



# Pipe Needle Valves



## SPECIFICATIONS

- Max. Working Pressure:  
Up to 15,000 PSI (1030 bar)
- Temperature Ratings:  
-100° to 600°F (-73° to 315°C)
- Grafoil packing available for high temperature service

## TYPICAL APPLICATIONS

- Chemical Injection systems
- Process control systems
- Hydraulic control panels
- Safety shutdown systems
- High pressure water blasting
- Hydrostatic test systems

## TYPICAL MATERIALS OF CONSTRUCTION

- Body - 316 cold-worked stainless steel
- Packing - Glass filled Teflon
- Stem 17-4PH
- Other materials available upon request

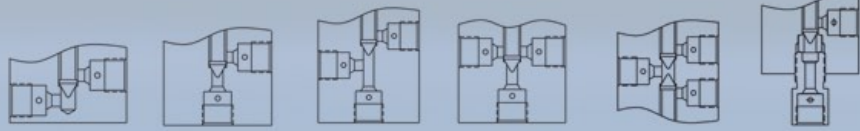
## ACTUATOR OPTIONS - see pg 28

## OTHER OPTIONS

- PM - Panel Mount
- GR - Grafoil packing for temperatures to 800° F (427° C)
- HT - Extended stuffing box with Grafoil packing to 1200° F (649° C)
- LT - Extended stuffing box with Teflon packing and Cryogenic trim materials to -423° F (-253° C)

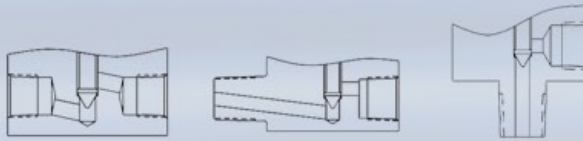
- Two-piece, non-rotating stem. Simplified and more reliable design compared to styles that require stem sleeve adjustment by means of locknuts.
- Full flow in 4-5 turns vs 9 turns
- Nine body styles for a wide range of applications.
- Packing gland machined from NiAluBronze for reduced operating torque.
- Internal gland locking mechanism. No removal & reinstallation of mechanical gland locking device allows for simple panel mounting.
- Bi-directional flow capability. Prevents damage to valve in case of accidental reverse hook up.
- Optional soft seat available in a wide variety of materials.
- Complete material traceability on all components.
- Equipment can be manufactured to meet NACE MR-01-75 standards. Consult your nearest authorized distributor for more information.
- Stainless Steel Handle.

## ORDERING



PRESSURE	CONNECTION SIZE	PORT	CV*	STEM TIP	2-WAY STRAIGHT	2-WAY ANGLE	3-WAY 2 INLET PORTS	3-WAY 2 OUTLET PORTS	2-STEM MANIFOLD	REPLACEABLE SEAT
15,000 PSI (1035 bar)	1/8"	0.187"	0.65	Vee	NVT2N1VA15	NVT2N2VA15	NVT2N3VA15	NVT2N4VA15	NVT2N5VA15	NVT2N6VA15
		0.187"	0.65	Reg	NVT2N1RA15	NVT2N2RA15	NVT2N3RA15	NVT2N4RA15	NVT2N5RA15	NVT2N6RA15
	1/4"	0.250"	0.75	Vee	NVT4N1VG15	NVT4N2VG15	NVT4N3VG15	NVT4N4VG15	NVT4N5VG15	NVT4N6VG15
		0.250"	0.75	Reg	NVT4N1RG15	NVT4N2RG15	NVT4N3RG15	NVT4N4RG15	NVT4N5RG15	NVT4N6RG15
	3/8"	0.312"	1.75	Vee	NVT6N1VB15	NVT6N2VB15	NVT6N3VB15	NVT6N4VB15	NVT6N5VB15	NVT6N6VB15
		0.312"	1.75	Reg	NVT6N1RB15	NVT6N2RB15	NVT6N3RB15	NVT6N4RB15	NVT6N5RB15	NVT6N6RB15
	1/2"	0.312"	1.75	Vee	NVT8N1VB15	NVT8N2VB15	NVT8N3VB15	NVT8N4VB15	NVT8N5VB15	NVT8N6VB15
		0.312"	1.75	Reg	NVT8N1RB15	NVT8N2RB15	NVT8N3RB15	NVT8N4RB15	NVT8N5RB15	NVT8N6RB15
10,000 PSI (690 bar)	3/4"	0.562"	3.40	Vee	NV12N1VD10	NV12N2VD10	NV12N3VD10	NV12N4VD10	NV12N5VD10	NV12N6VD10
		0.562"	3.40	Reg	NV12N1RD10	NV12N2RD10	NV12N3RD10	NV12N4RD10	NV12N5RD10	NV12N6RD10
	1"	0.562"	3.40	Vee	NV16N1VD10	NV16N2VD10	NV16N3VD10	NV16N4VD10	NV16N5VD10	NV16N6VD10
		0.562"	3.40	Reg	NV16N1RD10	NV16N2RD10	NV16N3RD10	NV16N4RD10	NV16N5RD10	NV16N6RD10

\*Cv values listed are for 2-way straight valves. For 2-way angle valves, increase Cv by 50%



PRESSURE	CONNECTION SIZE	PORT	CV*	STEM TIP	2-WAY STRAIGHT	2-WAY STRAIGHT MALE X FEMALE	2-WAY ANGLE MALE X FEMALE
15,000 PSI (1035 bar)	1/8"	0.187"	0.60	Vee	NVT2N1VE15	NVT2N7VE15	NVT2N8VE15
		0.187"	0.60	Reg	NVT2N1RE15	NVT2N7RE15	NVT2N8RE15
	1/4"	0.250"	0.73	Vee	NVT4N1VE15	NVT4N7VE15	NVT4N8VE15
		0.250"	0.73	Reg	NVT4N1RE15	NVT4N7RE15	NVT4N8RE15
	3/8"	0.250"	0.73	Vee	NVT6N1VE15	NVT6N7VE15	NVT6N8VE15
		0.250"	0.73	Reg	NVT6N1RE15	NVT6N7RE15	NVT6N8RE15
	1/2"	0.250"	1.75	Vee	NVT8N1VE15	NVT8N7VE15	NVT8N8VE15
		0.250"	1.75	Reg	NVT8N1RE15	NVT8N7RE15	NVT8N8RE15
10,000 PSI (690 bar)	3/4"	0.687"	5.20	Vee	NV12N1VF10	NV12N7VF10	NV12N8VF10
		0.687"	5.20	Reg	NV12N1RF10	NV12N7RF10	NV12N8RF10
	1"	0.687"	5.20	Vee	NV16N1VF10	NV16N7VF10	NV16N8VF10
		0.687"	5.20	Reg	NV16N1RF10	NV16N7RF10	NV16N8RF10

\*Cv values listed are for 2-way straight valves. For 2-way angle valves, increase Cv by 50%

### Notes:

1. All Maximum Allowable Working Pressures (MAWP) are based on usage @ 72° F.
2. Standard operating temperature range is -20 to 400° F (-20 to 204° C)  
For applications requiring higher temperatures, select the -HT option.
3. **Caution:** The Maximum Allowable Working Pressure (MAWP) of the valve shall not exceed the MAWP of the valve series or the selected connection, whichever is less.