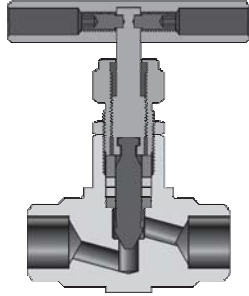


Needle Valves

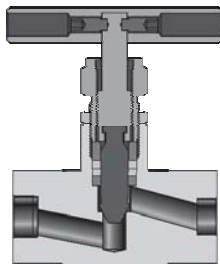


NV1 Series

one-piece forged body.
 Maximum working pressure up to 6000 psig (413 bar).
 Working temperatures from -65 °F to 1200 °F (-53 °C to 648 °C).
 Body materials: 316, 316L, 304, 321, F91,
 Duplex 2205/A182, alloy 600/B156, and brass CAD/B283.
 CIR-LOK provide blunt, ball, regulating, and soft seat tips.
 Orifice sizes from 4 mm to 20 mm.

Pressure-Temperature Ratings

Body Material	316 stainless steel
Temperature, °F (°C)	Working Pressure, psig (bar)
-65 (-53) to 100 (37)	6000 (413)
200 (93)	5260 (355)
300 (148)	4660 (321)
400 (204)	4280 (294)
500 (260)	3980 (274)
600 (315)	3760 (259)
700 (371)	3600 (248)
800 (426)	3460 (236)
900 (482)	3220 (221)
1000 (537)	3030 (208)
1100 (593)	2685 (184)
1200 (648)	1715 (118)



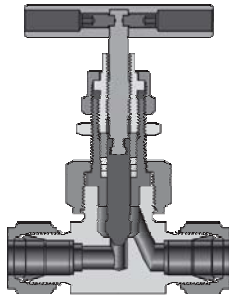
NV2 Series

One piece heavy-wall forged body.
 Maximum working pressure up to 10 000 psig (688 bar).
 Working temperatures from -65 °F to 1200 °F (-54 °C to 648 °C).
 Body materials: 316, 316L, 304, 321, F91,
 Duplex 2205/A182, and alloy 600/B156.
 CIR-LOK provide blunt, ball, regulating seat tips.
 Orifice sizes from 4 mm to 11 mm.

Pressure-Temperature Ratings

Body Material	316 stainless steel
Temperature, °F (°C)	Working Pressure, psig (bar)
-65 (-53) to 100 (37)	10000 (688)
200 (93)	9290 (640)
300 (148)	8390 (578)
400 (204)	7705 (530)
500 (260)	7165 (493)
600 (315)	6770 (466)
700 (371)	6480 (446)
800 (426)	6230 (429)
900 (482)	5905 (406)
1000 (537)	5450 (375)
1100 (593)	4835 (333)
1200 (648)	3085 (212)

NV3 Series

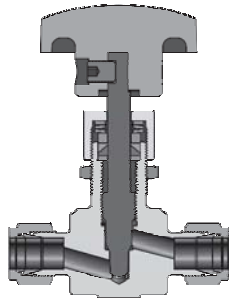


Union-bonnet construction for severe-service.
 Maximum working pressure up to 6000 psig (413 bar).
 Working temperatures from -65 °F to 1200 °F (-53 °C to 648 °C).
 Body materials: 316, 316L, 304, 321, F91,
 Duplex 2205/A182, alloy 600/B256, and brass CDA/B283.
 CIR-LOK provide blunt, ball, regulating, and soft seat tips.
 Orifice sizes from 4 mm to 11 mm.

Pressure-Temperature Ratings

Body Material	316 stainless steel
Temperature, °F (°C)	Working Pressure, psig (bar)
-65 (-53) to 100 (37)	6000 (413)
200 (93)	5260 (355)
300 (148)	4660 (321)
400 (204)	4280 (294)
500 (260)	3980 (274)
600 (315)	3760 (259)
700 (371)	3600 (248)
800 (426)	3460 (236)
900 (482)	3220 (221)
1000 (537)	3030 (208)
1100 (593)	2685 (184)
1200 (648)	1715 (118)

NV4 Series



Live - loaded packing system.
 Maximum working pressure up to 5000 psig (344 bar).
 Working temperatures from -65 °F to 600 °F (-53 °C to 315 °C).
 Body materials: 316, 316L, 304, 321/A182, and brass CDA/B283.
 CIR-LOK provide blunt, regulating, and soft seat tips.
 Orifice sizes from 2 mm to 9.5 mm

Pressure-Temperature Ratings

Body Material	316 stainless steel
Temperature, °F (°C)	Working Pressure, psig (bar)
-65 (-53) to 100 (37)	5000 (344)
200 (93)	4295 (295)
300 (148)	3875 (266)
400 (204)	3560 (245)
500 (260)	3310 (228)
600 (315)	3130 (215)

How to Order

NV1 — MBW8 — M12 — B8BB — GY — BA — 316

Series	Inlet Type	Inlet Size	Outlet Type	Outlet Size	Seat Material	Orifice Size	Tip Material	Tip Type	Packing Material	Panel Mounting	Handle	Flow Pattern	Body Material
NV1	FNPT Female NPT	2 1/8 in.	Same as Inlet		B Same as Body S Stellite	5 0.093 in. (2.4 mm)	B Same as Body S Stellite	B Blunt	T PTFE P PEEK G Graphite	N No Y Yes	B Black Aluminum Bar R Red Aluminum Bar G Green Aluminum Bar L Blue Aluminum Bar S 304 Stainless Steel Bar	S Straight A Angle	316 316L 304 304L 321 F91 F92 Duplex 2507 Titanium Alloy 20 Alloy 400 Alloy 600 Alloy C-276 Brass Steel
NV2	NPT Male NPT	4 1/4 in.				7 0.157 in. (4.0 mm)		R Regulating					
NV3	FBT Female BSPT	6 3/8 in. or 6 mm				8 0.236 in. (6.0 mm)		A Ball					
NV4	MBT Male BSPT	8 1/2 in. or 8 mm				9 0.433 in. (11 mm)							
	FMS Female ISO (for MRP)	10 10 mm				6 0.591 in. (15 mm)							
	MS Male ISO (for MRG)	12 3/4 in. or 12 mm				0 0.787 in. (20 mm)							
	FBP Female BSPP (for RP)	14 14 mm or M14 x 1.5											
	MRG Male BSPP (for RG)	16 1 in. or 16 mm											
	FSW Fractional Tube Socket Weld	18 18 mm											
	MSW Metric Tube Socket Weld	20 1 1/4 in. or 20 mm or M20 x 1.5											
	FBW Fractional Tube Butt Weld	22 22 mm or M22 x 1.5											
	MBW Metric Tube Butt Weld	24 M24 x 1.5											
	PSW Pipe Socket Weld	25 25 mm											
	PBW Pipe Butt Weld	27 M27 x 2											
	F Fractional Tube Fitting	28 28 mm											
	M Metric Tube Fitting												
	MNGN Nut + Gasket + Metric Bulge Nipple												