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Leak - Proof Flow & Control Solution Partner

The Best Partner
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S-LOK® High Pressure Needle Valves

High Pressure Needle Valves



SHNV100

SHNV100 Series 10000psi High Pressure Needle Valves

Product Information

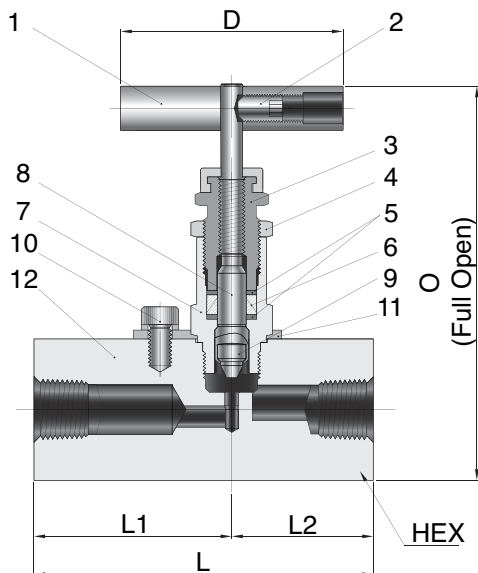
Features

- Packing bolt allows external packing adjustment.
- Chevron PTFE packing design provides highly qualified sealing maintainability.
- Packing under the stem threads is to isolate threads from system fluid and lubricant washout.
- non-rotating stem tip at closure is used for long-life and leak-tight shutoff.
- Lock plate ensures the valve to be fastened to the body.
- NACE MR0175/ISO 15156-3 are applicable.

Pressure-Temperature Ratings

Body material	Packing material	Temperature Rating	Pressure Rating @38° C (100 F)	Pressure Rating @ Max. Temp
Stainless steel	PTFE	-54 to 232°C (-65 to 450°F)	689 bar (10,000 psig)	285 bar@232°C 4,130 psig@450°F
	Graphite	-54 to 648°C (-65 to 1200°F)		118 bar@648°C 115 psig@1,200°F
Carbon steel	PTFE	-29 to 176°C (-20 to 350°F)	689 bar (10,000 psig)	360bar@176 °C (5,230psig@350°F)
	Graphite	-29 to 176°C (-20 to 350°F)		

Material of Construction



Component	Valve Body Materials	
	Stainless Steel	Carbon steel
	Grade/ASTM Specification	
1 Handle	Stainless Steel	Carbon steel
2 Set screw		Carbon steel
3 Packing bolt	S316/A276 or A479	C. Steel/JIS G4051
4 Lock nut		
5 Packing Ring	Reinforced PTFE	
6 Packing	Standard chevron PTFE packing, Optional Graphite	
7 Bonnet	S316/A276 or A479	C.STEEL/JIS G4051
8 Stem		S316/A276 or A479
9 Non-rotating stem disc	S630/A564	
10 Lock bolt	Stainless steel	
11 Lock plate		
12 Body	S316/A276 or A479	C.STEEL/JIS G4051 White zinc galvanized

Ordering Information and Dimensions

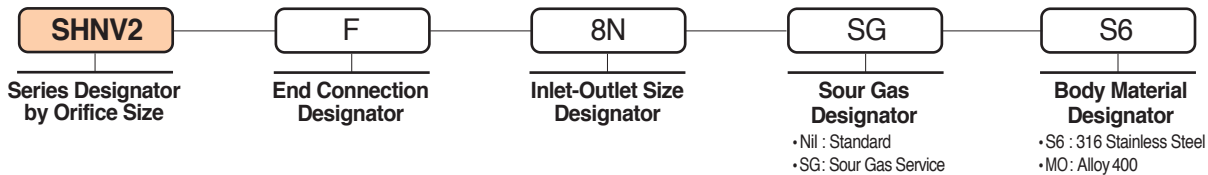
Basic Ordering NO.	End Connection		Orifice in(mm)	Dimensions					in(mm) O	
	Inlet	Outlet		L	L1	L2	Hex.	D		
SHNV1	F-4N	1/4 Female NPT		0.126 (3.2)	3 (76.2)	1.75 (44.4)	1.25 (31.8)	1.25 (31.8)	45	72.7
	F-6N	3/8 Female NPT								
SHNV2	F-8N	1/2 Female NPT		0.197 (5.0)	3 (76.2)	1.5 (38.1)	1.5 (38.1)	1.5 (38.1)	64	94.8
	MF-8N	1/2 Male NPT	1/2 Female NPT							
	MF-12N	3/4 Male NPT	3/4 Female NPT							



Product Information

How to Order

- To complete ordering number, add material designator S6 for 316 stainless steel or CS for carbon steel.
Example SHNV2-F-8N-S6
- To order an optional, Graphite packing, insert GF to the ordering number. Example SHNV2-F-8N-GF-S6
- To order NACE applicable valve, insert SG to the ordering number. Example SHNV2-F-8N-GF-SG-S6



Factory Test

- Every valve is factory tested with nitrogen at 69 bar (1,000 psig) for the leakage from the seat to a maximum allowable leak rate of 0.1 Standard Cubic Centimeter per minute (SCCM).
- Stem packing is tested for the detection of no leakage.

Packing Adjustment and Actuation Torque

- Extreme or rapid temperature cycle while valve in service may require packing adjustment.
- Valves that have not been actuated for a period of time may have a higher initial actuation torque.

Safety in Valve Selection

- In selection of a valve, the design of the total system must be considered to ensure safe and trouble-free performance. The system designer and the user are responsible for valve function, material's compatibility, adequate ratings, proper installation, operation, and maintenance.