

Subsea Needle Valves

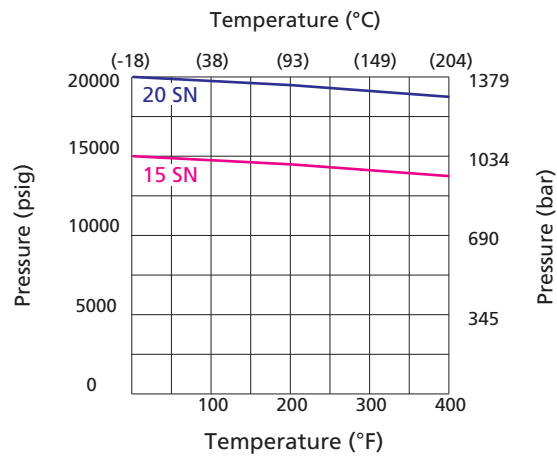
Features

- Working pressure up to 20,000 psig (1379 bar)
- Maximum external pressure: 6,000 psig (414 bar)
- NBR O-ring for operation from -10 to 250°F (-23 to 121°C); other O-ring materials available
- High tensile 316 stainless steel for valve body
- Standard stem seal material: PTFE
- NACE MR0175 optional
- Using a two-part spindle assembly with a non-rising upper stem, it is of great advantage when being used with ROVs
- Non-rotating lower stem to ensure positive non-galling operation during shut-off
- Packing located under stem threads
- Metal-to-metal seating to ensure ideal shut-off, longer stem/seat service lifetime for abrasive flow, excellent corrosion resistance and greater durability for repeated on/off cycles
- Reliable packing gland locking device
- Wide selection of tube and pipe end fittings available
- 2-way straight and angle flow patterns available
- Orifice size: 0.203"
- Rated Cv: 0.75
- Maximum water depth: 13,800 ft. (4200 m)

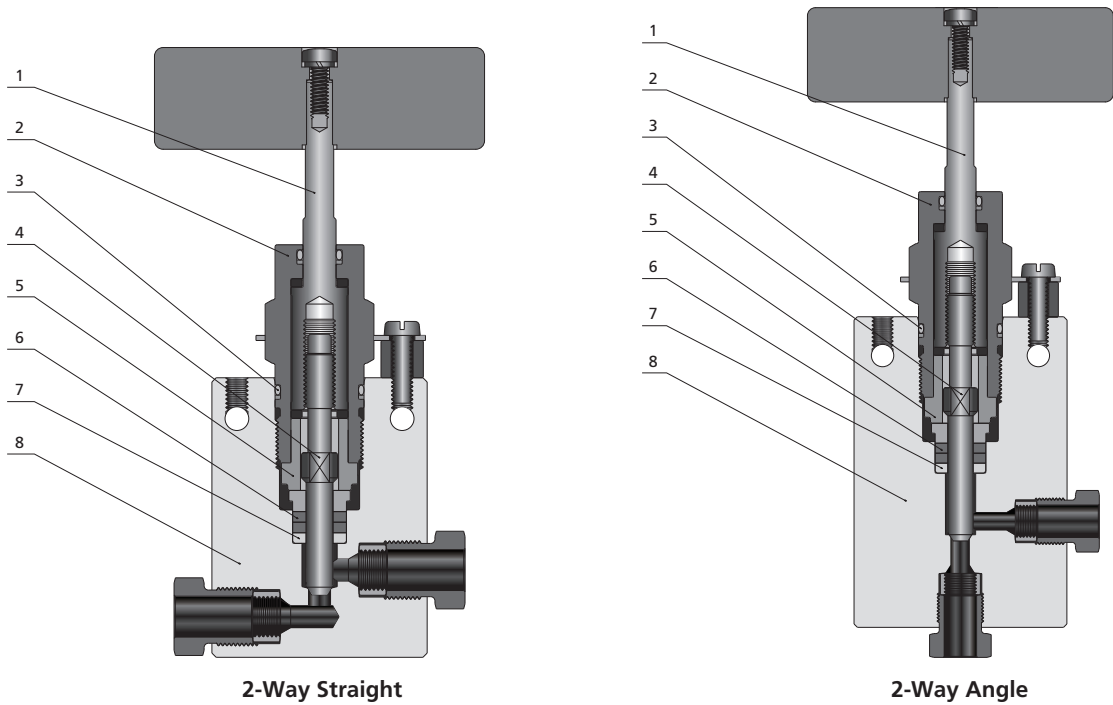


Fittings
Tubing
Quick Couplings
Line Filters
Valves
Sour Service Products
Subsea Valves
Part Number Crossover Charts

Pressure vs. Temperature Curve



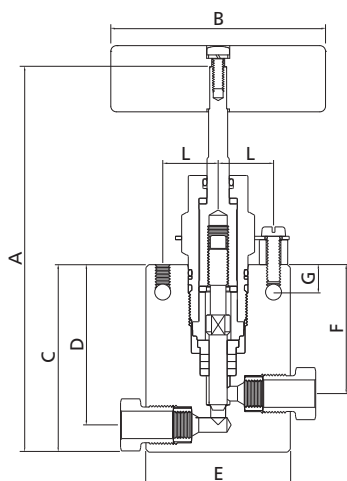
Standard Materials of Construction



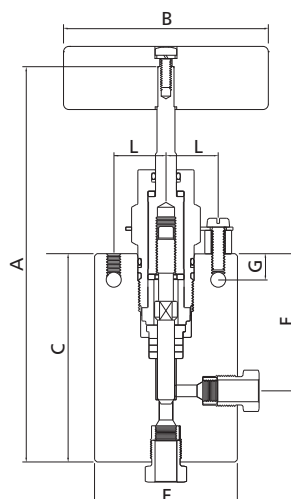
Item	Component	Material Grade
1	Upper Stem	316SS
2	Packing Gland	316SS
3	O-Ring	NBR
4	<i>Lower Stem</i>	<i>S17400</i>
5	Packing Ring	C63000
6	<i>Packing</i>	<i>PTFE</i>
7	<i>Packing Washer</i>	<i>S17400</i>
8	<i>Body</i>	<i>316 SS</i>
Lubricant		Molybdenum Disulfide

Wetted components listed in italics.

Ordering Information and Dimensions



2-Way Straight



2-Way Angle

Ordering Number	Connection	Dimensions, in. (mm)								
		A	B	C	D	E	F	G	L	Block Thickness
20SNSS-MF6-1	MF6	5.35 (135.9)	3.00 (76.2)	2.60 (66.00)	2.22 (56.4)	2.00 (50.8)	1.79 (45.40)	0.38 (9.65)	0.77 (19.5)	1.00 (25.4)
20SNSS-MF9-1	MF9	5.75 (146.1)	3.00 (76.2)	3.00 (76.2)	2.40 (61.0)	2.50 (63.5)	2.00 (50.8)	0.38 (9.65)	0.77 (19.5)	1.50 (38.1)
20SNSS-MF12-1	MF12	5.90 (149.9)	3.00 (76.2)	3.15 (80.0)	2.43 (61.8)	3.00 (76.2)	2.00 (50.8)	0.38 (9.65)	0.77 (19.5)	1.50 (38.1)
20SNSS-MF6-2	MF6	5.78 (146.9)	3.00 (76.2)	3.03 (77.00)	—	2.00 (50.8)	1.78 (45.40)	0.38 (9.65)	0.77 (19.5)	1.00 (25.4)
20SNSS-MF9-2	MF9	6.25 (158.8)	3.00 (76.2)	3.50 (88.9)	—	2.50 (63.5)	2.00 (50.8)	0.38 (9.65)	0.77 (19.5)	1.50 (38.1)
20SNSS-MF12-2	MF12	6.50 (165.2)	3.00 (76.2)	3.75 (95.3)	—	3.00 (76.2)	2.00 (50.8)	0.38 (9.65)	0.77 (19.5)	1.50 (38.1)

Ordering Number Description

