

Needle Valve

NV4 Series



- ❖ Maximum working pressure up to 5000 psig (344 bar)
- ❖ Working temperature from -65°F to 600°F (-53°C to 315°C)
- ❖ Live-Loaded Packing System
- ❖ Straight, angle and cross patterns
- ❖ Softseat stem with PCTFE tip available

Features

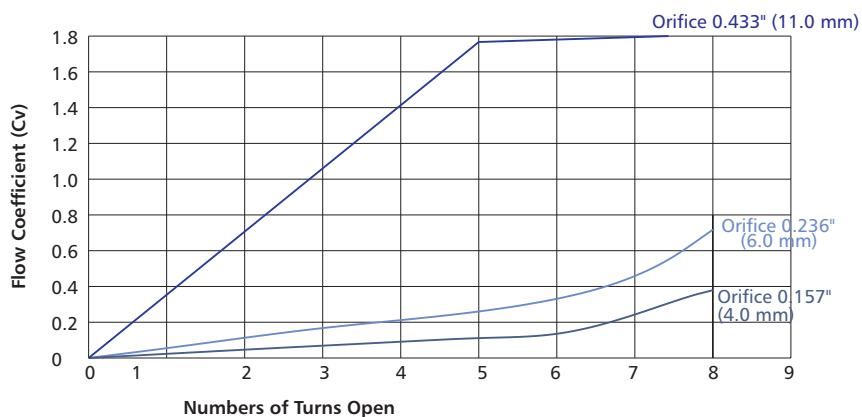
- ❖ Maximum working pressure up to 5000 psig (344 bar)
- ❖ Working temperature from -65°F to 600°F (-53°C to 315°C)
- ❖ Live-Loaded Packing System
- ❖ Packing nut enables easy external adjustments
- ❖ Straight, angle and cross patterns
- ❖ Softseat stem with PCTFE tip available
- ❖ Panel mounting available
- ❖ optional handle colors available

Pressure vs. Temperature

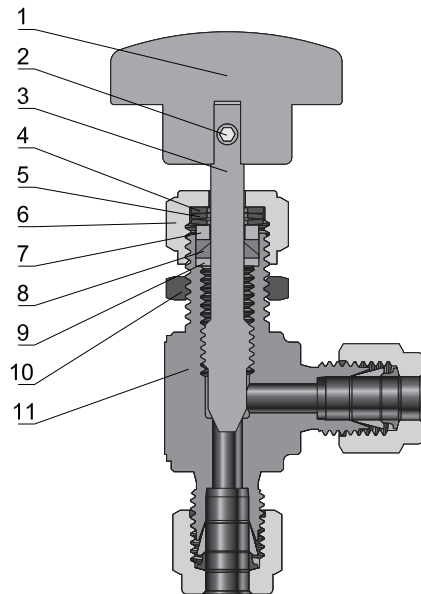
Body Material	316 Stainless Steel
Temperature, °F (°C)	Working Pressure, psig(bar)
-65 (-53) to 100 (37)	5000 (344)
200 (93)	4295 (295)
300 (148)	3875 (266)
400 (204)	3560 (245)
500 (260)	3310 (228)
600 (315)	3130 (215)

Flow Data at 100°F (38°C)

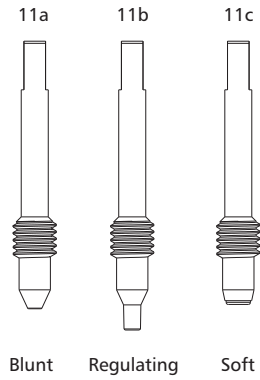
Regulating Stem



Standard Materials of Construction

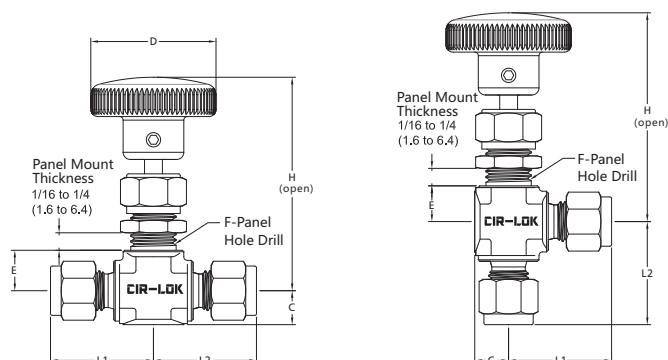


Stem Type



Item	Component	Material Grade/ASTM Specification	
		316 S.S.	Brass
1	Handle	Black Knob	
2	Screw	Nickel cadmium-plated steel	
3	Stem	Chrome-plated 316 S.S./A276	
4	Gland	304 S.S./A276	
5	Spring	S17700/A693	
6	Packing Nut	316 S.S./A276	Brass 360/B16
7	Gland	316 S.S./A276	
8	Packing	PTFE /D1710	
9	Gland	316 S.S./A276	
10	Nut	316 S.S./B783	
11	Body	316 S.S./A182	Brass 377/B283

Dimensions



Basic Ordering Number	Connection Type and Size	Orifice in. (mm)	Cv	Dimension, in. (mm)						
				L1	L2	C	D	E	F	H
NV4-FNPT2-02-	1/8 Female NPT	0.08 (2.0)	0.09	0.81 (20.6)	0.81 (20.6)	0.31 (7.9)	1.0 (25.4)	0.44 (11.2)	0.47 (11.9)	2.28 (57.9)
NV4-F2-02-	1/8" CIR-LOK			0.98 (25.0)	0.98 (25.0)					
NV4-M3-02-	3 mm CIR-LOK									
NV4-FNPT2-04-	1/8 Female NPT	0.157 (4.0)	0.35	0.81 (20.6)	0.81 (20.6)	0.39 (9.9)	1.38 (35.0)	0.44 (11.2)	0.53 (13.5)	2.50 (63.5)
NV4-NPT2-04-	1/8 Male NPT			0.98 (25.0)	0.98 (25.0)					
NV4-NPT4-04-	1/4 Male NPT			1.13 (28.7)	1.13 (28.7)					
NV4-F4-04-	1/4" CIR-LOK			1.17 (29.7)	1.17 (29.7)					
NV4-M6-04-	6 mm CIR-LOK									
NV4-M8-04-	8 mm CIR-LOK									
NV4-FNPT4-06-	1/4 Female NPT	0.25 (6.4)	0.70	1.06 (26.9)	1.06 (26.9)	0.5 (12.7)	1.88 (47.8)	0.5 (12.7)	0.78 (19.8)	2.97 (75.4)
NV4-FNPT6-06-	3/8" Female NPT			1.12 (28.4)	1.12 (28.4)					
NV4-NPT6-06-	3/8 Male NPT			1.50 (38.1)	1.50 (38.1)					
NV4-NPT8-06-	1/2 Male NPT			1.29 (32.8)	1.29 (32.8)					
NV4-F6-06-	3/8" CIR-LOK			1.4 (35.6)	1.4 (35.6)					
NV4-F8-06-	1/2" CIR-LOK			1.3 (33.0)	1.3 (33.0)					
NV4-M10-06-	10 mm CIR-LOK			1.4 (35.6)	1.4 (35.6)					
NV4-M12-06-	12 mm CIR-LOK			1.56 (39.7)	1.56 (39.7)					
NV4-M14-06-	14 mm CIR-LOK			1.50 (38.1)	1.50 (38.1)					
NV4-MS20-06-	M20 x 1.5 Male ISO									
NV4-FNPT8-11-	1/2 Female NPT	0.375 (9.5)	1.80	1.50 (38.1)	1.50 (38.1)	0.75 (19.1)	3.00 (76.2)	0.75 (19.1)	1.03 (26.2)	3.91 (99.3)
NV4-FNPT12-11-	3/4 Female NPT			1.63 (41.3)	1.63 (41.3)					
NV4-NPT12-11-	3/4 Male NPT									
NV4-F8-11-	1/2" CIR-LOK									
NV4-F12-11-	3/4" CIR-LOK			1.90 (48.3)	1.90 (48.3)					
NV4-M14-11-	14 mm CIR-LOK									

How to Order

NV4— FNPT8 — M12 — 06K — LA — 316

Series	Inlet Type	Inlet Size	Outlet Type	Outlet Size	Orifice Size	Tip Material	Tip Type	Handle	Flow Pattern	Body Material			
NV4	FNPT Female NPT	2 1/8 in.	Same as inlet type and inlet size	02	0.093 in. (2.4 mm)	Same as Body	Blunt	Black Round	Straight	316 316 S.S.			
	NPT Male NPT	4 1/4 in.									K PCTFE	R Regulating	R Red Round
	FBT Female BSPT	3/8 in. or 6 mm	If outlet and inlet are the same, eliminate the outlet designator	04	0.157 in. (4.0 mm)	K PCTFE	A Ball	G Green Round	A Angle	304 304 S.S.			
	MBT Male BSPT	1/2 in. or 8 mm									T PTFE	L Blue Round	304L 304L S.S.
	FMS Female ISO	10 10 mm									K PCTFE	A400 Alloy 400	
	MS Male ISO	12 3/4 in. or 12 mm											
	FBP Female BSPP	14 mm or M14 x 1.5										P PEEK	A20 Alloy 20
	MBP Male BSPP												A600 Alloy 600
	F Fractional Tube Fitting												A825 Alloy 825
	M Metric Tube Fitting												A276 Alloy C276
													DU7 Duplex 2507
				BR Brass									