

Medium Pressure Fittings Nipples and Tubing

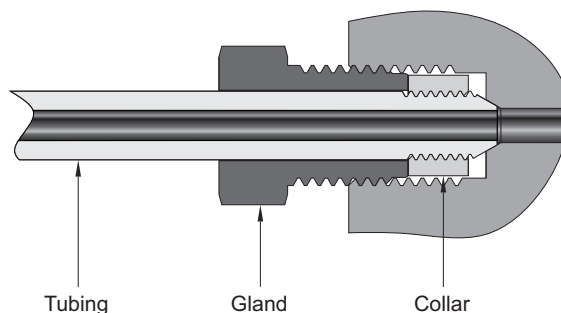
20 Series, 20,000 psi (1379 bar)



- ❖ Coned-and-Threaded Connection
- ❖ Available sizes are 1/4, 3/8, 9/16, 3/4, and 1 in.
- ❖ Working temperature from -423°F to 1200°F (-252°C to 649°C)
- ❖ Special 316 stainless steel and Alloy 826 material

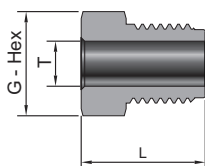
Typical 20 Series fittings Assemblies

- ❖ Coned-and-Threaded Connection
- ❖ Available sizes are 1/4, 3/8, 9/16, 3/4, and 1 in.
- ❖ Working temperature from -423°F to 1200°F (-252°C to 649°C)
- ❖ Special 316 stainless steel and Alloy 826 material
- ❖ Anti-vibration connection components available
- ❖ CIR-LOK 20 series medium pressure fittings are designed for use with 20 series medium pressure valves



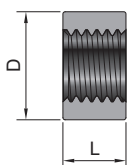
Dimensions

Glands



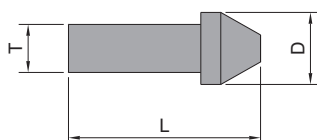
T-Tube O.D. in.	Basic Ordering Number	Dimensions, in. (mm)	
		G	L
1/4	20G-MPF4-	0.50 (12.7)	0.58 (14.7)
3/8	20G-MPF6-	0.63 (15.9)	0.73 (18.5)
9/16	20G-MPF9-	0.94 (23.8)	0.88 (22.4)
3/4	20G-MPF12-	1.19 (30.2)	1.00 (25.4)
1	20G-MPF16-	1.38 (34.9)	1.38 (35.1)

Collars



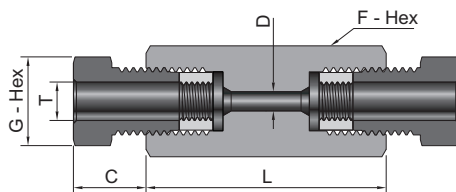
T-Tube O.D. in.	Basic Ordering Number	Dimensions, in. (mm)	
		D	L
1/4	20C-MPF4-	0.38 (9.7)	0.22 (5.6)
3/8	20C-MPF6-	0.47 (11.9)	0.25 (6.4)
9/16	20C-MPF9-	0.72 (18.3)	0.31 (7.9)
3/4	20C-MPF12-	0.94 (23.8)	0.37 (9.4)
1	20C-MPF16-	1.25 (31.8)	0.50 (12.7)

Plugs



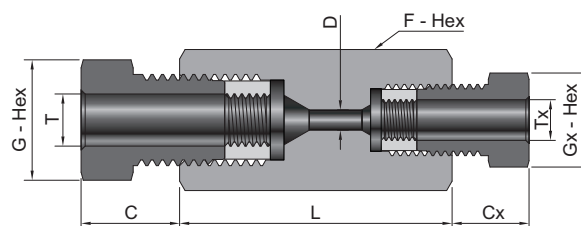
T-Tube O.D. in.	Basic Ordering Number	Dimensions, in. (mm)	
		D	L
1/4	20P-MPF4-	0.38 (9.7)	0.94 (23.8)
3/8	20P-MPF6-	0.47 (11.9)	1.18 (30.0)
9/16	20P-MPF9-	0.72 (18.3)	1.40 (35.6)
3/4	20P-MPF12-	0.94 (23.8)	1.69 (42.9)
1	20P-MPF16-	1.25 (31.8)	2.20 (55.9)

Union Couplings



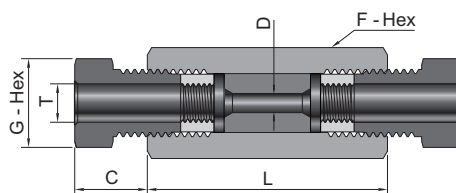
T-Tube O.D. in.	Basic Ordering Number	Dimensions, in. (mm)				
		L	C	D	G	F
1/4	20U-MPF4-	1.62 (41.1)	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	0.63 (15.9)
3/8	20U-MPF6-	1.75 (44.5)	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	0.75 (19.1)
9/16	20U-MPF9-	2.12 (53.9)	0.53 (13.5)	0.31 (7.9)	0.94 (23.8)	1.00 (25.4)
3/4	20U-MPF12-	2.50 (63.5)	0.62 (15.7)	0.44 (11.1)	1.19 (30.2)	1.38 (34.9)
1	20U-MPF16-	3.50 (88.9)	0.72 (18.3)	0.56 (14.3)	1.38 (34.9)	1.75 (44.5)

Reducing Union Couplings



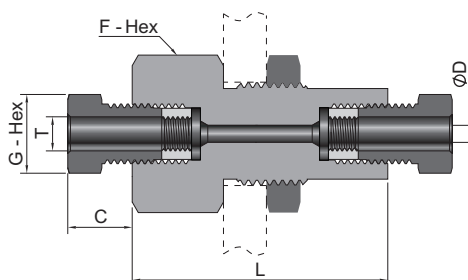
T-Tube O.D. in.	Tx-Tube O.D. in.	Basic Ordering Number	Dimensions, in. (mm)						
			L	C	Cx	D	G	Gx	F
3/8	1/4	MPF6-20RU-MPF4-	1.75 (44.5)	0.44 (11.2)	0.38 (9.7)	0.11 (2.8)	0.63 (15.9)	0.50 (12.7)	0.75 (19.1)
9/16	1/4	MPF9-20RU-MPF4-	2.00 (50.8)	0.53 (13.5)	0.38 (9.7)	0.11 (2.8)	0.94 (23.8)	0.50 (12.7)	1.00 (25.4)
9/16	3/8	MPF9-20RU-MPF6-	2.00 (50.8)	0.53 (13.5)	0.44 (11.2)	0.20 (5.1)	0.94 (23.8)	0.63 (15.9)	1.00 (25.4)
3/4	1/4	MPF12-20RU-MPF4-	2.25 (57.2)	0.62 (15.7)	0.38 (9.7)	0.11 (2.8)	1.19 (30.2)	0.50 (12.7)	1.38 (34.9)
3/4	3/8	MPF12-20RU-MPF6-	2.25 (57.2)	0.62 (15.7)	0.44 (11.2)	0.20 (5.1)	1.19 (30.2)	0.63 (15.9)	1.38 (34.9)
3/4	9/16	MPF12-20RU-MPF9-	2.50 (63.5)	0.62 (15.7)	0.53 (13.5)	0.31 (7.9)	1.19 (30.2)	0.94 (23.8)	1.38 (34.9)
1	1/4	MPF16-20RU-MPF4-	2.75 (69.9)	0.72 (18.3)	0.38 (9.7)	0.11 (2.8)	1.38 (34.9)	0.50 (12.7)	1.75 (44.5)
1	3/8	MPF16-20RU-MPF6-	2.88 (73.0)	0.72 (18.3)	0.44 (11.2)	0.20 (5.1)	1.38 (34.9)	0.63 (15.9)	1.75 (44.5)
1	9/16	MPF16-20RU-MPF9-	3.00 (76.2)	0.72 (18.3)	0.53 (13.5)	0.31 (7.9)	1.38 (34.9)	0.94 (23.8)	1.75 (44.5)
1	3/4	MPF16-20RU-MPF12-	3.00 (76.2)	0.72 (18.3)	0.62 (15.7)	0.44 (11.1)	1.38 (34.9)	1.19 (30.2)	1.75 (44.5)

Union Couplings (Slip Type)



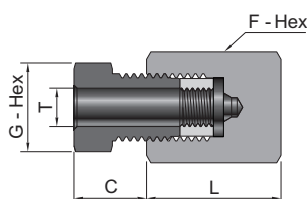
T-Tube O.D. in.	Basic Ordering Number	Dimensions, in. (mm)				
		L	C	D	G	F
1/4	20SU-MPF4-	1.62 (41.1)	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	0.63 (15.9)
3/8	20SU-MPF6-	1.75 (44.5)	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	0.75 (19.1)
9/16	20SU-MPF9-	2.12 (53.9)	0.53 (13.5)	0.31 (7.9)	0.94 (23.8)	1.00 (25.4)
3/4	20SU-MPF12-	2.50 (63.5)	0.62 (15.7)	0.44 (11.1)	1.19 (30.2)	1.38 (34.9)
1	20SU-MPF16-	3.50 (88.9)	0.72 (18.3)	0.56 (14.3)	1.38 (34.9)	1.75 (44.5)

Bulkhead Couplings



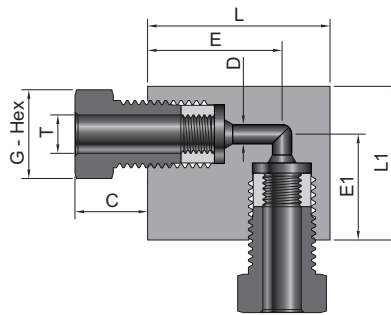
T-Tube O.D. in.	Basic Ordering Number	Dimensions, in. (mm)						
		L	C	D	G	F	Panel Hole Size	Max. Panel Thickness
1/4	20BU-MPF4-	1.88 (47.8)	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	1.00 (25.4)	0.81 (20.6)	0.38 (9.7)
3/8	20BU-MPF6-	2.00 (50.8)	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	1.06 (27.0)	0.94 (23.9)	0.38 (9.7)
9/16	20BU-MPF9-	2.38 (60.5)	0.53 (13.5)	0.31 (7.9)	0.94 (23.8)	1.38 (34.9)	1.13 (28.6)	0.38 (9.7)
3/4	20BU-MPF12-	2.62 (66.5)	0.62 (15.7)	0.44 (11.1)	1.19 (30.2)	1.88 (47.6)	1.69 (42.9)	0.38 (9.7)
1	20BU-MPF16-	3.50 (88.9)	0.72 (18.3)	0.56 (14.3)	1.38 (34.9)	2.13 (54.0)	1.94 (49.3)	0.38 (9.7)

Caps



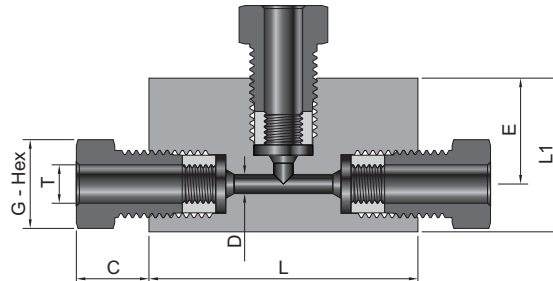
T-Tube O.D. in.	Basic Ordering Number	Dimensions, in. (mm)			
		L	C	G	F
1/4	20CA-MPF4-	0.81 (20.6)	0.38 (9.7)	0.50 (12.7)	0.63 (15.9)
3/8	20CA-MPF6-	1.13 (28.6)	0.44 (11.2)	0.63 (15.9)	0.75 (19.1)
9/16	20CA-MPF9-	1.38 (34.9)	0.53 (13.5)	0.94 (23.8)	1.00 (25.4)
3/4	20CA-MPF12-	1.75 (44.5)	0.62 (15.7)	1.19 (30.2)	1.38 (34.9)
1	20CA-MPF16-	2.25 (57.2)	0.72 (18.3)	1.38 (34.9)	1.75 (44.5)

Elbows



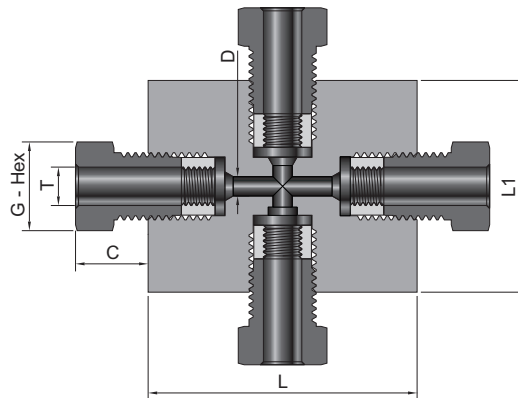
T-Tube O.D. in.	Basic Ordering Number	Dimensions, in. (mm)							
		C	D	G	L	E	L1	E1	Thickness
1/4	20UE-MPF4-	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	1.12 (28.4)	0.75 (19.1)	1.12 (28.4)	0.75 (19.1)	0.63 (15.9)
3/8	20UE-MPF6-	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	1.38 (34.9)	1.00 (25.4)	1.38 (34.9)	1.00 (25.4)	0.75 (19.1)
9/16	20UE-MPF9-	0.53 (13.5)	0.31 (7.9)	0.94 (23.8)	1.75 (44.5)	1.25 (31.8)	1.75 (44.5)	1.25 (31.8)	1.00 (25.4)
3/4	20UE-MPF12-	0.62 (15.7)	0.44 (11.1)	1.19 (30.2)	2.25 (57.2)	1.50 (38.1)	2.25 (57.2)	1.50 (38.1)	1.38 (34.9)
1	20UE-MPF16-	0.72 (18.3)	0.56 (14.3)	1.38 (34.9)	3.00 (76.2)	2.06 (52.3)	3.00 (76.2)	2.06 (52.3)	1.75 (44.5)

Tees



T-Tube O.D. in.	Basic Ordering Number	Dimensions, in. (mm)						
		C	D	G	L	L1	E	Thickness
1/4	20UT-MPF4-	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	1.50 (38.1)	1.12 (28.4)	0.75 (19.1)	0.63 (15.9)
3/8	20UT-MPF6-	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	2.00 (50.8)	1.38 (34.9)	1.00 (25.4)	0.75 (19.1)
9/16	20UT-MPF9-	0.53 (13.5)	0.31 (7.9)	0.94 (23.8)	2.50 (63.5)	1.75 (44.5)	1.25 (31.8)	1.00 (25.4)
3/4	20UT-MPF12-	0.62 (15.7)	0.44 (11.1)	1.19 (30.2)	3.00 (76.2)	2.25 (57.2)	1.50 (38.1)	1.38 (34.9)
1	20UT-MPF16-	0.72 (18.3)	0.56 (14.3)	1.38 (34.9)	4.12 (104.6)	3.00 (76.2)	2.06 (52.3)	1.75 (44.5)

Crosses



T-Tube O.D. in.	Basic Ordering Number	Dimensions, in. (mm)					
		C	D	G	L	L1	Thickness
1/4	20UC-MPF4-	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	1.50 (38.1)	1.50 (38.1)	0.63 (15.9)
3/8	20UC-MPF6-	0.44 (11.2)	0.20 (5.1)	0.63 (15.9)	2.00 (50.8)	2.00 (50.8)	0.75 (19.1)
9/16	20UC-MPF9-	0.53 (13.5)	0.31 (7.9)	0.94 (23.8)	2.50 (63.5)	2.50 (63.5)	1.00 (25.4)
3/4	20UC-MPF12-	0.62 (15.7)	0.44 (11.1)	1.19 (30.2)	3.00 (76.2)	3.00 (76.2)	1.38 (34.9)
1	20UC-MPF16-	0.72 (18.3)	0.56 (14.3)	1.38 (34.9)	4.12 (104.6)	4.12 (104.6)	1.75 (44.5)

Ordering Information

❖ To order CIR-LOK 20 series medium pressure fittings, add the material designator (316 or A825) to the ordering number

Tubing

- ❖ CIR-LOK 20 series medium pressure tubing is manufactured specifically for high pressure applications
- ❖ 316 stainless steel and alloy 825 materials



T-Tube O.D. in.	Tx-Tube I.D. in.	Material	Basic Ordering Number	Tolerance O.D. in. (mm)
1/4	0.109	316	FT-4-0.019-6M-	0.248/0.243 (6.30/6.17)
3/8	0.203	316	FT-6-0.203-6M-	0.370/0.365 (9.40/9.27)
9/16	0.312	316	FT-9-0.312-6M-	0.557/0.552 (14.15/14.02)
3/4	0.438	316	FT-12-0.438-6M-	0.745/0.740 (18.92/18.80)
1	0.562	316	FT-16-0.562-6M-	0.995/0.990 (25.27/25.14)

Working Pressure

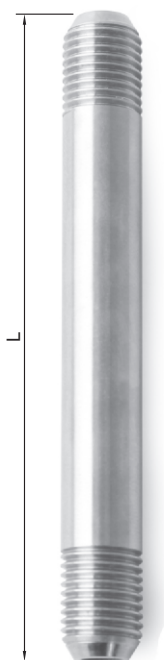
Tube O.D. in.	Working Pressure, psig (bar)				
	-423 to 100°F (-252 to 37.8°C)	200°F (93°C)	400°F (204°C)	600°F (316°C)	800°F (427°C)
1/4	20,000 (1379)	20,000 (1379)	19,250 (1327)	18,050 (1244)	16,800 (1158)
3/8	20,000 (1379)	20,000 (1379)	19,250 (1327)	18,050 (1244)	16,800 (1158)
9/16	20,000 (1379)	20,000 (1379)	19,250 (1327)	18,050 (1244)	16,800 (1158)
3/4	20,000 (1379)	20,000 (1379)	19,250 (1327)	18,050 (1244)	16,800 (1158)
1	20,000 (1379)	20,000 (1379)	19,250 (1327)	18,050 (1244)	16,800 (1158)

Ordering Information

- ❖ To order CIR-LOK 20 series medium pressure tubing, add the material designator (316 or A825) to the basic ordering number

Coned and Threaded Nipples

❖ CIR-LOK supplies precut, coned-and-threaded nipples in various sizes and lengths for 20 series medium pressure valves and fittings



T-Tube O.D. in.	Tx-Tube I.D. in.	Basic Ordering Number	L in. (mm)
1/4	0.109	NIP-MPF4-2.75-	2.75 (69.9)
1/4	0.109	NIP-MPF4-3-	3 (76.2)
1/4	0.109	NIP-MPF4-4-	4 (101.6)
1/4	0.109	NIP-MPF4-6-	6 (152.4)
1/4	0.109	NIP-MPF4-8-	8 (203.2)
1/4	0.109	NIP-MPF4-10-	10 (254.0)
1/4	0.109	NIP-MPF4-12-	12 (304.8)
3/8	0.203	NIP-MPF6-3-	3 (76.2)
3/8	0.203	NIP-MPF6-4-	4 (101.6)
3/8	0.203	NIP-MPF6-6-	6 (152.4)
3/8	0.203	NIP-MPF6-8-	8 (203.2)
3/8	0.203	NIP-MPF6-10-	10 (254.0)
3/8	0.203	NIP-MPF6-12-	12 (304.8)
9/16	0.312	NIP-MPF9-4-	4 (101.6)
9/16	0.312	NIP-MPF9-6-	6 (152.4)
9/16	0.312	NIP-MPF9-8-	8 (203.2)
9/16	0.312	NIP-MPF9-10-	10 (254.0)
9/16	0.312	NIP-MPF9-12-	12 (304.8)
3/4	0.438	NIP-MPF12-4-	4 (101.6)
3/4	0.438	NIP-MPF12-6-	6 (152.4)
3/4	0.438	NIP-MPF12-8-	8 (203.2)
3/4	0.438	NIP-MPF12-10-	10 (254.0)
3/4	0.438	NIP-MPF12-12-	12 (304.8)
1	0.562	NIP-MPF16-6-	6 (152.4)
1	0.562	NIP-MPF16-8-	8 (203.2)
1	0.562	NIP-MPF16-10-	10 (254.0)
1	0.562	NIP-MPF16-12-	12 (304.8)

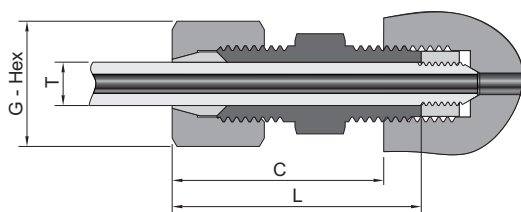
Ordering Information

❖ To order CIR-LOK 20 series medium pressure nipples, add the material designator (316 or A825) to the basic ordering number

Anti-Vibration Collet Gland Assemblies

- ❖ Anti-vibration collet gland assembly sizes from 1/4 to 1 in. (6.35 to 25.4 mm)
- ❖ Completely interchangeable with standard CIR-LOK 20 series medium pressure connections
- ❖ Moving the stress concentration back to the unthreaded part of the tubing and providing a wedge-typegripping action
- ❖ Anti-vibration collet gland assembly strengthens the entire structure

Typical 20 Series Anti-Vibration Collet Gland Assemblies



Dimensions

T-Tube O.D. in.	Basic Ordering Number	Dimensions, in. (mm)		
		L	C	G
1/4	AVA-MPF4-	1.19 (30.2)	0.94 (23.8)	0.63 (15.9)
3/8	AVA-MPF6-	1.50 (38.1)	1.19 (30.2)	0.81 (20.6)
9/16	AVA-MPF9-	1.78 (45.2)	1.41 (35.8)	0.94 (23.8)
3/4	AVA-MPF12-	2.00 (50.8)	1.59 (40.4)	1.25 (31.8)
1	AVA-MPF16-	2.38 (60.5)	1.69 (42.9)	1.50 (38.1)

Ordering Information

- ❖ To order CIR-LOK 20 series anti-vibration collet gland assembly, add the material designator (316 or A825) to the basic ordering number