

---

# High Pressure Bar Stock Needle Valves

• SHBNV Series

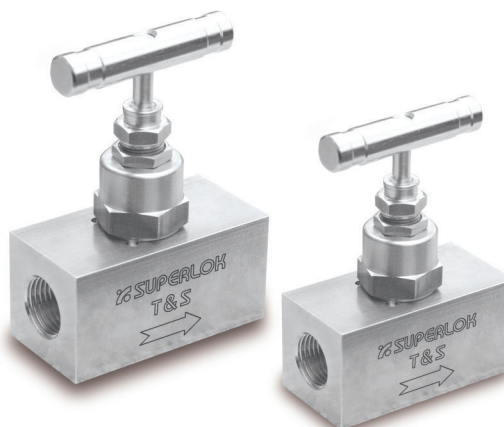


# High Pressure Bar Stock Needle Valves

## SHBNV Series

### Features

- Bar stock body
- Compact design
- Low operating torques
- Variety of End Connections
- Straight and Angle flow patterns
- Each and every valve is tested at the factory



### Specifications

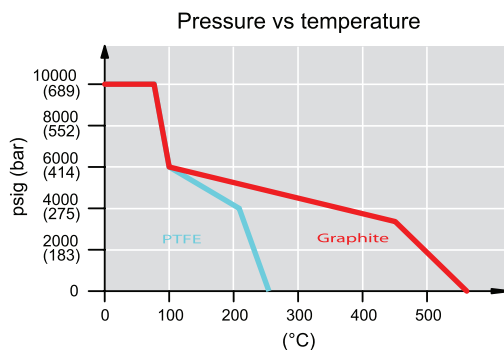
Maximum Working Pressure rating	10000psig (689bar) @100°F(38°C)
Temperature rating	-65 to 450°F (-54 to 232 °C) with PTFE packing
Body material	316 stainless steel, Carbon steel
Orifice	0.197 in. (5.0mm)

### Testing

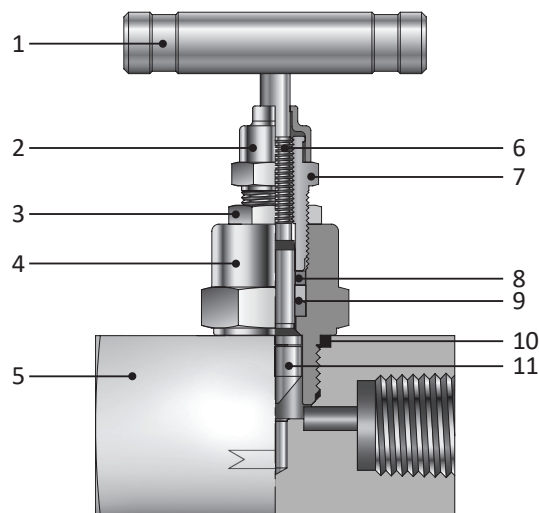
- Each Valve is tested with nitrogen at 1000psig(69bar) to maximum allowable leak rate of 0.1 SCCM.
- Hydrostatic shell test is performed at 1.5 times of the working pressure. (OPTION)

### Technical Data

Body Material	Stainless Steel	Carbon Steel
Temperature Rating	-65 °F ~ 450 °F (-54 °C ~ 232 °C)	-20 °F ~ 350 °F (-29 °C ~ 176 °C)
Pressure Rating @ 100 °F	10000 psig (689bar)	10000 psig (689bar)
Pressure Rating @ Max Temperature	4000 psig @ 500 °F 276 bar @ 260 °C	5230 psig @ 350 °F 360 bar @ 176 °C



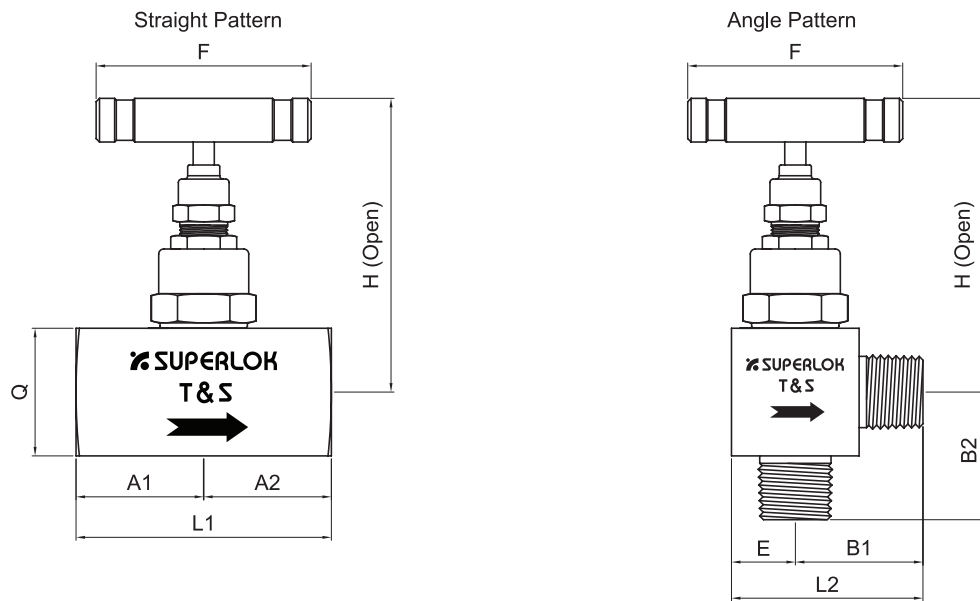
### Materials of Construction



No.	Component	Material Grade / ASTM Specification	
		Stainless Steel	Carbon Steel
1	Bar Handle	Stainless Steel	
2	Dust Cap	Nylon	
3	Lock Nut	Stainless Steel	
*4	Bonnet	SS316 / A479	A105
*5	Body	SS316 / A479	A105
*6	Stem	SS316 / A479	
7	Packing Bolt	SS316 / A276	
8	Packing Gland	SS316 / A276	
*9	Packing	PTFE, Graphite	
10	Bonnet Seal	PTFE, Graphite	
*11	Vee Tip	SS630 / A564	

\* Wetted components

## SHBNV Series



## Table of Dimensions

Part No.	Orifice	Cv	End Connections		Dimensions										
			Inlet	Outlet	L1	A1	A2	Q	L2	B1	B2	E	F	H	
SHBNV	F4N	4.0	0.52	1/4 Female NPT		60.4	30.2	30.2	32.0	51.0	35.0	35.0	16.0	64.0	85.5
	M4N-F4N			1/4 Male NPT	1/4 Female NPT	60.4	30.2	30.2							
	F6N			3/8 Female NPT		61.0	30.5	30.5							
	M6N-F6N			3/8 Male NPT	3/8 Female NPT	61.0	30.5	30.5							
	F8N			1/2 Female NPT		68.0	34.0	34.0							
	M8N-F8N			1/2 Male NPT	1/2 Female NPT	68.0	34.0	34.0							

- Dimensions and Drawings are for reference only and are subject to change without prior notice.
- Unless otherwise specified, all dimensions are in millimeters.
- Sizes, pressure classes, and end connections not listed are available upon request.
- Dimensions shown with SUPERLOK nuts finger-tight, where applicable.

## Ordering Information

Example :

	Inlet		Outlet				
<b>SHBNV</b>	<b>-</b>	<b>M8N</b>	<b>-</b>	<b>F8N</b>	<b>-</b>	<b>AH</b>	<b>- GR - C</b>
<b>1</b>		<b>2</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b> <b>6</b>

### 1. Valve Series

- SHBNV = Straight Flow Pattern
- SHBNVA = Angle Flow Pattern

### 2. Port Type

- M = Male Pipe Thread
- F = Female Pipe Thread

### 3. Port Size

Size (inch)	1/4	3/8	1/2
Screw BSPT	4R	6R	8R
Screw NPT	4N	6N	8N

### 4. Handle

- (Blank) = Stainless Steel Bar Handle (Standard)
- AH = Anodized black aluminum bar handle

### 5. Packing Material

- (Blank) = PTFE (Standard)
- GR = Grafoil

### 6. Body Material

- (Blank) = 316 Stainless Steel
- C = Carbon Steel

※ For special sizes and configurations, please consult BMT (SUPERLOK) sales representative.

# BMT Co., Ltd.

## Headquarters

(46031) 부산시 기장군 장안읍 신소재산단2로 17 (반룡리)

17, Sinsojaesandan 2-ro, Jangan-eup, Gijang-gun, Busan, 46031 South Korea

TEL: +82 51 780 5000 FAX: +82 51 780 5100

E-mail: [superlok@superlok.com](mailto:superlok@superlok.com)

WEB: [www.superlok.com](http://www.superlok.com)

## Fittings & Valves

### Industrial

Instrumentation Tube Fittings

i-Fitting®

Ball/Plug Valves

Double Block & Bleed Valves

Manifold/Gauge Valves

Globe/Needle Valves

Cryogenic Valves

Check/Relief/Excess Flow Valves

Medium/High Pressure Fittings & Valves

Eco-fuel Conversion and Supply Units

### Ultra High Purity

HGS® (High-integrated Gas System)

Weld & Metal Face Seal Fittings

Bend Fittings

Diaphragm Valves

Bellows Valves

Check Valves

Clean Ball Valves

Regulators

Gas Filters

HGS® : Trademark registered in Republic of Korea (as of April 2024)

## Electric & Energy

Metal Clad Switchgear (MCSG)

Compact Switchboard

Motor Control Center (MCC)

Smart Distribution Board

Energy Management System (EMS)