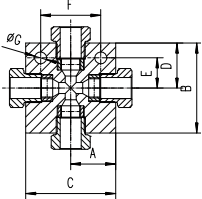
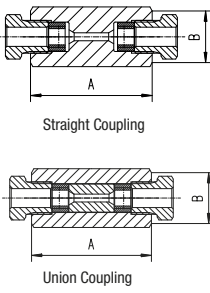
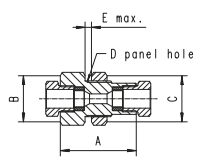
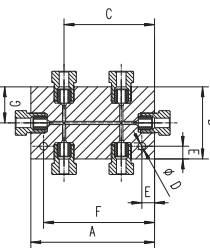


Medium Pressure Fittings

» Pressures to 22,500 psi (1,550 bar)

Fitting Pattern	Catalog Number	Connection Type	O.D. Tube Size in.	Orifice in. (mm)	Dimensions in. (mm)							Block Thickness
Cross												
	21X4M	4MF	1/4	0.106 (2.7)	0.77 (19.5)	1.54 (39.1)	1.54 (39.1)	0.77 (19.5)	0.49 (12.5)	0.98 (25)	0.22 (5.6)	0.63 (16)
	21X6M	6MF	3/8	0.201 (5.1)	1.00 (25.4)	2.00 (50.8)	2.00 (50.8)	1.00 (25.4)	0.63 (16)	1.26 (32)	0.26 (6.6)	0.79 (20.1)
	21X9M	9MF	9/16	0.307 (7.8)	1.25 (31.8)	2.50 (63.5)	2.50 (63.5)	1.25 (31.8)	0.84 (21.3)	1.67 (42.6)	0.33 (8.4)	1.02 (25.9)
	21X12M	12MF	3/4	0.438 (11.1)	1.50 (38.1)	3.00 (76)	3.00 (76)	1.50 (38.1)	1.00 (25.4)	2.00 (50.8)	0.35 (8.9)	1.38 (35)
	21X16M	16MF	1	0.562 (14.3)	2.06 (52.3)	4.13 (105)	4.13 (105)	2.06 (52.3)	1.38 (35)	2.76 (70)	0.53 (13.5)	1.77 (45)
Straight Coupling / Union Coupling												
	21F4M	4MF	1/4	0.106 (2.7)	1.62 (41.1)	0.69 (17.5)	Straight Coupling					
	21UF4M						Union Coupling					
	21F6M	6MF	3/8	0.201 (5.1)	1.75 (44.5)	0.88 (22.3)	Straight Coupling					
	21UF6M						Union Coupling					
	21F9M	9MF	9/16	0.307 (7.8)	2.12 (53.8)	1.06 (27)	Straight Coupling					
	21UF9M						Union Coupling					
	21F12M	12MF	3/4	0.438 (11.1)	2.50 (63.5)	1.44 (36.5)	Straight Coupling					
	21UF12M						Union Coupling					
	21F16M	16MF	1	0.562 (14.3)	3.50 (88.9)	2.00 (50.8)	Straight Coupling					
	21UF16M						Union Coupling					
Bulkhead Coupling												
	21BF4M	4MF	1/4	0.106 (2.7)	1.88 (47.8)	1.06 (27)	1.06 (27)	0.94 (23.9)	0.67 (17)			
	21BF6M	6MF	3/8	0.201 (5.1)	2.01 (51)	1.06 (27)	1.06 (27)	0.94 (23.9)	0.39 (9.9)			
	21BF9M	9MF	9/16	0.307 (7.8)	2.38 (60.5)	1.44 (36.5)	1.44 (36.5)	1.12 (28.5)	0.39 (9.9)			
	21BF12M	12MF	3/4	0.438 (11.1)	2.81 (71.4)	1.62 (41.3)	1.62 (41.3)	1.37 (34.8)	0.47 (11.9)			
	21BF16M	16MF	1	0.562 (14.3)	3.54 (89.9)	2.00 (50.8)	2.00 (50.8)	1.68 (42.6)	0.51 (13)			
Manifold Block												
	21MB64M	4MF	1/4	0.106 (2.7)	3.39 (86)	1.54 (39.1)	2.6 (66)	0.22 (5.5)	0.28 (7)	3.11 (79)	0.77 (19.5)	0.63 (16)
	21MB66M	6MF	3/8	0.201 (5.1)	3.39 (86)	2.00 (50.8)	2.38 (60.5)	0.26 (6.5)	0.37 (9.5)	3.01 (76.5)	1.00 (25.5)	0.79 (20.1)
	21MB69M	9MF	9/16	0.307 (7.8)	5.12 (130)	2.50 (63.5)	3.86 (98)	0.33 (8.5)	0.41 (10.5)	4.7 (119.5)	1.25 (31.75)	1.02 (25.9)
	21MB612M	12MF	3/4	0.438 (11.1)	6.50 (165)	3.00 (76)	5.00 (127)	0.35 (9)	0.49 (12.5)	6.00 (152.5)	1.5 (38)	1.38 (35)
	21MB616M	16MF	1	0.562 (14.3)	7.25 (191)	4.13 (105)	5.45 (138.5)	0.53 (13.5)	0.69 (17.5)	6.83 (173.5)	2.07 (52.5)	1.77 (45)

All dimensions are for reference only and are subject to change. See page 2 in the Technical Section for pressure/temperature rating chart.

All technical and dimensional information subject to change. All general Terms and Conditions of sale, including limitations of our liability, apply to all products and services sold.

7.3 Disk, cup type and angle filters

During assembly, check the direction of flow. The angle filter should be installed so that the filter element can be replaced from below.

7.4 Fittings

Bulkhead fitting:

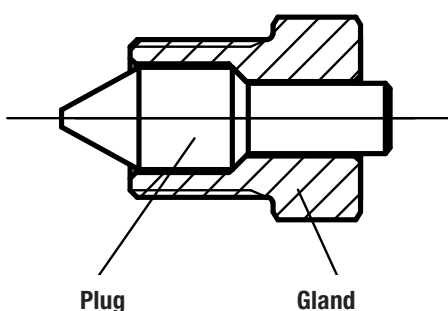
1. Release the hex nut from the screw connection.
2. Push the screw connection through the borehole (borehole diameter as stated in table below).
3. The re-tighten the hex nuts.

Type	Bore-hole diameter Inches (mm)
15BF24M	2.4 (61)
21BF4M	0.81 (20.6)
21BF6M	0.94 (23.9)
21BF9M	1.12 (28.5)
21BF12M	1.37 (34.8)
21BF16M	1.68 (42.6)
43BF16H	1.68 (42.6)
65BF4H	0.94 (23.9)
65BF6H	1.12 (28.5)
65BF9H	1.43 (36.3)
101BF4U	0.94 (23.9)
101BF6U	1.12 (28.5)
101BF9U	1.43 (36.3)
152BF5U	1.43 (36.3)

7.5 High-pressure screw connections

Plugs:

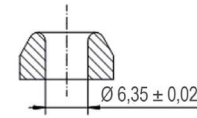
1. Push the plug into the gland.
2. Screw gland into the body connection and tighten with torque stated in the table: Tightening torque for pressure screws.



7.6 Rupture disks

Check the rupture pressure prior to rupture disk installation. To this end, the rupture pressure as indicated on the rupture disk must be compared to the value stated on the type plate. Sealing surfaces shall be inspected prior to assembly, if you wish to replace a rupture disk or want to place it in a used safety head assembly. Only intact surfaces ensure proper function of components. Defective parts must be replaced. Also check the internal diameter of the hold-down ring. The borehole must lie within a tolerance range of $6.35 \text{ mm} \pm 0.02 \text{ mm}$. In case of deviation, replace the pressure piece.

NOTE



A deformed hold-down ring results in rupture pressure modifications. Depending on rupture disk design (flat or hat-shaped) the rupture disk shall be assembled in front of or behind the hold-down ring.

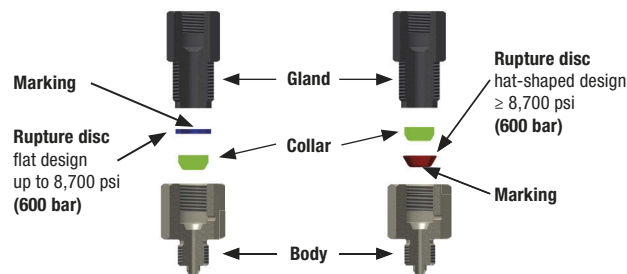


Figure 12: Rupture disk forms

The tightening torque for the hold-down nut based on a thread treated with lubricant paste is indicated on the rupture disk type label. Figure 12 shows the two rupture disk forms. This is a flat or hat-shaped rupture disk that can be used depending on the pressure requirements.

NOTE



An unsuitable tightening torque results in leakages and modifications of rupture pressure. If possible (and if operating conditions allow), use a suitable lubricant (e.g. copper paste) for all threads and sealing cones.

8. Deinstallation

Dismantling takes place in the reverse order of assembly.

NOTE



Ensure that the system is depressurized before dismantling.