

# Toggle Needle Valve

NV6 Series



- ❖ Maximum working pressure up to 300 psig (20.6 bar)
- ❖ Working temperature from -20°F to 200°F (-28°C to 93°C)
- ❖ One-piece forged body
- ❖ Straight and angle patterns
- ❖ Opens and closes quickly

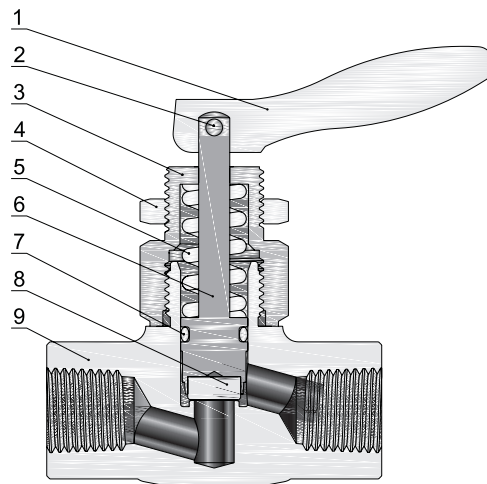
## Features

- ❖ Maximum working pressure up to 300 psig (20.6 bar)
- ❖ Working temperature from -20°F to 200°F (-28°C to 93°C)
- ❖ One-piece forged body
- ❖ Straight, angle and cross flow patterns
- ❖ Opens and closes quickly
- ❖ Soft-seat shutoff
- ❖ O-ring stem seal needs no adjustment

## Pressure vs. Temperature

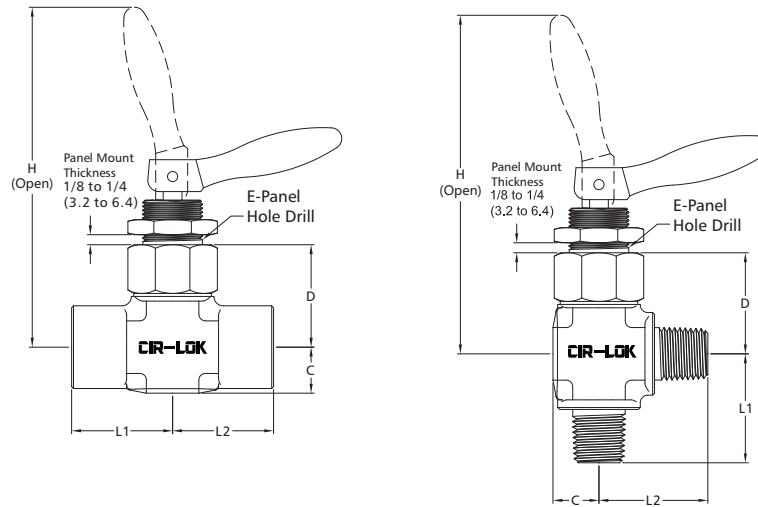
Orifice in. (mm)	Temperature °F (°C)	Working Pressure psig (bar)
0.080 (2.0)	-20 to 200 (-28 to 93)	300 psig
0.125 (3.2)		200 psig
0.250 (6.4)		

## Standard Materials of Construction



Item	Component	Material Grade/ASTM Specification		
		316 S.S.	304 S.S.	Brass
1	Handle	Stainless steel		
2	Pin	Stainless steel		
3	Bonnet	316 S.S./A276	304 S.S./A276	Brass 360/B16
4	Nut	316 S.S./B783		Brass 360/B16
5	Spring	PTFE-plated S17700/A313		
6	Stem	316 S.S./A276	304 S.S./A276	
7	O-ring	Fluorocarbon FKM		
8	Stem Tip	PTFE/D1710		
9	Body	316 S.S./A276	304 S.S./A276	Brass 377/B283

**Dimensions**



Basic Ordering Number	Connection Type and Size	Orifice in. (mm)	Cv	Dimension, in. (mm)					
				L1	L2	C	D	E	H
NV6-NPT2-02-	1/8 Male NPT	0.08 (2.0)	0.11	0.75 (19.0)	0.75 (19.0)	0.31 (7.9)	0.92 (23.4)	0.53 (13.5)	2.87 (72.9)
NV6-NPT2-F2-02-	1/8 Male NPT			0.75 (19.0)	0.98 (25.0)				
NV6-F2-02-	1/8" CIR-LOK			0.98 (25.0)	0.98 (25.0)				
NV6-M3-02-	3 mm CIR-LOK								
NV6-FNPT2-03-	1/8 Female NPT	0.125 (3.2)	0.20	0.81 (20.6)	0.81 (20.6)	0.39 (9.9)	0.92 (23.4)	0.53 (13.5)	2.87 (72.9)
NV6-NPT2-03-	1/8 Male NPT			0.86 (21.8)	0.86 (21.8)				
NV6-NPT4-03-	1/4 Male NPT			25.0 (0.98)	25.0 (0.98)				
NV6-NPT4-F4-03-	1/4 Male NPT			25.0 (0.98)					
NV6-F4-03-	1/4" CIR-LOK				1.13 (28.7)				
NV6-M6-03-	6 mm CIR-LOK								
NV6-M8-03-	8 mm CIR-LOK								
NV6-FNPT4-06-	1/4 Female NPT								
NV6-FNPT6-06-	3/8 Female NPT	0.25 (6.4)	0.70	1.06 (26.9)	1.06 (26.9)	0.5 (12.7)	1.06 (26.9)	0.66 (16.8)	3.56 (90.4)
NV6-NPT6-06-	3/8 Male NPT			1.12 (28.4)	1.12 (28.4)				
NV6-F6-06-	3/8" CIR-LOK			1.29 (32.8)	1.29 (32.8)				
NV6-F8-06-	1/2" CIR-LOK			1.4 (35.6)	1.4 (35.6)				
NV6-M10-06-	10 mm CIR-LOK			1.36 (34.5)	1.36 (34.5)				
NV6-M12-06-	12 mm CIR-LOK			1.46 (37.1)	1.46 (37.1)				
NV6-MS20-06-	M20 x 1.5 Male ISO			1.50 (38.1)	1.50 (38.1)				
NV6-MS22-06-	M22 x 1.5 Male ISO								

## How to Order

**NV6** — **NPT4** — **F4** — **03** — **Z** — **A** — **316**

Series	Inlet Type	Inlet Size	Outlet Type	Outlet Size	Orifice Size	O-Ring Material	Flow Pattern	Body Material
<b>NV6</b>	<b>FNPT</b> Female NPT	2 1/8 in.	Same as inlet type and inlet size		<b>02</b> 0.080 in. (2.0 mm)	Fluorocarbon FKM	Straight	<b>316</b> 316 S.S.
	<b>NPT</b> Male NPT	4 1/4 in.				<b>B</b> Buna N	<b>A</b> Angle	<b>316L</b> 316L S.S.
	<b>FBT</b> Female BSPT	6 3/8 in. or 6 mm	If outlet and inlet are the same, eliminate the outlet designator		<b>03</b> 0.125 in. (3.2 mm)	<b>E</b> Ethylene Propylene		<b>304</b> 304 S.S.
	<b>MBT</b> Male BSPT	8 1/2 in. or 8 mm				<b>N</b> Neoprene		<b>304L</b> 304L S.S.
	<b>FMS</b> Female ISO	10 10 mm				<b>Z</b> Kalrez		
	<b>MS</b> Male ISO	12 3/4 in. or 12 mm						
	<b>FBP</b> Female BSPP							
	<b>MBP</b> Male BSPP							
	<b>F</b> Fractional Tube Fitting							
	<b>M</b> Metric Tube Fitting							