-MT15	52.0 (2.05)	24.4 (0.96)	25.0 (0.98)	24.0 (0.94)	11.9 (0.47)
16	_D-U-MT16	52.0 (2.05)	24.4 (0.96)	25.0 (0.98)	24.0 (0.94)	12.7 (0.50)
18	_D-U-MT18	53.5 (2.11)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)	15.1 (0.59)
20	_D-U-MT20	55.0 (2.17)	26.0 (1.02)	32.0 (1.26)	30.0 (1.18)	15.9 (0.63)
22	_D-U-MT22	55.0 (2.17)	26.0 (1.02)	32.0 (1.26)	30.0 (1.18)	18.3 (0.72)
25	_D-U-MT25	65.0 (2.56)	31.3 (1.23)	38.0 (1.50)	35.0 (1.38)	21.8 (0.86)
28	_D-U-MT28	85.0 (3.35)	36.6 (1.44)	46.0 (1.81)	41.0 (1.61)	21.8 (0.86)
30	_D-U-MT30	92.7 (3.65)	39.6 (1.56)	50.0 (1.97)	46.0 (1.81)	26.2 (1.03)
32	_D-U-MT32	97.3 (3.83)	42.0 (1.65)	50.0 (1.97)	46.0 (1.81)	28.6 (1.13)
38	_D-U-MT38	113.6 (4.47)	49.4 (1.94)	60.0 (2.36)	55.0 (2.17)	33.7 (1.33)

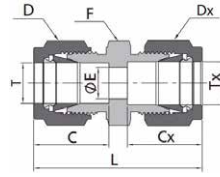
CONVERSION UNIONS



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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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)

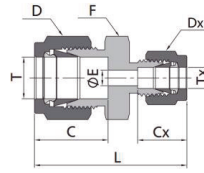
REDUCING UNIONS



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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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)

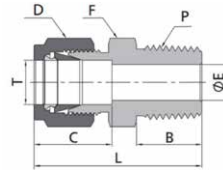
REDUCING UNIONS



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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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)

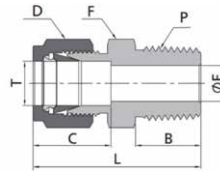
MALE CONNECTOR



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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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)

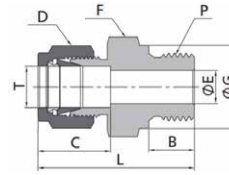
MALE CONNECTOR



Fractional Tube to RT Thread

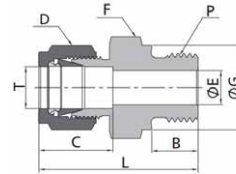
T - Tube O.D. (in.)	P-RT Size	Basic Ordering Number	Dimension, in. (mm)					
			L	B	C	E	D	F
1/8	1/8	_D-MC-F2-RT2	1.20 (30.5)	0.38 (9.7)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.44 (11.1)
1/8	1/4	_D-MC-F2-RT4	1.40 (35.6)	0.56 (14.2)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.56 (14.3)
1/4	1/8	_D-MC-F4-RT2	1.29 (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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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

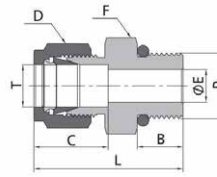
T - Tube O.D. (in.)	P-RS Size	Basic Ordering Number	Dimension, in. (mm)						
			L	B	C	E	D	F	G
1/8	1/8	_D-MC-F2-RS2	1.18 (30.0)	0.28 (7.1)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.56 (14.3)	0.54 (13.7)
1/8	1/4	_D-MC-F2-RS4	1.39 (35.3)	0.44 (11.2)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.75 (19.1)	0.71 (18.0)
1/8	3/8	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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)

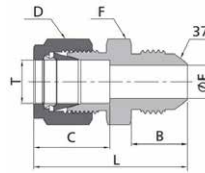
MALE CONNECTOR



Fractional Tube to SAE / MS Thread

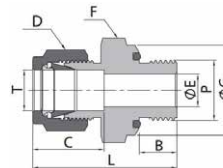
T - Tube O.D. (in.)	P-SAE/MS Size	Basic Ordering Number	Dimension, in. (mm)					
			L	B	C	E	D	F
1/16	5/16-24	_D-MC-F1-ST5	0.92 (23.4)	0.30 (7.6)	0.34 (8.6)	0.05 (1.3)	0.31 (7.9)	0.44 (11.1)
1/8	5/16-24	_D-MC-F2-ST5	1.18 (30.0)	0.30 (7.6)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.44 (11.1)
1/8	7/16-20	_D-MC-F2-ST7	1.24 (31.5)	0.36 (9.1)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.56 (14.3)
1/8	9/16-18	_D-MC-F2-ST9	1.31 (33.3)	0.39 (9.9)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.69 (17.5)
3/16	3/8-24	_D-MC-F3-ST6	1.20 (30.5)	0.30 (7.6)	0.54 (13.7)	0.12 (3.0)	0.50 (12.7)	0.50 (12.7)
1/4	5/16-24	_D-MC-F4-ST5	1.27 (32.3)	0.30 (7.6)	0.60 (15.2)	0.09 (2.3)	0.56 (14.3)	0.50 (12.7)
1/4	7/16-20	_D-MC-F4-ST7	1.34 (34.0)	0.36 (9.1)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.56 (14.3)
1/4	9/16-18	_D-MC-F4-ST9	1.40 (35.6)	0.39 (9.9)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.69 (17.5)
1/4	3/4-16	_D-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	_D-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	_D-MC-F5-ST8	1.37 (34.8)	0.36 (9.1)	0.64 (16.3)	0.25 (6.4)	0.63 (15.9)	0.63 (15.9)
3/8	7/16-20	_D-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	_D-MC-F6-ST9	1.46 (37.1)	0.39 (9.9)	0.66 (16.8)	0.28 (7.1)	0.69 (17.5)	0.69 (17.5)
3/8	3/4-16	_D-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	_D-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	_D-MC-F8-ST9	1.54 (39.1)	0.39 (9.9)	0.90 (22.9)	0.28 (7.1)	0.87 (22.2)	0.81 (20.6)
1/2	3/4-16	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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

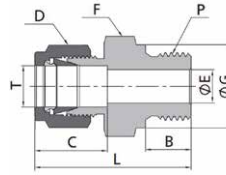
T - Tube O.D. (in.)	Flared Size	Basic Ordering Number	Dimension, in. (mm)					
			L	B	C	E	D	F
1/16	1/8	_D-MC-F1-AN2	1.07 (27.2)	0.45 (11.4)	0.34 (8.6)	0.05 (1.3)	0.31 (7.9)	0.44 (11.1)
1/8	1/8	_D-MC-F2-AN2	1.27 (32.3)	0.45 (11.4)	0.50 (12.7)	0.06 (1.5)	0.44 (11.1)	0.44 (11.1)
1/8	1/4	_D-MC-F2-AN4	1.38 (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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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)

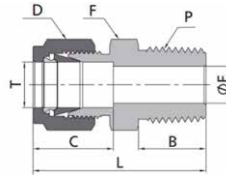
MALE CONNECTOR



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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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)

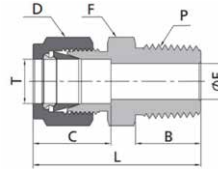
MALE CONNECTOR



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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-MC-M8-N6	393 (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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-MC-M22-N12	523 (2.06)	19.1 (0.75)	26.0 (1.02)	15.9 (0.63)	32.0 (1.26)	30.0 (1.18)
22	1	_D-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	_D-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	_D-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	_D-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	_D-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	_D-MC-MT8-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	_D-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	_D-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	_D-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)

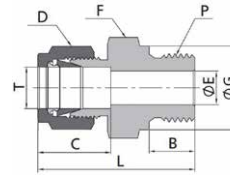
MALE CONNECTOR



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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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)

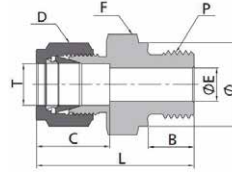
MALE CONNECTOR



Metric Tube to ISO Parallel Thread

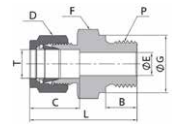
T - Tube O.D. (mm)	P - RS Size	Basic Ordering Number	Dimension, mm (in.)						
			L	B	C	E	D	F	G
2	1/8	_D-MC-M2-RS2	30.0 (1.18)	7.1 (0.28)	12.9 (0.51)	1.7 (0.07)	12.0 (0.47)	14.0 (0.55)	13.7 (0.54)
3	1/8	_D-MC-M3-RS2	30.0 (1.18)	7.1 (0.28)	12.9 (0.51)	2.4 (0.09)	12.0 (0.47)	14.0 (0.55)	13.7 (0.54)
3	1/4	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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

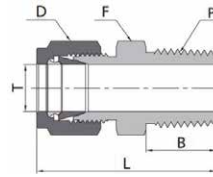
T - Tube O.D. (mm)	P-RP Size	Basic Ordering Number	Dimension, mm (in.)						
			L	B	C	E	D	F	G
3	1/8	_D-MC-M3-RP2	30.0(1.18)	7.1 (0.28)	12.9 (0.51)	2.4 (0.09)	12.0 (0.47)	14.0 (0.55)	13.8 (0.54)
4	1/8	_D-MC-M4-RP2	30.7(1.21)	7.1 (0.28)	13.7 (0.54)	2.4 (0.09)	12.0 (0.47)	14.0 (0.55)	13.8 (0.54)
6	1/4	_D-MC-M6-RP4	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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	M8x 1	_D-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	M10x 1	_D-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	M10x 1	_D-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	M12x 1.5	_D-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	M12x 1.5	_D-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	M14x 1.5	_D-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	M16x 1.5	_D-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	M20x 1.5	_D-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	M20x 1.5	_D-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	M20x 1.5	_D-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	M20x 1.5	_D-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	M20x 1.5	_D-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	M24x 1.5	_D-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	M27x 2	_D-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



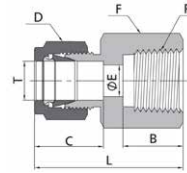
Fractional Tube to NPT Thread

T - Tube O.D. (in.)	P-NPT Size	Basic Ordering Number	Dimension, in. (mm)			
			L	B	C	D
3/16	1/16	_D-TCM-F1-N1	0.94 (23.9)	0.38(9.7)	0.31 (7.9)	0.31 (7.9)
1/6	1/8	_D-TCM-F1-N2	1.03 (26.2)	0.38(9.7)	0.31 (7.9)	0.44 (11.1)
1/8	1/16	_D-TCM-F2-N1	1.17 (29.7)	0.38(9.7)	0.44 (11.1)	0.44 (11.1)
1/8	1/8	_D-TCM-F2-N2	1.20 (30.5)	0.38(9.7)	0.44 (11.1)	0.44 (11.1)
1/8	1/4	_D-TCM-F2-N4	1.40 (35.6)	0.56(14.2)	0.44 (11.1)	0.56 (14.3)
3/16	1/8	_D-TCM-F3-N2	1.23 (31.2)	0.38(9.7)	0.50 (12.7)	0.44 (11.1)
3/16	1/4	_D-TCM-F3-N4	1.43 (36.3)	0.56(14.2)	0.50 (12.7)	0.56 (14.3)
1/4	1/8	_D-TCM-F4-N2	1.29 (32.8)	0.38(9.7)	0.56 (14.3)	0.50 (12.7)
1/4	1/4	_D-TCM-F4-N4	1.49 (37.8)	0.56(14.2)	0.56 (14.3)	0.56 (14.3)
1/4	3/8	_D-TCM-F4-N6	1.51 (38.4)	0.56(14.2)	0.56 (14.3)	0.69 (17.5)
1/4	1/2	_D-TCM-F4-N8	1.76 (44.7)	0.75(19.1)	0.56 (14.3)	0.87 (22.2)
5/16	1/4	_D-TCM-F5-N4	1.52 (38.6)	0.56(14.2)	0.63 (15.9)	0.56 (14.3)
3/8	1/4	_D-TCM-F6-N4	1.57 (39.9)	0.56(14.2)	0.69 (17.5)	0.63 (15.9)
3/8	3/8	_D-TCM-F6-N6	1.57 (39.9)	0.56(14.2)	0.69 (17.5)	0.69 (17.5)
3/8	1/2	_D-TCM-F6-N8	1.82 (46.2)	0.75(19.1)	0.69 (17.5)	0.87 (22.2)
1/2	1/2	_D-TCM-F8-N8	1.93 (49.0)	0.75(19.1)	0.87 (22.2)	0.87 (22.2)
1/2	3/4	_D-TCM-F8-N12	1.99 (50.5)	0.75(19.1)	0.87 (22.2)	1.06 (27.0)
5/8	3/4	_D-TCM-F10-N12	1.99 (50.5)	0.75(19.1)	1.00 (25.4)	1.06 (27.0)
3/4	3/4	_D-TCM-F12-N12	1.99 (50.5)	0.75(19.1)	1.13 (28.6)	1.06 (27.0)
1	1	_D-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	_D-TCM-M2-N2	30.5 (1.20)	9.7 (0.38)	12.0 (0.47)	12.0 (0.47)
3	1/8	_D-TCM-M3-N2	30.5 (1.20)	9.7 (0.38)	12.0 (0.47)	12.0 (0.47)
3	1/4	_D-TCM-M3-N4	35.6 (1.40)	14.2 (0.56)	12.0 (0.47)	14.0 (0.55)
4	1/8	_D-TCM-M4-N2	31.2 (1.23)	9.7 (0.38)	12.0 (0.47)	12.0 (0.47)
4	1/4	_D-TCM-M4-N4	36.3 (1.43)	14.2 (0.56)	12.0 (0.47)	14.0 (0.55)
6	1/8	_D-TCM-M6-N2	32.8 (1.29)	9.7 (0.38)	14.0 (0.55)	14.0 (0.55)
6	1/4	_D-TCM-M6-N4	37.9 (1.49)	14.2 (0.56)	14.0 (0.55)	14.0 (0.55)
8	1/4	_D-TCM-M8-N4	38.7 (1.52)	14.2 (0.56)	16.0 (0.63)	15.0 (0.59)
8	3/8	_D-TCM-M8-N6	39.3 (1.55)	14.2 (0.56)	16.0 (0.63)	18.0 (0.71)
10	3/8	_D-TCM-M10-N6	40.9 (1.61)	14.2 (0.56)	19.0 (0.75)	18.0 (0.71)
10	1/2	_D-TCM-M10-N8	46.5 (1.83)	19.1 (0.75)	19.0 (0.75)	22.0 (0.87)
12	3/8	_D-TCM-M12-N6	43.4 (1.71)	14.2 (0.56)	22.0 (0.87)	22.0 (0.87)
12	1/2	_D-TCM-M12-N8	49.0 (1.93)	19.1 (0.75)	22.0 (0.87)	22.0 (0.87)
12	3/4	_D-TCM-M12-N12	50.5 (1.99)	19.1 (0.75)	22.0 (0.87)	27.0 (1.06)
14	1/2	_D-TCM-M14-N8	49.0 (1.93)	19.1 (0.75)	25.0 (0.98)	24.0 (0.94)
14	3/4	_D-TCM-M14-N12	50.5 (1.99)	19.1 (0.75)	25.0 (0.98)	27.0 (1.06)
15	1/2	_D-TCM-M15-N8	49.0 (1.93)	19.1 (0.75)	25.0 (0.98)	24.0 (0.94)

FEMALE CONNECTOR



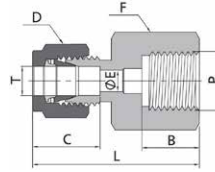
Fractional Tube to NPT Thread

T - Tube O.D. (in.)	P-NPT Size	Basic Ordering Number	Dimension, in. (mm)					
			L	B	C	E	D	F
1/16	1/16	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-FC-F5-N2	1.26 (32.0)	0.41 (10.4)	0.64 (16.3)	0.16 (6.4)	0.63 (15.9)	0.56 (14.3)
5/16	1/4	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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

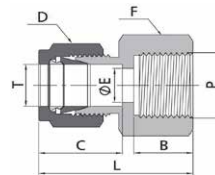
T - Tube O.D. (in.)	P-RT Size	Basic Ordering Number	Dimension, in. (mm)					
			L	B	C	E	D	F
1/4	1/8	_D-FC-F4-R2	1.23 (31.2)	0.41 (10.4)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.56 (14.3)
1/4	1/4	_D-FC-F4-R4	1.41 (35.8)	0.59 (15.0)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.75 (19.1)
1/4	3/8	_D-FC-F4-R6	1.48 (37.6)	0.59 (15.0)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.87 (22.2)
1/4	1/2	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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

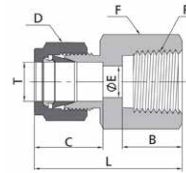
T - Tube O.D. (in.)	P-RG Size	Basic Ordering Number	Dimension, in. (mm)					
			L	B	C	E	D	F
1/8	1/4	_D-FC-F2-RG4	1.39 (35.3)	0.51 (12.9)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.75 (19.1)
1/8	3/8	_D-FC-F2-RG6	1.52 (38.7)	0.56 (14.2)	0.50 (12.7)	0.09 (2.3)	0.44 (11.1)	0.94 (23.8)
1/4	1/4	_D-FC-F4-RG4	1.48 (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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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)

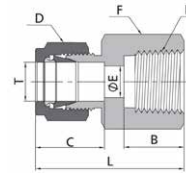
FEMALE CONNECTOR



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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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)

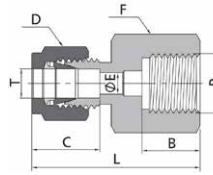
FEMALE CONNECTOR



Metric Tube to RT Thread

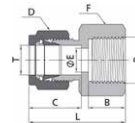
T - Tube O.D. (mm)	P - RT Size	Basic Ordering Number	Dimension, mm (in.)					
			L	B	C	E	D	F
3	1/8	_D-FC-M3-RT2	28.7 (1.13)	10.4 (0.41)	12.9 (0.51)	2.4 (0.09)	12.0 (0.47)	14.0 (0.55)
6	1/8	_D-FC-M6-RT2	31.3 (1.23)	10.4 (0.41)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	14.0 (0.55)
6	1/4	_D-FC-M6-RT4	35.8 (1.41)	15.0 (0.59)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	19.0 (0.75)
6	3/8	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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

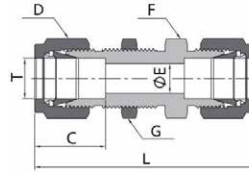
T - Tube O.D. (mm)	P-RG Size	Basic Ordering Number	Dimension, mm (in.)					
			L	B	C	E	D	F
3	1/4	_D-FC-M3-RG4	35.3 (1.39)	12.9 (0.51)	12.9 (0.51)	2.4 (0.09)	12.0 (0.47)	19.0 (0.75)
6	1/4	_D-FC-M6-RG4	37.6 (1.48)	12.9 (0.51)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	19.0 (0.75)
6	3/8	_D-FC-M6-RG6	37.6 (1.48)	14.2 (0.56)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	24.0 (0.94)
6	1/2	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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



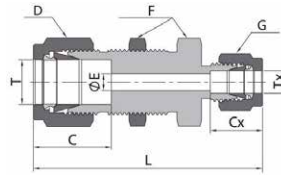
Fractional Tube

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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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



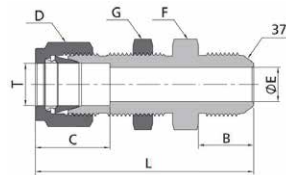
Fractional Tube

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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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)

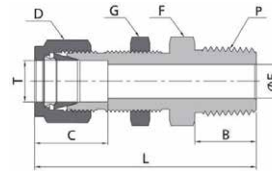
BULKHEAD FLARED CONNECTOR



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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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



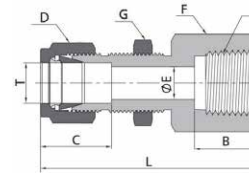
Fractional Tube to NPT Thread

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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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

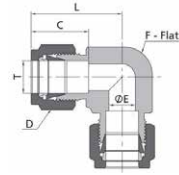


Fractional Tube to NPT Thread

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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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

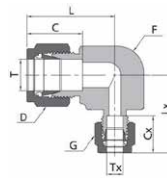
T - Tube O.D.(mm)	P-NPT Size	Basic Ordering Number	Dimension, mm (in.)							Panel Hole Size in. (mm)	Max. Panel Thickness in. (mm)
			L	B	C	E	D	F	G		
6	1/8	_D-BFC-M6-N2	47.2 (1.86)	10.4 (0.41)	15.3 (0.60)	4.8 (0.19)	14.0 (0.55)	16.0 (0.63)	16.0 (0.63)	11.5 (0.45)	10.2 (0.40)
6	1/4	_D-BFC-M6-N4	51.8 (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	_D-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	_D-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	_D-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	_D-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	_D-LU-F1	0.70 (17.8)	0.34 (8.6)	0.31 (7.9)	0.37 (9.5)	0.05 (1.3)
1/8	_D-LU-F2	0.88 (22.4)	0.50 (12.7)	0.44 (11.1)	0.37 (9.5)	0.09 (2.3)
3/16	_D-LU-F3	1.00 (25.4)	0.54 (13.7)	0.50 (12.7)	0.50 (12.7)	0.12 (3.0)
1/4	_D-LU-F4	1.06 (26.9)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.19 (4.8)
5/16	_D-LU-F5	1.13 (28.7)	0.64 (16.3)	0.63 (15.9)	0.56 (14.3)	0.25 (6.4)
3/8	_D-LU-F6	1.20 (30.5)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.28 (7.1)
1/2	_D-LU-F8	1.42 (36.1)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)	0.41 (10.4)
5/8	_D-LU-F10	1.50 (38.1)	0.96 (24.4)	1.00 (25.4)	0.94 (23.8)	0.5 (12.7)
3/4	_D-LU-F12	1.57 (39.9)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.62 (15.7)
7/8	_D-LU-F14	1.76 (44.7)	1.02 (25.9)	1.25 (31.8)	1.37 (34.9)	0.72 (18.3)
1	_D-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	_D-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	_D-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	_D-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	_D-LU-M3	22.3 (0.88)	12.9 (0.51)	12.0 (0.47)	9.5 (0.37)	2.4 (0.09)
4	_D-LU-M4	25.4 (1.00)	13.7 (0.54)	12.0 (0.47)	12.7 (0.50)	2.4 (0.09)
6	_D-LU-M6	27.0 (1.06)	15.3 (0.60)	14.0 (0.55)	12.7 (0.50)	4.8 (0.19)
8	_D-LU-M8	28.8 (1.13)	16.2 (0.64)	16.0 (0.63)	14.3 (0.56)	6.4 (0.25)
10	_D-LU-M10	31.5 (1.24)	17.2 (0.68)	19.0 (0.75)	17.5 (0.69)	7.9 (0.31)
12	_D-LU-M12	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	9.5 (0.37)
14	_D-LU-M14	38.0 (1.50)	24.4 (0.96)	25.0 (0.98)	23.8 (0.94)	11.0 (0.43)
15	_D-LU-M15	38.8 (1.53)	24.4 (0.96)	25.0 (0.98)	23.8 (0.94)	11.9 (0.47)
16	_D-LU-M16	38.0 (1.50)	24.4 (0.96)	25.0 (0.98)	23.8 (0.94)	12.7 (0.50)
18	_D-LU-M18	39.8 (1.57)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)	15.1 (0.59)
20	_D-LU-M20	44.6 (1.76)	26.0 (1.02)	32.0 (1.26)	34.9 (1.37)	15.9 (0.63)
22	_D-LU-M22	44.6 (1.76)	26.0 (1.02)	32.0 (1.26)	34.9 (1.37)	18.3 (0.72)
25	_D-LU-M25	49.1 (1.93)	31.3 (1.23)	38.0 (1.5)	34.9 (1.37)	21.8 (0.86)
28	_D-LU-M28	64.0 (2.52)	36.6 (1.44)	46.0 (1.81)	42.9 (1.69)	21.8 (0.86)
30	_D-LU-M30	69.9 (2.75)	39.6 (1.56)	50.0 (1.97)	42.9 (1.69)	26.2 (1.03)
32	_D-LU-M32	72.3 (2.85)	42.0 (1.65)	50.0 (1.97)	42.9 (1.69)	28.6 (1.13)
38	_D-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

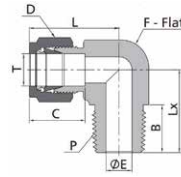
Fractional Tube

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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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

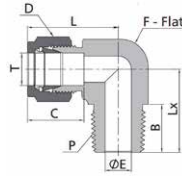


Fractional Tube to NPT Thread

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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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

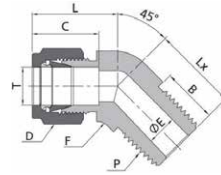
Metric Tube to NPT Thread

T - Tube O.D.(mm)	P-RT Size	Basic Ordering Number	Dimension, mm (in.)						
			L	C	D	F	E	B	Lx
3	1/8	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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



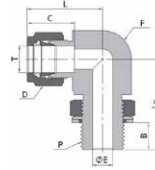
Fractional Tube to NPT Thread

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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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

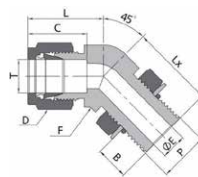
T - Tube O.D.(in.)	P-SAE/MS Size	Basic Ordering Number	Dimension, in. (mm)						
			L	B	C	D	E	F	Lx
1/4	7/16-20	_D-AME-F4-ST7	1.12 (28.4)	0.39 (9.9)	0.60 (15.2)	0.56 (14.3)	0.19 (4.8)	0.50 (12.7)	1.12 (28.4)
1/4	9/16-18	_D-AME-F4-ST9	1.20 (30.5)	0.44 (11.2)	0.60 (15.2)	0.56 (14.3)	0.19 (4.8)	0.63 (15.9)	1.27 (32.3)
5/16	1/2-20	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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° AJUSTEABLE MALE ELBOWS

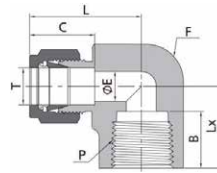
Fractional Tube to SAE/MS Thread

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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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



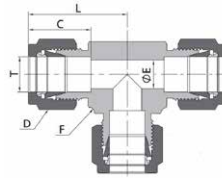
Fractional Tube to NPT Thread

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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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



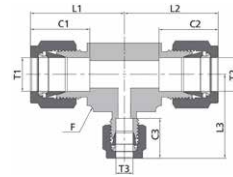
Fractional Tube

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

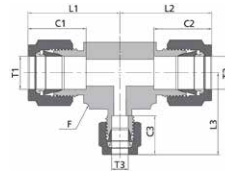
Metric Tube

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



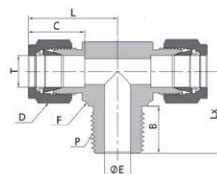
Fractional Tube										
T1 - O.D. (in.)	T2 - O.D. (in.)	T3 - O.D. (in.)	Basic Ordering Number	Dimension, in. (mm)						
				L1	L2	L3	C1	C2	C3	F
1/4	1/4	1/8	_D-TUR-F4-F4-F2	1.05 (26.7)	1.05 (26.7)	0.96 (24.4)	0.60 (15.2)	0.60 (15.2)	0.50 (12.7)	0.50 (12.7)
3/8	1/4	1/4	_D-TUR-F6-F4-F4	1.20 (30.5)	1.14 (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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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

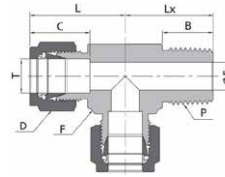
Fractional Tube to NPT Thread

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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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

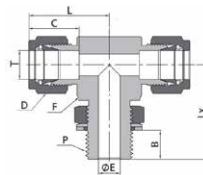


Fractional Tube to NPT Thread

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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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

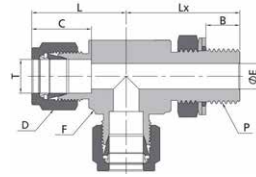
T - Tube O.D.(in.)	P-BSP Size	Basic Ordering Number	Dimension, in. (mm)						
			L	B	C	E	D	F	Lx
1/4	1/8	_D-TTA-F4-PP2	1.06 (26.9)	0.32 (8.1)	0.60 (15.2)	0.16 (4.1)	0.56 (14.3)	0.50 (12.7)	1.04 (26.4)
1/4	1/4	_D-TTA-F4-PP4	1.14 (29.0)	0.36 (9.1)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.63 (15.9)	1.27 (32.3)
3/8	1/4	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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

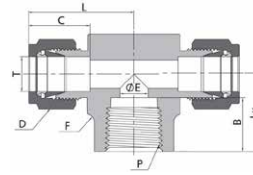
T - Tube O.D.(in.)	P-BSP Size	Basic Ordering Number	Dimension, in. (mm)						
			L	B	C	E	D	F	Lx
1/4	1/8	_D-TAT-F4-PP2	1.06 (26.9)	0.32 (8.1)	0.60 (15.2)	0.16 (4.1)	0.56 (14.3)	0.50 (12.7)	1.04 (26.4)
1/4	1/4	_D-TAT-F4-PP4	1.14 (29.0)	0.36 (9.1)	0.60 (15.2)	0.19 (4.8)	0.56 (14.3)	0.63 (15.9)	1.27 (32.3)
3/8	1/4	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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)



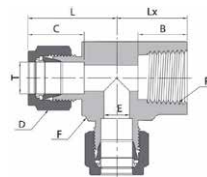
FEMALE BRANCH TEES

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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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

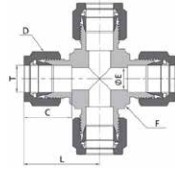
Fractional Tube to NPT Thread

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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-TFT-M16-N8	39.8 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



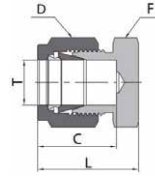
Fractional Tube

T - Tube O.D.(in.)	Basic Ordering Number	Dimension, in. (mm)				
		L	C	D	F	E
1/8	_D-C-F2	0.88 (22.4)	0.50 (12.7)	0.44 (11.1)	0.37 (9.5)	0.09 (2.3)
3/16	_D-C-F3	0.96 (24.4)	0.54 (13.7)	0.50 (12.7)	0.44 (11.1)	0.12 (3.0)
1/4	_D-C-F4	1.06 (26.9)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)	0.19 (4.8)
5/16	_D-C-F5	1.17 (29.7)	0.64 (16.2)	0.63 (15.9)	0.63 (15.9)	0.25 (6.4)
3/8	_D-C-F6	1.20 (30.5)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)	0.28 (7.1)
1/2	_D-C-F8	1.42 (36.1)	0.90 (22.9)	0.69 (17.5)	0.81 (20.6)	0.41 (10.4)
5/8	_D-C-F10	1.43 (36.3)	0.96 (24.4)	1.00 (25.4)	1.06 (27.0)	0.50 (12.7)
3/4	_D-C-F12	1.57 (39.9)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)	0.62 (15.7)
7/8	_D-C-F14	1.76 (44.7)	1.02 (25.9)	1.25 (31.8)	1.37 (34.9)	0.72 (18.3)
1	_D-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	_D-C-M3	22.3 (0.88)	12.9 (0.51)	12.0 (0.47)	9.5 (0.37)	2.4 (0.09)
4	_D-C-M4	25.4 (1.00)	13.7 (0.54)	12.0 (0.47)	12.7 (0.50)	2.4 (0.09)
6	_D-C-M6	27.0 (1.06)	15.3 (0.60)	14.0 (0.55)	12.7 (0.50)	4.8 (0.19)
8	_D-C-M8	29.9 (1.18)	16.2 (0.64)	16.0 (0.63)	15.9 (0.63)	6.4 (0.25)
10	_D-C-M10	33.5 (1.32)	17.2 (0.68)	19.0 (0.75)	20.6 (0.81)	7.9 (0.31)
12	_D-C-M12	36.0 (1.42)	22.8 (0.90)	22.0 (0.87)	20.6 (0.81)	9.5 (0.37)
16	_D-C-M16	37.0 (1.46)	24.4 (0.96)	25.0 (0.98)	23.8 (0.94)	12.7 (0.50)
18	_D-C-M18	38.3 (1.51)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)	15.1 (0.59)
20	_D-C-M20	44.6 (1.76)	26.0 (1.02)	32.0 (1.26)	34.9 (1.37)	15.9 (0.63)
22	_D-C-M22	44.7 (1.76)	26.0 (1.02)	32.0 (1.26)	34.9 (1.37)	18.3 (0.72)
25	_D-C-MT25	49.2 (1.94)	31.3 (1.23)	38.0 (1.50)	34.9 (1.37)	21.8 (0.86)

CAPS



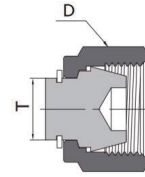
Fractional Tube

T - Tube O.D.(in.)	Basic Ordering Number	Dimension, in. (mm)			
		L	C	D	F
1/16	_D-TC-F1	0.59 (15.0)	0.34 (8.6)	0.31 (7.9)	0.31 (7.9)
1/8	_D-TC-F2	0.79 (20.1)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)
3/16	_D-TC-F3	0.84 (21.3)	0.54 (13.7)	0.50 (12.7)	0.44 (11.1)
1/4	_D-TC-F4	0.92 (23.4)	0.60 (15.2)	0.56 (14.3)	0.50 (12.7)
5/16	_D-TC-F5	0.96 (24.4)	0.64 (16.3)	0.63 (15.9)	0.56 (14.3)
3/8	_D-TC-F6	1.01 (25.7)	0.66 (16.8)	0.69 (17.5)	0.63 (15.9)
1/2	_D-TC-F8	1.15 (29.2)	0.90 (22.9)	0.87 (22.2)	0.81 (20.6)
5/8	_D-TC-F10	1.18 (30.0)	0.96 (24.4)	1.00 (25.4)	0.94 (23.8)
3/4	_D-TC-F12	1.24 (31.5)	0.96 (24.4)	1.13 (28.6)	1.06 (27.0)
7/8	_D-TC-F14	1.34 (34.0)	1.02 (25.9)	1.25 (31.8)	1.19 (30.2)
1	_D-TC-F16	1.51 (38.4)	1.23 (31.2)	1.50 (38.1)	1.37 (34.9)
1 1/8	_D-TC-F18	1.51 (38.4)	1.23 (31.2)	1.81 (46.0)	1.63 (41.3)
1 1/4	_D-TC-F20	2.10 (53.3)	1.62 (41.1)	1.87 (47.6)	1.75 (44.5)
1 1/2	_D-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	_D-TC-M2	20.1 (0.79)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)
3	_D-TC-M3	20.1 (0.79)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)
4	_D-TC-M4	21.3 (0.84)	13.7 (0.54)	12.0 (0.47)	12.0 (0.47)
6	_D-TC-M6	23.1 (0.91)	15.3 (0.60)	14.0 (0.55)	14.0 (0.55)
8	_D-TC-M8	24.5 (0.96)	16.2 (0.64)	16.0 (0.63)	15.0 (0.59)
10	_D-TC-M10	26.6 (1.05)	17.2 (0.68)	19.0 (0.75)	18.0 (0.71)
12	_D-TC-M12	29.1 (1.15)	22.8 (0.90)	22.0 (0.87)	22.0 (0.87)
14	_D-TC-M14	29.9 (1.18)	24.4 (0.96)	22.0 (0.87)	24.0 (0.94)
15	_D-TC-M15	29.9 (1.18)	24.4 (0.96)	25.0 (0.98)	24.0 (0.94)
16	_D-TC-M16	29.9 (1.18)	24.4 (0.96)	25.0 (0.98)	24.0 (0.94)
18	_D-TC-M18	31.4 (1.24)	24.4 (0.96)	30.0 (1.18)	27.0 (1.06)
20	_D-TC-M20	34.0 (1.34)	26.0 (1.02)	32.0 (1.26)	30.0 (1.18)
22	_D-TC-M22	34.0 (1.34)	26.0 (1.02)	32.0 (1.26)	30.0 (1.18)
25	_D-TC-M25	38.5 (1.52)	31.3 (1.23)	38.0 (1.50)	35.0 (1.38)
28	_D-TC-M28	48.5 (1.91)	36.6 (1.44)	46.0 (1.81)	41.0 (1.61)
30	_D-TC-M30	53.4 (2.10)	39.6 (1.56)	50.0 (1.97)	46.0 (1.81)
32	_D-TC-M32	55.8 (2.20)	42.0 (1.65)	50.0 (1.97)	46.0 (1.81)
38	_D-TC-M38	65.4 (2.57)	49.4 (1.94)	60.0 (2.36)	55.0 (2.17)

PLUGS



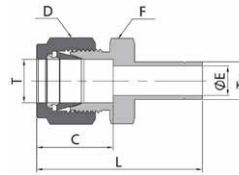
Fractional Tube

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

Metric Tube

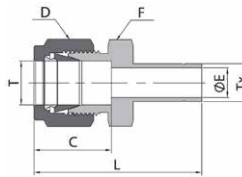
T - Tube O.D.(mm)	Basic Ordering Number	Dimension, mm (in.)
		D
2	_D-TP-M2	12.0 (0.47)
3	_D-TP-M3	12.0 (0.47)
4	_D-TP-M4	12.0 (0.47)
6	_D-TP-M6	14.0 (0.55)
8	_D-TP-M8	16.0 (0.63)
10	_D-TP-M10	19.0 (0.75)
12	_D-TP-M12	22.0 (0.87)
14	_D-TP-M14	25.0 (0.98)
15	_D-TP-M15	25.0 (0.98)
16	_D-TP-M16	25.0 (0.98)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

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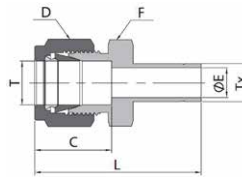
Fractional Tube							
T - Tube O.D. (in.)	Tx-Tube O.D.(in.)	Basic Ordering Number	Dimension, in. (mm)				
			L	C	D	F	E
31/16	1/8	_D-RD-F1-FT2	1.15 (29.2)	0.34 (8.6)	0.31 (7.9)	0.31 (7.9)	0.05 (1.3)
1/16	3/16	_D-RD-F1-FT3	1.18 (30.0)	0.34 (8.6)	0.31 (7.9)	0.31 (7.9)	0.05 (1.3)
1/16	1/4	_D-RD-F1-FT4	1.24 (31.5)	0.34 (8.6)	0.31 (7.9)	0.31 (7.9)	0.05 (1.3)
1/8	1/16	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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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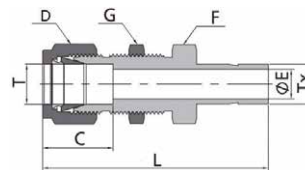
Metric Tube							
T - Tube O.D. (mm)	Tx-Tube O.D.(mm)	Basic Ordering Number	Dimension, mm (in.)				
			L	C	D	F	E
2	3	_D-RD-M2-MT3	33.5 (1.32)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)	1.7 (0.07)
3	4	_D-RD-M3-MT4	35.0 (1.38)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)	2.4 (0.09)
3	6	_D-RD-M3-MT6	36.1 (1.42)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)	2.4 (0.09)
3	10	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-RD-M25-MT20	64.6 (2.54)	31.3 (1.23)	38.0 (1.50)	35.0 (1.38)	15.5 (0.61)

REDUCERS



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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-RD-M25-FT16	69.5 (2.74)	31.3 (1.23)	38.0 (1.50)	35.0 (1.38)	20.2 (0.80)

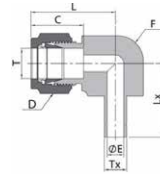


BULKHEAD REDUCERS

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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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)

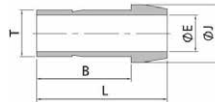
REDUCER ELBOWS



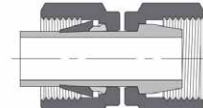
Metric Tube to Fractional Tube

T - Tube O.D. (mm)	Tx-Tube O.D.(mm)	Basic Ordering Number	Dimension, mm (in.)					
			L	C	D	F	G	E
6	6	_D-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	_D-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" /28 mm and above

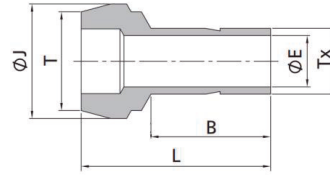
Fractional Tube

T - Tube O.D. (in.)	Basic Ordering Number	Dimension, in. (mm)			
		L	F	B	E
1/16	_D-P-FT1	0.54 (13.7)	0.42 (10.7)	0.03 (0.8)	0.13 (3.3)
1/8	_D-P-FT2	0.88 (22.4)	0.62 (15.7)	0.08 (2.0)	0.24 (6.1)
1/4	_D-P-FT4	0.97 (24.6)	0.74 (18.8)	0.17 (4.3)	0.37 (9.4)
5/16	_D-P-FT5	1.02 (25.9)	0.79 (20.1)	0.22 (5.6)	0.43 (10.9)
3/8	_D-P-FT6	1.03 (26.2)	0.80 (20.3)	0.27 (6.9)	0.50 (12.7)
1/2	_D-P-FT8	1.41 (35.8)	1.02 (25.9)	0.37 (9.4)	0.62 (15.7)
5/8	_D-P-FT10	1.64 (41.7)	1.11 (28.1)	0.47 (11.9)	0.81 (20.5)
3/4	_D-P-FT12	1.65 (41.9)	1.09 (27.7)	0.58 (14.7)	0.87 (22.1)
1	_D-P-FT16	1.89 (48.0)	1.36 (34.5)	0.80 (20.3)	1.12 (28.4)
1 1/4	_D-P-FT20	2.72 (69.1)	1.99 (50.6)	1.02 (25.9)	1.47 (37.4)
1 1/2	_D-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	_D-P-MT3	22.2 (0.87)	15.7 (0.62)	1.9 (0.07)	6.0 (0.24)
6	_D-P-MT6	24.6 (0.97)	18.7 (0.74)	4.1 (0.16)	9.0 (0.35)
8	_D-P-MT8	25.9 (1.02)	20.0 (0.79)	5.6 (0.22)	11.0 (0.43)
10	_D-P-MT10	26.1 (1.03)	20.2 (0.80)	7.1 (0.28)	13.1 (0.52)
12	_D-P-MT12	35.8 (1.41)	26.0 (1.02)	8.8 (0.35)	15.0 (0.59)
15	_D-P-MT15	37.8 (1.49)	27.6 (1.09)	11.2 (0.44)	19.6 (0.77)
16	_D-P-MT16	37.8 (1.49)	27.6 (1.09)	12.0 (0.47)	20.6 (0.81)
18	_D-P-MT18	37.8 (1.49)	27.7 (1.09)	13.9 (0.55)	21.0 (0.83)
20	_D-P-MT20	39.4 (1.55)	29.2 (1.15)	15.5 (0.61)	24.6 (0.97)
25	_D-P-MT25	49.3 (1.94)	34.5 (1.36)	19.9 (0.78)	31.2 (1.23)
28	_D-P-MT28	63.5 (2.5)	48.3 (1.90)	22.5 (0.89)	34.4 (1.35)
30	_D-P-MT30	67.6 (2.66)	52.2 (2.06)	24.3 (0.96)	37.4 (1.47)
32	_D-P-MT32	69.7 (2.74)	52.4 (2.06)	26.5 (1.04)	39.4 (1.55)
38	_D-P-MT38	81.9 (3.22)	61.4 (2.42)	31.6 (1.24)	45.8 (1.80)

REDUCING PORT CONNECTORS



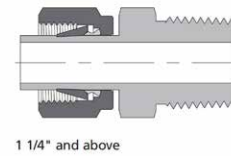
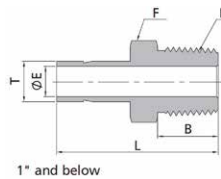
Fractional Tube

T - Tube O.D. (in.)	Tx-Tube O.D.(in.)	Basic Ordering Number	Dimension, in. (mm)			
			L	B	E	J
1/8	1/16	_D-RP-F2-FT1	0.68 (17.3)	0.34 (8.6)	0.03 (0.8)	0.24 (6.1)
1/4	1/16	_D-RP-F4-FT1	0.71 (18.0)	0.34 (8.6)	0.03 (0.8)	0.37 (9.4)
1/4	1/8	_D-RP-F4-FT2	0.89 (22.6)	0.53 (13.5)	0.08 (2.0)	0.37 (9.4)
3/8	1/8	_D-RP-F6-FT2	0.91 (23.1)	0.53 (13.5)	0.08 (2.0)	0.50 (12.7)
3/8	1/4	_D-RP-F6-FT4	0.98 (24.9)	0.62 (15.7)	0.17 (4.3)	0.50 (12.7)
1/2	1/4	_D-RP-F8-FT4	1.15 (29.2)	0.62 (15.7)	0.17 (4.3)	0.62 (15.7)
1/2	3/8	_D-RP-F8-FT6	1.20 (30.5)	0.69 (17.5)	0.27 (6.9)	0.62 (15.7)
3/4	1/2	_D-RP-F12-FT8	1.49 (37.8)	0.91 (23.1)	0.37 (9.4)	0.87 (22.1)
1	1/2	_D-RP-F16-FT8	1.69 (42.9)	0.96 (24.4)	0.37 (9.4)	1.12 (28.5)
1	3/4	_D-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	_D-RPCM6-MT3	22.6 (0.89)	13.5 (0.53)	1.9 (0.07)	9.0 (0.35)
8	6	_D-RP-M8-MT6	24.7 (0.97)	15.7 (0.62)	4.1 (0.16)	11.0 (0.43)
10	6	_D-RP-M10-MT6	25.0 (0.98)	15.7 (0.62)	4.1 (0.16)	13.1 (0.52)
10	8	_D-RP-M10-MT8	26.3 (1.04)	17.0 (0.67)	5.6 (0.22)	13.1 (0.52)
12	6	_D-RP-M12-MT6	29.6 (1.17)	15.7 (0.62)	4.1 (0.16)	15.0 (0.59)
12	8	_D-RP-M12-MT8	29.8 (1.17)	16.8 (0.66)	5.6 (0.22)	15.0 (0.59)
12	10	_D-RP-M12-MT10	30.4 (1.20)	17.5 (0.69)	7.1 (0.28)	15.0 (0.59)
16	12	_D-RP-M16-MT12	36.2 (1.43)	23.1 (0.91)	8.8 (0.35)	19.0 (0.75)
28	25	_D-RP-M28-MT25	56.5 (2.22)	33.0 (1.30)	19.8 (0.78)	34.3 (1.35)
32	25	_D-RP-M32-MT25	60.3 (2.37)	33.0 (1.30)	19.8 (0.78)	39.5 (1.56)
38	25	_D-RP-M38-MT25	65.8 (2.59)	33.0 (1.30)	19.8 (0.78)	47.1 (1.85)

MALE ADAPTERS



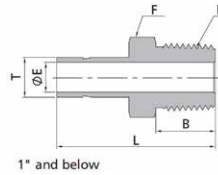
Fractional Tube to NPT Thread

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

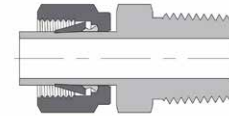
Fractional Tube to RT Thread

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

MALE ADAPTERS



1" and below



1 1/4" and above

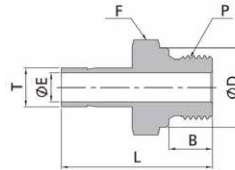
Metric Tube to NPT Thread

T - Tube O.D. (mm)	P-NPT Size	Basic Ordering Number	Dimension, mm (in.)			
			L	B	E	F
3	1/8	_D-MAD-MT3-N2	29.4 (1.16)	9.7 (0.38)	1.8 (0.07)	12.0 (0.47)
4	1/8	_D-MAD-MT4-N2	29.4 (1.16)	9.7 (0.38)	2.0 (0.08)	12.0 (0.47)
6	1/8	_D-MAD-MT6-N2	32.8 (1.29)	9.7 (0.38)	4.1 (0.16)	12.0 (0.47)
6	1/4	_D-MAD-MT6-N4	38.1 (1.50)	14.2 (0.56)	4.1 (0.16)	14.0 (0.55)
6	3/8	_D-MAD-MT6-N6	39.2 (1.54)	14.2 (0.56)	4.1 (0.16)	18.0 (0.71)
6	1/2	_D-MAD-MT6-N8	42.1 (1.66)	19.1 (0.75)	4.1 (0.16)	22.0 (0.87)
8	1/4	_D-MAD-MT8-N4	39.1 (1.54)	14.2 (0.56)	5.6 (0.22)	14.0 (0.55)
8	3/8	_D-MAD-MT8-N6	39.9 (1.57)	14.2 (0.56)	5.6 (0.22)	19.0 (0.75)
10	1/4	_D-MAD-MT10-N4	39.9 (1.57)	14.2 (0.56)	7.1 (0.28)	14.0 (0.55)
10	3/8	_D-MAD-MT10-N6	40.6 (1.60)	14.2 (0.56)	7.1 (0.28)	18.0 (0.71)
10	1/2	_D-MAD-MT10-N8	46.2 (1.82)	19.1 (0.75)	7.1 (0.28)	22.0 (0.87)
12	1/4	_D-MAD-MT12-N4	46.5 (1.83)	14.2 (0.56)	7.1 (0.28)	14.0 (0.55)
12	3/8	_D-MAD-MT12-N6	46.2 (1.82)	14.2 (0.56)	8.8 (0.35)	18.0 (0.71)
12	1/2	_D-MAD-MT12-N8	52.1 (2.05)	19.1 (0.75)	8.8 (0.35)	22.0 (0.87)
16	1/2	_D-MAD-MT16-N8	50.8 (2.00)	19.1 (0.75)	12.7 (0.50)	22.0 (0.87)
16	3/4	_D-MAD-MT16-N12	51.6 (2.03)	19.1 (0.75)	12.7 (0.50)	27.0 (1.06)
18	1/2	_D-MAD-MT18-N8	50.8 (2.00)	19.1 (0.75)	12.7 (0.50)	27.0 (1.06)
18	3/4	_D-MAD-MT18-N12	51.6 (2.03)	19.1 (0.75)	14.0 (0.55)	27.0 (1.06)
20	1/2	_D-MAD-MT20-N8	51.8 (2.04)	19.1 (0.75)	11.9 (0.47)	22.0 (0.87)
20	3/4	_D-MAD-MT20-N12	52.4 (2.06)	19.1 (0.75)	15.1 (0.59)	27.0 (1.06)
25	1	_D-MAD-MT25-N16	65.9 (2.59)	23.9 (0.94)	19.8 (0.78)	35.0 (1.38)
28	1	_D-MAD-MT28-N16	74.4 (2.93)	23.9 (0.94)	22.2 (0.87)	35.0 (1.38)
28	1 1/4	_D-MAD-MT28-N20	76.2 (3.00)	23.9 (0.94)	22.5 (0.89)	46.0 (1.81)
30	1	_D-MAD-MT30-N16	79.2 (3.12)	23.9 (0.94)	22.2 (0.87)	41.0 (1.61)
30	1 1/4	_D-MAD-MT30-N20	80.0 (3.15)	23.9 (0.94)	24.3 (0.96)	46.0 (1.81)
32	1 1/4	_D-MAD-MT32-N20	81.0 (3.19)	23.9 (0.94)	26.5 (1.04)	46.0 (1.81)
38	1 1/2	_D-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	_D-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	_D-MAD-MT3-RT2	29.4 (1.16)	9.7 (0.38)	1.8 (0.07)	12.0 (0.47)
4	1/8	_D-MAD-MT4-RT2	29.4 (1.16)	9.7 (0.38)	2.0 (0.08)	12.0 (0.47)
6	1/8	_D-MAD-MT6-RT2	32.8 (1.29)	9.7 (0.38)	4.1 (0.16)	12.0 (0.47)
6	1/4	_D-MAD-MT6-RT4	38.1 (1.50)	14.2 (0.56)	4.1 (0.16)	14.0 (0.55)
8	1/4	_D-MAD-MT8-RT4	39.1 (1.54)	14.2 (0.56)	5.6 (0.22)	14.0 (0.55)
8	3/8	_D-MAD-MT8-RT6	39.9 (1.57)	14.2 (0.56)	5.6 (0.22)	18.0 (0.71)
10	1/4	_D-MAD-MT10-RT4	39.9 (1.57)	14.2 (0.56)	7.1 (0.28)	14.0 (0.55)
10	3/8	_D-MAD-MT10-RT6	40.6 (1.60)	14.2 (0.56)	7.1 (0.28)	18.0 (0.71)
10	1/2	_D-MAD-MT10-RT8	44.5 (1.75)	19.1 (0.75)	7.5 (0.30)	22.0 (0.87)
12	1/4	_D-MAD-MT12-RT4	46.5 (1.83)	14.2 (0.56)	7.1 (0.28)	16.0 (0.63)
12	3/8	_D-MAD-MT12-RT6	46.2 (1.82)	14.2 (0.56)	8.8 (0.35)	18.0 (0.71)
12	1/2	_D-MAD-MT12-RT8	51.8 (2.04)	19.1 (0.75)	8.8 (0.35)	22.0 (0.87)
16	1/2	_D-MAD-MT16-RT8	50.8 (2.00)	19.1 (0.75)	12.7 (0.50)	22.0 (0.87)
18	3/4	_D-MAD-MT18-RT12	51.6 (2.03)	19.1 (0.75)	14.0 (0.55)	27.0 (1.06)
20	3/4	_D-MAD-MT20-RT12	52.4 (2.06)	19.1 (0.75)	15.1 (0.59)	27.0 (1.06)
25	1	_D-MAD-MT25-RT16	65.9 (2.59)	23.9 (0.94)	19.8 (0.78)	35.0 (1.38)
28	1	_D-MAD-MT28-RT16	74.7 (2.94)	23.9 (0.94)	22.2 (0.87)	35.0 (1.38)
28	1 1/4	_D-MAD-MT28-RT20	76.2 (3.00)	23.9 (0.94)	22.5 (0.89)	46.0 (1.81)
30	1 1/4	_D-MAD-MT30-RT20	80.0 (3.15)	23.9 (0.94)	24.3 (0.96)	46.0 (1.81)
32	1 1/4	_D-MAD-MT32-RT20	81.0 (3.19)	23.9 (0.94)	26.5 (1.04)	46.0 (1.81)

MALE ADAPTERS



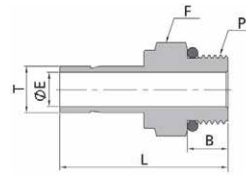
Fractional Tube to ISO Parallel Thread

T - Tube O.D. (in.)	P-RP Size	Basic Ordering Number	Dimension, in. (mm)				
			L	B	E	F	D
1/8	1/8	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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

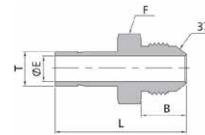
T - Tube O.D. (mm)	P-RS Size	Basic Ordering Number	Dimension, mm (in.)				
			L	B	E	F	D
3	1/8	_D-MAD-MT3-RS2	31.0 (1.22)	7.1 (0.28)	1.8 (0.07)	14.0 (0.55)	13.7 (0.54)
4	1/8	_D-MAD-MT4-RS2	31.8 (1.25)	7.1 (0.28)	2.0 (0.08)	14.0 (0.55)	13.7 (0.54)
6	1/8	_D-MAD-MT6-RS2	34.3 (1.35)	7.1 (0.28)	4.0 (0.16)	14.0 (0.55)	13.7 (0.54)
6	1/4	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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



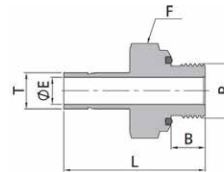
Fractional Tube to SAE/MS Thread

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



Fractional Tube to Flared

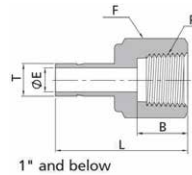
T - Tube O.D. (in.)	Tube Flared Size	Basic Ordering Number	Dimension, in. (mm)			
			L	B	E	F
1/4	5/4	_D-MAD-FT4-AN4	1.46 (37.1)	0.55 (14.0)	0.17 (4.3)	0.50 (12.7)
3/8	1/4	_D-MAD-FT6-AN4	1.53 (38.9)	0.55 (14.0)	0.17 (4.3)	0.50 (12.7)
3/8	3/8	_D-MAD-FT6-AN6	1.56 (39.6)	0.56 (14.2)	0.27 (6.9)	0.63 (15.9)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



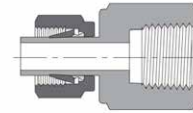
Fractional Tube to SAE/MS Thread

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

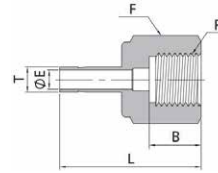
Fractional Tube to NPT Thread

T - Tube O.D. (in.)	P-NPT Size	Basic Ordering Number	Dimension, in. (mm)			
			L	B	E	F
1/16	1/8	_D-FAD-FT1-N2	1.07 (27.2)	0.41 (10.4)	0.03 (0.8)	0.56 (14.3)
1/8	1/8	_D-FAD-FT2-N2	1.24 (31.5)	0.41 (10.4)	0.08 (2.0)	0.56 (14.3)
1/8	1/4	_D-FAD-FT2-N4	1.39 (35.3)	0.59 (15.0)	0.08 (2.0)	0.75 (19.1)
3/16	1/8	_D-FAD-FT3-N2	1.25 (31.8)	0.41 (10.4)	0.11 (2.9)	0.56 (14.3)
3/16	1/4	_D-FAD-FT3-N4	1.41 (35.8)	0.59 (15.0)	0.12 (3.0)	0.75 (19.1)
1/4	1/8	_D-FAD-FT4-N2	1.30 (33.0)	0.41 (10.4)	0.17 (4.3)	0.56 (14.3)
1/4	1/4	_D-FAD-FT4-N4	1.46 (37.1)	0.59 (15.0)	0.17 (4.3)	0.75 (19.1)
1/4	3/8	_D-FAD-FT4-N6	1.55 (39.4)	0.59 (15.0)	0.17 (4.3)	0.87 (22.2)
1/4	1/2	_D-FAD-FT4-N8	1.79 (45.5)	0.78 (19.8)	0.17 (4.3)	1.06 (27.0)
5/16	1/8	_D-FAD-FT5-N2	1.34 (34.0)	0.41 (10.4)	0.22 (5.6)	0.56 (14.3)
5/16	1/4	_D-FAD-FT5-N4	1.48 (37.6)	0.59 (15.0)	0.22 (5.6)	0.75 (19.1)
5/16	3/8	_D-FAD-FT5-N6	1.59 (40.4)	0.59 (15.0)	0.22 (5.6)	0.87 (22.2)
3/8	1/8	_D-FAD-FT6-N2	1.35 (34.3)	0.41 (10.4)	0.27 (6.9)	0.56 (14.3)
3/8	1/4	_D-FAD-FT6-N4	1.50 (38.1)	0.59 (15.0)	0.27 (6.9)	0.75 (19.1)
3/8	3/8	_D-FAD-FT6-N6	1.59 (40.4)	0.59 (15.0)	0.27 (6.9)	0.87 (22.2)
3/8	1/2	_D-FAD-FT6-N8	1.84 (46.7)	0.78 (19.8)	0.27 (6.9)	1.06 (27.0)
1/2	1/4	_D-FAD-FT8-N4	1.71 (43.4)	0.59 (15.0)	0.37 (9.4)	0.75 (19.1)
1/2	3/8	_D-FAD-FT8-N6	1.79 (45.5)	0.59 (15.0)	0.37 (9.4)	0.87 (22.2)
1/2	1/2	_D-FAD-FT8-N8	2.04 (51.8)	0.78 (19.8)	0.37 (9.4)	1.06 (27.0)
5/8	3/8	_D-FAD-FT10-N6	1.86 (47.2)	0.59 (15.0)	0.47 (11.9)	0.87 (22.2)
5/8	1/2	_D-FAD-FT10-N8	2.09 (53.1)	0.78 (19.8)	0.47 (11.9)	1.06 (27.0)
3/4	1/2	_D-FAD-FT12-N8	2.08 (52.8)	0.78 (19.8)	0.58 (14.7)	1.06 (27.0)
3/4	3/4	_D-FAD-FT12-N12	2.16 (54.9)	0.81 (20.6)	0.58 (14.7)	1.31 (33.3)
3/4	1	_D-FAD-FT12-N16	2.30 (58.4)	1.00 (25.4)	0.58 (14.7)	1.63 (41.3)
7/8	3/4	_D-FAD-FT14-N12	2.22 (56.4)	0.81 (20.6)	0.58 (14.7)	1.31 (33.3)
1	3/4	_D-FAD-FT16-N12	2.39 (60.7)	0.81 (20.6)	0.80 (20.3)	1.31 (33.3)
1	1	_D-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	_D-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	_D-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	_D-FAD-FT4-RT2	1.30 (33.0)	0.41 (10.4)	0.17 (4.3)	0.56 (14.3)
1/4	1/4	_D-FAD-FT4-RT4	1.45 (36.8)	0.59 (15.0)	0.17 (4.3)	0.75 (19.1)
3/8	1/4	_D-FAD-FT6-RT4	1.50 (38.1)	0.59 (15.0)	0.27 (6.9)	0.75 (19.1)
3/8	3/8	_D-FAD-FT6-RT6	1.59 (40.4)	0.59 (15.0)	0.27 (6.9)	0.87 (22.2)
1/2	1/4	_D-FAD-FT8-RT4	1.71 (43.4)	0.59 (15.0)	0.37 (9.4)	0.75 (19.1)
1/2	3/8	_D-FAD-FT8-RT6	1.80 (45.7)	0.59 (15.0)	0.37 (9.4)	0.87 (22.2)
1/2	1/2	_D-FAD-FT8-RT8	2.05 (52.1)	0.78 (19.8)	0.37 (9.4)	1.06 (27.0)

FEMALE ADAPTERS



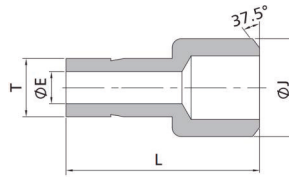
Metric Tube to ISO Parallel Thread

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

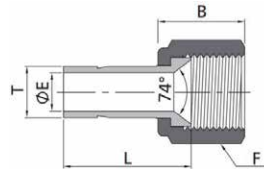
T - Tube O.D. (mm)	P-RT Size	Basic Ordering Number	Dimension, mm (in.)			
			L	B	E	F
3	1/8	_D-FAD-MT3-TR2	27.8 (1.09)	10.4 (0.41)	1.8 (0.07)	14.0 (0.55)
4	1/8	_D-FAD-MT4-TR2	28.6 (1.13)	10.4 (0.41)	2.0 (0.08)	14.0 (0.55)
6	1/8	_D-FAD-MT6-TR2	33.0 (1.30)	10.4 (0.41)	4.1 (0.16)	14.0 (0.55)
8	1/4	_D-FAD-MT8-TR4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

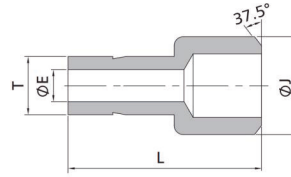
T - Tube O.D. (mm)	P-BSP Size	Basic Ordering Number	Dimension, mm (in.)			
			L	B	E	F
3	1/8	_D-FAD-MT3-RG2	28.6 (1.13)	6.5 (0.26)	1.6 (0.06)	14.0 (0.55)
3	1/4	_D-FAD-MT4-RG2	33.5 (1.32)	10.2 (0.40)	1.9 (0.07)	19.0 (0.75)
4	1/8	_D-FAD-MT6-RG2	29.4 (1.16)	6.5 (0.26)	2.0 (0.08)	14.0 (0.55)
6	1/8	_D-FAD-MT6-RG4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



Fractional Tube to Flraed

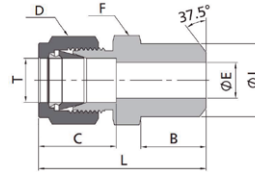
T - Tube O.D. (in.)	Tube Flraed Size	Basic Ordering Number	Dimension, in. (mm)			
			L	B	E	F
1/8	1/8	_D-FAD-FT3-AN2	0.88 (22.4)	0.55 (14.0)	0.09 (2.4)	0.37 (9.5)
1/8	1/4	_D-FAD-FT4-AN2	0.88 (22.4)	0.62 (15.8)	0.09 (2.4)	0.56 (14.3)
1/4	1/4	_D-FAD-FT6-AN2	0.96 (24.4)	0.62 (15.8)	0.18 (4.6)	0.56 (14.3)
3/8	3/8	_D-FAD-FT6-AN4	1.11 (28.1)	0.73 (18.5)	0.28 (7.1)	0.69 (17.5)
1/2	1/2	_D-FAD-FT8-AN2	1.42 (36.1)	0.85 (21.6)	0.39 (9.9)	0.87 (22.2)
3/4	3/4	_D-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	_D-WA-FT4-PW4	1.14 (29.0)	0.54 (13.7)	0.17 (4.3)
3/8	1/2	_D-WA-FT6-PW8	1.46 (37.1)	0.84 (21.3)	0.27 (6.9)
1/2	1/2	_D-WA-FT8-PW8	1.66 (42.2)	0.84 (21.3)	0.37 (9.4)
1/2	3/4	_D-WA-FT8-PW12	1.68 (42.7)	1.05 (26.7)	0.37 (9.4)
3/4	3/4	_D-WA-FT12-PW12	1.87 (47.5)	1.05 (26.7)	0.58 (14.7)

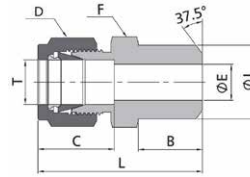


WELD CONNECTORS

Fractional Tube to Pipe Butt Weld

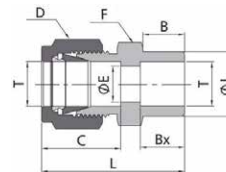
T - Tube O.D. (in.)	Pipe Weld Size	Basic Ordering Number	Dimension, in. (mm)						
			L	C	D	F	E	B	J
1/8	1/8	_D-WC-F2-PB2	1.20 (30.5)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)	0.09 (2.3)	0.38 (9.7)	0.41 (10.3)
3/16	1/8	_D-WC-F3-PB2	1.23 (31.2)	0.54 (13.7)	0.50 (12.7)	0.44 (11.1)	0.12 (3.0)	0.38 (9.7)	0.41 (10.3)
1/4	1/8	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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

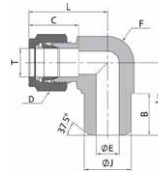
T - Tube O.D. (mm)	Pipe Weld Size	Basic Ordering Number	Dimension, mm (in.)						
			L	C	D	F	E	B	J
3	1/8	_D-WCM3-PB2	30.5 (1.20)	12.9 (0.51)	12.0 (0.47)	12.0 (0.47)	2.4 (0.09)	9.7 (0.38)	10.3 (0.41)
4	1/8	_D-WC-M4-PB2	31.5 (1.24)	13.7 (0.54)	12.0 (0.47)	12.0 (0.47)	2.4 (0.09)	9.7 (0.38)	10.3 (0.41)
6	1/8	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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

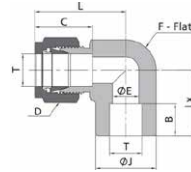
T - Tube O.D. (in.)	Basic Ordering Number	Dimension, mm (in.)							
		L	C	D	F	B	E	Bx	J
1/8	_D-WC-F2-SW2	1.14 (29.0)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)	0.34 (8.6)	0.09 (2.3)	0.10 (2.5)	0.31 (7.9)
3/16	_D-WC-F3-SW3	1.17 (29.7)	0.54 (13.7)	0.50 (12.7)	0.44 (11.1)	0.37 (9.5)	0.13 (3.3)	0.19 (4.8)	0.42 (10.7)
1/4	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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

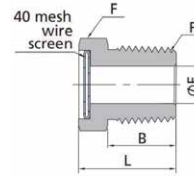
T - Tube O.D. (in.)	Pipe Weld Size	Basic Ordering Number	Dimension, in. (mm)							
			L	C	D	F	B	E	Lx	Lx
1/8	1/8	_D-LW-F2-PB2	0.92 (23.4)	0.50 (12.7)	0.44 (11.1)	0.44 (11.1)	0.38 (9.7)	0.09 (2.3)	0.72 (18.3)	0.41 (10.3)
3/16	1/8	_D-LW-F3-PB2	1.01 (25.7)	0.54 (13.7)	0.50 (12.7)	0.50 (12.7)	0.38 (9.7)	0.13 (3.3)	0.74 (18.8)	0.41 (10.3)
1/4	1/8	_D-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	_D-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	_D-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	_D-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	_D-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	_D-LW-F10-PB8	1.57 (36.3)	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	_D-LW-F12-PB12	1.94 (39.9)	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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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)

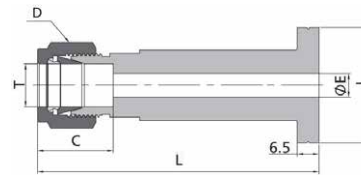
VENTS PROTECTORS



Fractional Tube to Tube Socket Weld

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

LAPPED FLANGE CONNECTORS



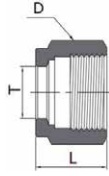
Fractional Tube

T - Tube O.D. (in.)	Flange Seal	Basic Ordering Number	Dimension, in. (mm)				
			L	D	C	E	J
1/4	A	_D-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	_D-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	_D-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	_D-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	_D-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	_D-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	_D-LFC-M10A	82.6 (3.25)	19.0 (0.75)	17.2 (0.68)	7.9 (0.31)	34.5 (1.36)
10	B	_D-LFC-M10B	82.6 (3.25)	19.0 (0.75)	17.2 (0.68)	7.9 (0.31)	34.5 (1.36)

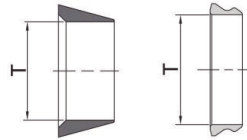
NUTS



Fractional Tube			
T - Tube O.D. (in.)	Basic Ordering Number	Dimension, in. (mm)	
		D	L
1/16	_D-N-F1	0.31 (7.9)	0.31 (7.9)
1/8	_D-N-F2	0.44 (11.1)	0.47 (11.9)
3/16	_D-N-F3	0.50 (12.7)	0.47 (11.9)
1/4	_D-N-F4	0.56 (14.3)	0.50 (12.7)
5/16	_D-N-F5	0.63 (15.9)	0.53 (13.5)
3/8	_D-N-F6	0.69 (17.5)	0.56 (14.2)
1/2	_D-N-F8	0.87 (22.2)	0.69 (17.5)
5/8	_D-N-F10	1.00 (25.4)	0.69 (17.5)
3/4	_D-N-F12	1.13 (28.6)	0.69 (17.5)
7/8	_D-N-F14	1.25 (31.8)	0.69 (17.5)
1	_D-N-F16	1.50 (38.1)	0.81 (20.6)
1 1/8	_D-N-F18	1.81 (46.0)	1.21 (30.8)
1 1/4	_D-N-F20	1.87 (47.6)	1.25 (31.8)
1 1/2	_D-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	_D-N-M2	12.0 (0.47)	11.9 (0.47)
3	_D-N-M3	12.0 (0.47)	11.9 (0.47)
4	_D-N-M4	12.0 (0.47)	11.9 (0.47)
6	_D-N-M6	14.0 (0.55)	12.7 (0.50)
8	_D-N-M8	16.0 (0.63)	13.5 (0.53)
10	_D-N-M10	19.0 (0.75)	15.1 (0.59)
12	_D-N-M12	22.0 (0.87)	17.4 (0.69)
14	_D-N-M14	25.0 (0.98)	17.4 (0.69)
15	_D-N-M15	25.0 (0.98)	17.4 (0.69)
16	_D-N-M16	25.0 (0.98)	17.4 (0.69)
18	_D-N-M18	30.0 (1.18)	17.4 (0.69)
20	_D-N-M20	32.0 (1.26)	17.4 (0.69)
22	_D-N-M22	32.0 (1.26)	17.4 (0.69)
25	_D-N-M25	38.0 (1.50)	20.6 (0.81)
28	_D-N-M28	46.0 (1.81)	30.6 (1.20)
30	_D-TN-MT30	50.0 (1.97)	32.7 (1.29)
32	_D-TN-MT32	50.0 (1.97)	34.4 (1.35)
38	_D-TN-MT38	60.0 (2.36)	40.6 (1.60)

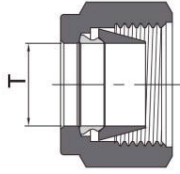
FRONT AND REAR FERRULES



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

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

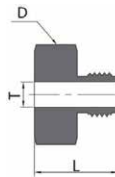
NUTS + FERRULES



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

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

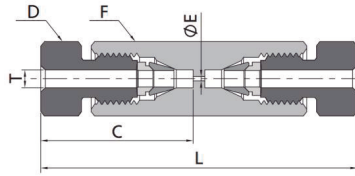
MALE NUTS



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

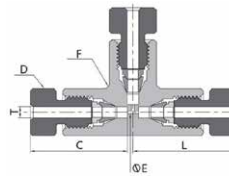
Metric Tube			
T - Tube O.D. (mm)	Basic Ordering Number	Dimension, mm (in.)	
		D	L
3	_D-TMN-M3	10.0 (0.39)	13.5 (0.53)
6	_D-TMN-M6	14.0 (0.55)	15.7 (0.62)
10	_D-TMN-M10	22.0 (0.87)	22.1 (0.87)
12	_D-TMN-M12	24.0 (0.94)	22.1 (0.87)

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	_D-CU-F1	1.26 (32.0)	0.61(15.5)	0.01(0.3)	0.25(6.4)	0.25(6.4)	6.6 × 10-5cm 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	_D-CT-F1	0.66 (16.8)	0.61 (15.5)	0.01 (0.3)	0.25 (6.4)	0.37 (9.5)	6.6 × 10-4cm ³



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