

20M Series Medium Pressure Fittings

20,000 psig (1379 bar)



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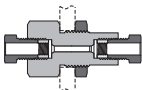
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Unions (Slip Type) - MSU



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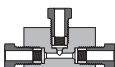
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Union Elbows - MLU



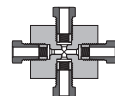
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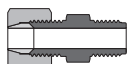
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Fittings

Tubing

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Valves

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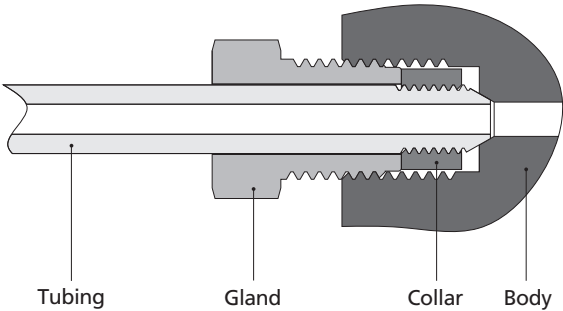
Subsea Valves

Part Number
Crossover Charts

Features

- Working pressure: 20,000 psig (1379 bar)
- Working temperature range: -423°F to 1200°F (-252°C to 649°C)
- Use with T20M series tubing as standard, tubing sizes available in 1/4", 3/8", 9/16", 3/4" and 1"
- High tensile 316 stainless steel material
- Every fitting marked with size, material and trace ID

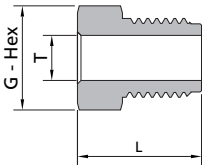
Construction



Ordering Information and Dimensions

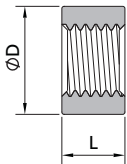
Dimensions are for reference only and are subject to change.

Glands

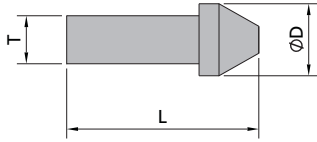


Tube			
T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)	
		G	L
1/4	SS-MG-MF4	0.50 (12.7)	0.58 (14.7)
3/8	SS-MG-MF6	0.63 (15.9)	0.73 (18.5)
9/16	SS-MG-MF9	0.94 (23.8)	0.88 (22.4)
3/4	SS-MG-MF12	1.19 (30.2)	1.00 (25.4)
1	SS-MG-MF16	1.38 (34.9)	1.38 (35.1)

Collars



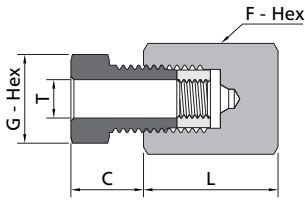
Tube			
T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)	
		D	L
1/4	SS-MCO-MF4	0.38 (9.7)	0.22 (5.6)
3/8	SS-MCO-MF6	0.47 (11.9)	0.25 (6.4)
9/16	SS-MCO-MF9	0.72 (18.3)	0.31 (7.9)
3/4	SS-MCO-MF12	0.94 (23.8)	0.37 (9.4)
1	SS-MCO-MF16	1.25 (31.8)	0.50 (12.7)

Plugs^①

① When using plug, collar is not required.

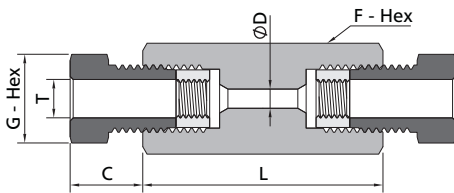
Tube			
T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)	
		D	L
1/4	SS-MTP-MF4	0.38 (9.7)	0.94 (23.8)
3/8	SS-MTP-MF6	0.47 (11.9)	1.18 (30.0)
9/16	SS-MTP-MF9	0.72 (18.3)	1.40 (35.6)
3/4	SS-MTP-MF12	0.94 (23.8)	1.69 (42.9)
1	SS-MTP-MF16	1.25 (31.8)	2.20 (55.9)

Caps



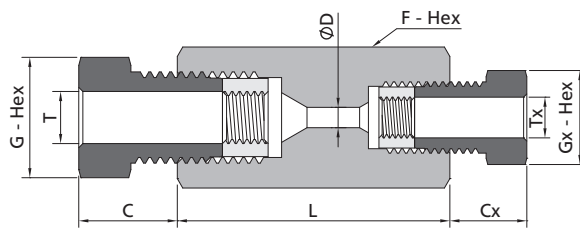
Tube					
T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)			
		L	C	G	F
1/4	SS-MTC-MF4	0.81 (20.6)	0.38 (9.7)	0.50 (12.7)	0.63 (15.9)
3/8	SS-MTC-MF6	1.13 (28.6)	0.44 (11.2)	0.63 (15.9)	0.75 (19.1)
9/16	SS-MTC-MF9	1.38 (34.9)	0.55 (14.0)	0.94 (23.8)	1.00 (25.4)
3/4	SS-MTC-MF12	1.75 (44.5)	0.60 (15.2)	1.19 (30.2)	1.38 (34.9)
1	SS-MTC-MF16	2.25 (57.2)	0.74 (18.7)	1.38 (34.9)	1.75 (44.5)

Unions



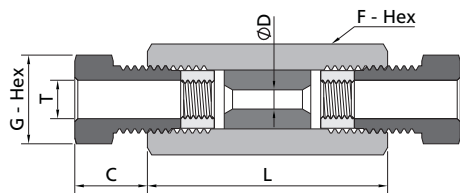
Tube						
T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)				
		L	C	D	G	F
1/4	SS-MU-MF4	1.62 (41.1)	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	0.63 (15.9)
3/8	SS-MU-MF6	1.75 (44.5)	0.44 (11.2)	0.20 (5.2)	0.63 (15.9)	0.75 (19.1)
9/16	SS-MU-MF9	2.14 (54.3)	0.55 (14.0)	0.31 (7.9)	0.94 (23.8)	1.00 (25.4)
3/4	SS-MU-MF12	2.50 (63.5)	0.60 (15.2)	0.44 (11.1)	1.19 (30.2)	1.38 (34.9)
1	SS-MU-MF16	3.50 (88.9)	0.74 (18.7)	0.56 (14.3)	1.38 (34.9)	1.75 (44.5)

Reducing Unions



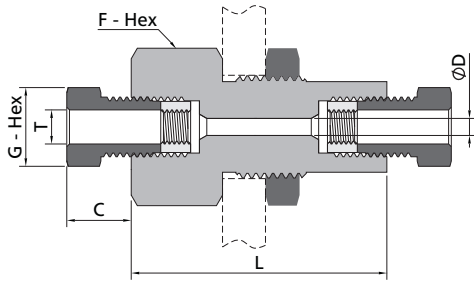
Tube									
T - Tube O.D. in.	Tx - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)						
			L	C	Cx	D	G	Gx	F
3/8	1/4	SS-MU-MF6-MF4	1.75 (44.5)	0.44 (11.2)	0.38 (9.7)	0.11 (2.8)	0.63 (15.9)	0.50 (12.7)	0.75 (19.1)
9/16	1/4	SS-MU-MF9-MF4	2.00 (50.8)	0.55 (14.0)	0.38 (9.7)	0.11 (2.8)	0.94 (23.8)	0.50 (12.7)	1.00 (25.4)
9/16	3/8	SS-MU-MF9-MF6	2.00 (50.8)	0.55 (14.0)	0.44 (11.2)	0.20 (5.2)	0.94 (23.8)	0.63 (15.9)	1.00 (25.4)
3/4	1/4	SS-MU-MF12-MF4	2.25 (57.2)	0.60 (15.2)	0.38 (9.7)	0.11 (2.8)	1.19 (30.2)	0.50 (12.7)	1.38 (34.9)
3/4	3/8	SS-MU-MF12-MF6	2.25 (57.2)	0.60 (15.2)	0.44 (11.2)	0.20 (5.2)	1.19 (30.2)	0.63 (15.9)	1.38 (34.9)
3/4	9/16	SS-MU-MF12-MF9	2.50 (63.5)	0.60 (15.2)	0.55 (14.0)	0.31 (7.9)	1.19 (30.2)	0.94 (23.8)	1.38 (34.9)
1	1/4	SS-MU-MF16-MF4	2.75 (69.9)	0.74 (18.7)	0.38 (9.7)	0.11 (2.8)	1.38 (34.9)	0.50 (12.7)	1.75 (44.5)
1	3/8	SS-MU-MF16-MF6	2.88 (73.0)	0.74 (18.7)	0.44 (11.2)	0.20 (5.2)	1.38 (34.9)	0.63 (15.9)	1.75 (44.5)
1	9/16	SS-MU-MF16-MF9	3.00 (76.2)	0.74 (18.7)	0.55 (14.0)	0.31 (7.9)	1.38 (34.9)	0.94 (23.8)	1.75 (44.5)
1	3/4	SS-MU-MF16-MF12	3.00 (76.2)	0.74 (18.7)	0.60 (15.2)	0.44 (11.1)	1.38 (34.9)	1.19 (30.2)	1.75 (44.5)

Unions (Slip Type)



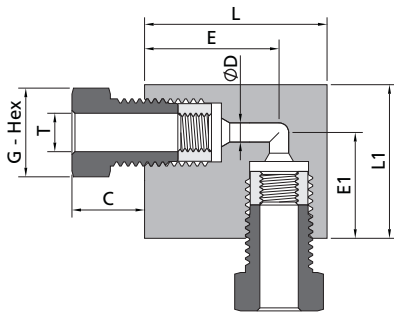
Tube						
T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)				
		L	C	D	G	F
1/4	SS-MSU-MF4	1.62 (41.1)	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	0.63 (15.9)
3/8	SS-MSU-MF6	1.75 (44.5)	0.44 (11.2)	0.20 (5.2)	0.63 (15.9)	0.75 (19.1)
9/16	SS-MSU-MF9	2.14 (54.3)	0.55 (14.0)	0.31 (7.9)	0.94 (23.8)	1.00 (25.4)
3/4	SS-MSU-MF12	2.50 (63.5)	0.60 (15.2)	0.44 (11.1)	1.19 (30.2)	1.38 (34.9)
1	SS-MSU-MF16	3.50 (88.9)	0.74 (18.7)	0.56 (14.3)	1.38 (34.9)	1.75 (44.5)

Bulkhead Unions



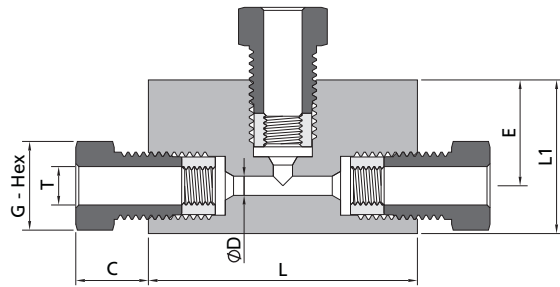
Tube		Dimensions, in. (mm)						
T - Tube O.D. in.	Ordering Number	L	C	D	G	F	Panel Hole Size	Max. Panel Thickness
1/4	SS-MBU-MF4	1.88 (47.8)	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	1.00 (25.4)	0.81 (20.6)	0.38 (9.7)
3/8	SS-MBU-MF6	2.00 (50.8)	0.44 (11.2)	0.20 (5.2)	0.63 (15.9)	1.06 (27.0)	0.94 (23.9)	0.38 (9.7)
9/16	SS-MBU-MF9	2.38 (60.5)	0.55 (14.0)	0.31 (7.9)	0.94 (23.8)	1.38 (34.9)	1.13 (28.6)	0.38 (9.7)
3/4	SS-MBU-MF12	2.62 (66.5)	0.60 (15.2)	0.44 (11.1)	1.19 (30.2)	1.88 (47.6)	1.69 (42.9)	0.38 (9.7)
1	SS-MBU-MF16	3.50 (88.9)	0.74 (18.7)	0.56 (14.3)	1.38 (34.9)	2.13 (54.0)	1.94 (49.3)	0.38 (9.7)

Union Elbows



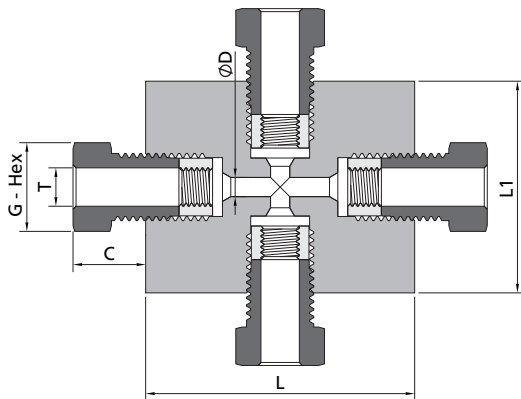
Tube		Dimensions, in. (mm)							
T - Tube O.D. in.	Ordering Number	C	D	G	L	E	L1	E1	Thickness
1/4	SS-MLU-MF4	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	1.12 (28.4)	0.75 (19.1)	1.12 (28.4)	0.75 (19.1)	0.63 (15.9)
3/8	SS-MLU-MF6	0.44 (11.2)	0.20 (5.2)	0.63 (15.9)	1.38 (34.9)	1.00 (25.4)	1.38 (34.9)	1.00 (25.4)	0.75 (19.1)
9/16	SS-MLU-MF9	0.55 (14.0)	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	SS-MLU-MF12	0.60 (15.2)	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	SS-MLU-MF16	0.74 (18.7)	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)

Union Tees



Tube		Dimensions, in. (mm)						
T - Tube O.D. in.	Ordering Number	C	D	G	L	L1	E	Thickness
1/4	SS-MT-MF4	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	SS-MT-MF6	0.44 (11.2)	0.20 (5.2)	0.63 (15.9)	2.00 (50.8)	1.38 (34.9)	1.00 (25.4)	0.75 (19.1)
9/16	SS-MT-MF9	0.55 (14.0)	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	SS-MT-MF12	0.60 (15.2)	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	SS-MT-MF16	0.74 (18.7)	0.56 (14.3)	1.38 (34.9)	4.12 (104.6)	3.00 (76.2)	2.06 (52.3)	1.75 (44.5)

Union Crosses



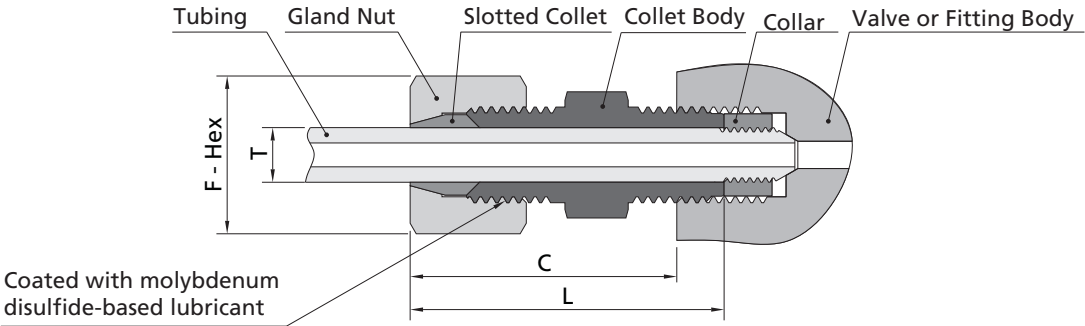
Tube		Dimensions, in. (mm)					
T - Tube O.D. in.	Ordering Number	C	D	G	L	L1	Thickness
1/4	SS-MX-MF4	0.38 (9.7)	0.11 (2.8)	0.50 (12.7)	1.50 (38.1)	1.50 (38.1)	0.63 (15.9)
3/8	SS-MX-MF6	0.44 (11.2)	0.20 (5.2)	0.63 (15.9)	2.00 (50.8)	2.00 (50.8)	0.75 (19.1)
9/16	SS-MX-MF9	0.55 (14.0)	0.31 (7.9)	0.94 (23.8)	2.50 (63.5)	2.50 (63.5)	1.00 (25.4)
3/4	SS-MX-MF12	0.60 (15.2)	0.44 (11.1)	1.19 (30.2)	3.00 (76.2)	3.00 (76.2)	1.38 (34.9)
1	SS-MX-MF16	0.74 (18.7)	0.56 (14.3)	1.38 (34.9)	4.12 (104.6)	4.12 (104.6)	1.75 (44.5)

Anti-Vibration Gland Assemblies

Working pressure: 20,000 psig (1379 bar)

Tubing systems may be subject to extreme vibration or shock. In such applications, these assemblies provide the same reliable connection as standard FITOK glands to essentially prolong vibrational fatigue life.

A complete ordering number for anti-vibration gland assembly (for example: SS-MAV-MF4) includes gland nut, slotted collet and collet body. These three parts can also be ordered separately, as shown in the tables below. To order components with anti-vibration gland assemblies, add "-AV" to ordering number.



Tube					
Anti-Vibration Gland Assemblies	T - Tube O.D. in.	Ordering Number	Dimensions, in. (mm)		
			L	C	F
	1/4	SS-MAV-MF4	1.24 (31.6)	1.05 (26.7)	0.63 (15.9)
	3/8	SS-MAV-MF6	1.50 (38.1)	1.22 (30.9)	0.81 (20.6)
	9/16	SS-MAV-MF9	1.78 (45.2)	1.42 (36.0)	0.94 (23.8)
	3/4	SS-MAV-MF12	2.00 (50.8)	1.61 (40.8)	1.38 (34.9)
	1	SS-MAV-MF16	2.38 (60.5)	1.74 (44.3)	1.50 (38.1)

Fittings	Tubing	Quick Couplings	Line Filters	Valves	Sour Service Products	Subsea Valves	Part Number Crossover Charts
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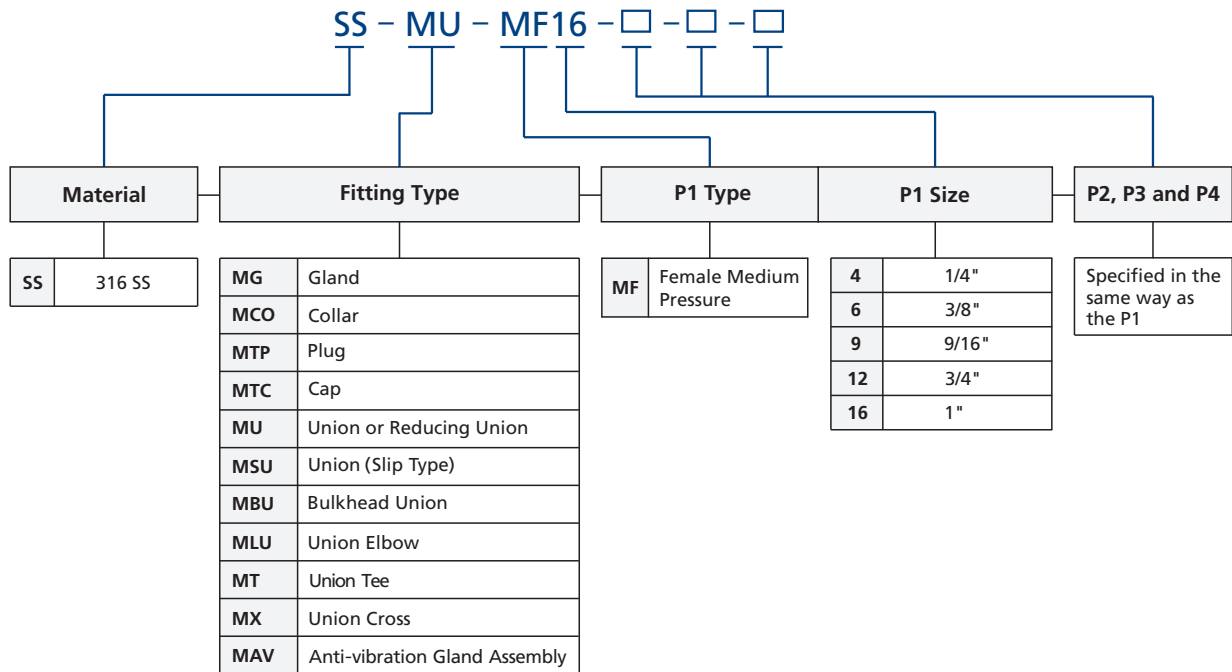
Installation Instructions

Please see A-112.

Connection Information

Please see A-02.

Ordering Number Description



Notes: 1. For more details regarding Medium Pressure connection, please see **Connection Information** on A-02.

2. "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.