

# 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

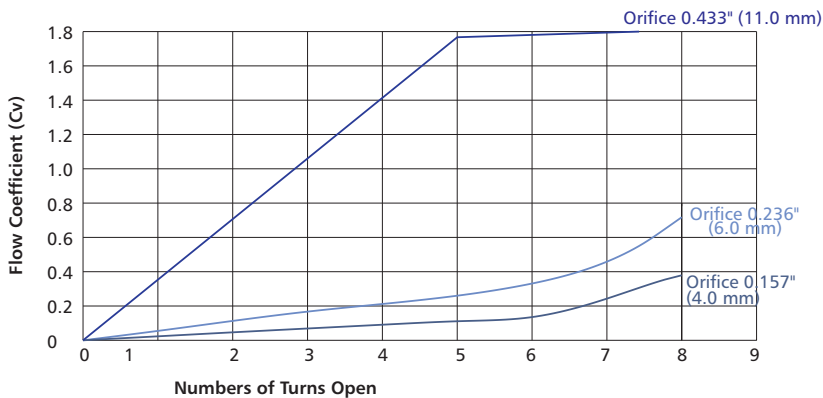
- ❖ Maximum working pressure up to 5000 psig (344 bar)
- ❖ Working temperature from -65°F to 600°F (-53°C to 315°C)
- ❖ Live-Loaded Packing System
- ❖ Packing nut enables easy external adjustments
- ❖ Straight, angle and cross patterns
- ❖ Softseat stem with PCTFE tip available
- ❖ Panel mounting available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

## Pressure vs. Temperature

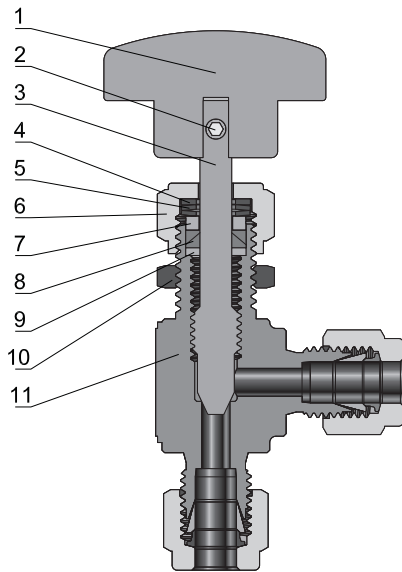
Body Material	316 Stainless Steel
Temperature, °F (°C)	Working Pressure, psig(bar)
-65 (-53) to 100 (37)	5000 (344)
200 (93)	4295 (295)
300 (148)	3875 (266)
400 (204)	3560 (245)
500 (260)	3310 (228)
600 (315)	3130 (215)

## Flow Data at 100°F (38°C)

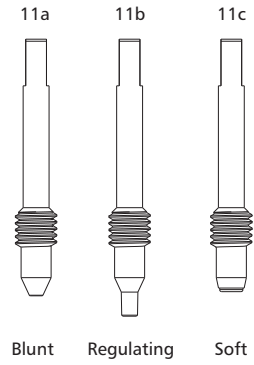
Regulating Stem



## Standard Materials of Construction

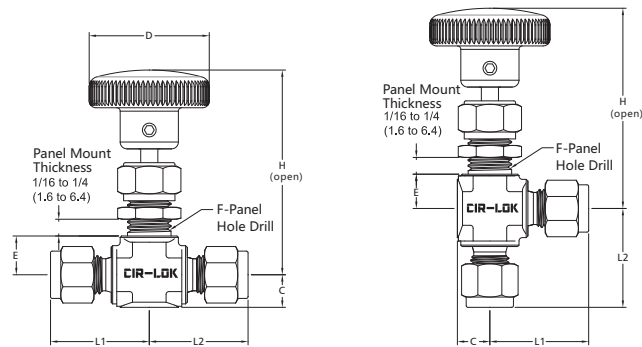


### Stem Type



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	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-FNPT4-06-	1/4 Female NPT			1.12 (28.4)	1.12 (28.4)					
NV4-FNPT6-06-	3/8" Female NPT			1.50 (38.1)	1.50 (38.1)					
NV4-NPT6-06-	3/8 Male NPT			1.29 (32.8)	1.29 (32.8)					
NV4-NPT8-06-	1/2 Male NPT			1.4 (35.6)	1.4 (35.6)					
NV4-F6-06-	3/8" CIR-LOK			1.3 (33.0)	1.3 (33.0)					
NV4-F8-06-	1/2" CIR-LOK			1.4 (35.6)	1.4 (35.6)					
NV4-M10-06-	10 mm CIR-LOK			1.56 (39.7)	1.56 (39.7)					
NV4-M12-06-	12 mm CIR-LOK			1.50 (38.1)	1.50 (38.1)					
NV4-M14-06-	14 mm CIR-LOK									
NV4-MS20-06-	M20 x 1.5 Male ISO	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-FNPT8-11-	1/2 Female NPT			1.63 (41.3)	1.63 (41.3)					
NV4-FNPT12-11-	3/4 Female NPT			1.90 (48.3)	1.90 (48.3)					
NV4-NPT12-11-	3/4 Male NPT									
NV4-F8-11-	1/2" CIR-LOK									
NV4-F12-11-	3/4" CIR-LOK									
NV4-M14-11-	14 mm CIR-LOK									

## How to Order

Series	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.		04	0.157 in. (4.0 mm)	K PCTFE	R Regulating	R Red Round	A Angle	316L 316L S.S.	
	FBT Female BSPT	3/8 in. or 6 mm	If outlet and inlet are the same, eliminate the outlet designator	06	0.236 in. (6.0 mm)		A Ball	G Green Round			304 304 S.S.
	MBT Male BSPT	1/2 in. or 8 mm		11	0.433 in. (11 mm)		T PTFE	L Blue Round			304L 304L S.S.
	FMS Female ISO	10 10 mm					K PCTFE				A400 Alloy 400
	MS Male ISO	3/4 in. or 12 mm					P PEEK				A20 Alloy 20
	FBP Female BSPP	14 mm or M14 x 1.5									A600 Alloy 600
	MBP Male BSPP										A825 Alloy 825
	F Fractional Tube Fitting										A276 Alloy C276
	M Metric Tube Fitting										DU7 Duplex 2507
											BR Brass