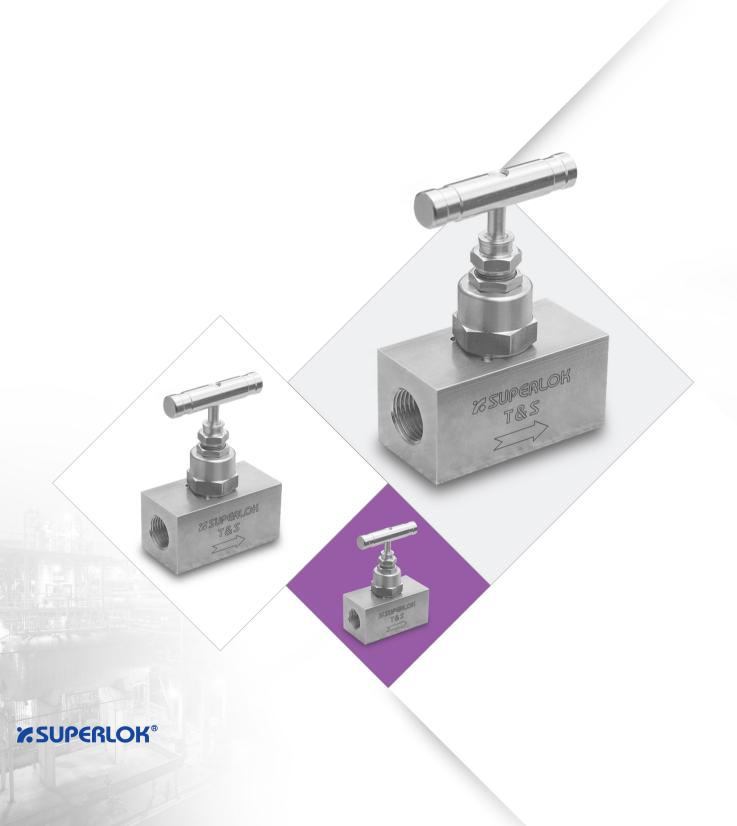


# High Pressure Bar Stock Needle Valves



# **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**

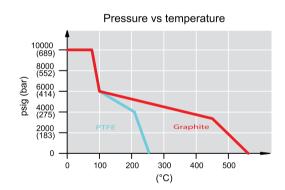
Maximum Working Pressure rating	10000psig (689bar) @100°F(38°C)
Temperature rating	-65 to 450°F (-54 to 232 °C) with PTFE packing
Body material	316 stainless steel, Carbon steel
Orifice	0.197 in. (5.0mm)

## **Testing**

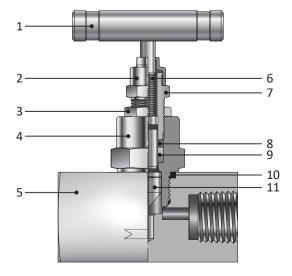
- Each Valve is tested with nitrogen at 1000psig(69bar) to maximum allowable leak rate of 0.1 SCCM.
- Hydrostatic shell test is porformed at 1.5 times of the working pressure. (OPTION)

### **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		



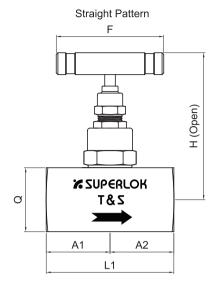
## **Materials of Construction**

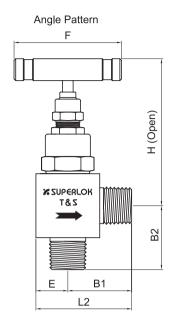


		Material Grade / A	CTM Specification					
No. Component	Component	Material Grade / ASTM Specification						
		Stainless Steel	Carbon Steel					
1	Bar Handle	Stainless Steel						
2	Dust Cap	Nylon						
3	Lock Nut	Stainless Steel						
*4	Bonnet	SS316 / A479	A105					
*5	Body	SS316 / A479	A105					
*6	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						

<sup>\*</sup> Wetted components

#### **SHBNV Series**



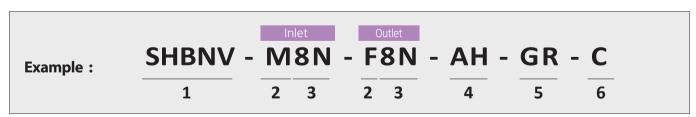


### **Table of Dimensions**

Part No.		0.15	C	End Connections		Dimensions									
		Orifice	Cv	Inlet	Outlet	L1	A1	A2	Q	L2	B1	B2	Е	F	Н
	F4N		0.52	1/4 Female NPT		60.4	30.2	30.2							
SHBNV	M4N-F4N			1/4 Male NPT	1/4 Female NPT	60.4	30.2	30.2							
	F6N	4.0		3/8 Female NPT		61.0	30.5	30.5	32.0 5	51.0	35.0	35.0	16.0	640	85.5
	M6N-F6N	4.0		3/8 Male NPT	3/8 Female NPT	61.0	30.5	30.5	32.0	32.0 51.0	35.0	35.0	16.0	64.0	85.5
	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**



- 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
Screwed BSPT	4R	6R	8R
Screwed 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





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i-Fitting®

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Double Block & Bleed Valves

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#### **ULTRA HIGH PURITY**

Weld & Metal Face Seal Fittings

Bend Fittings

Diaphragm Valves

Bellows Valves

Check Valves

Clean Ball Valves

Regulators

## **Electric & Energy**

#### **PRODUCT & SOLUTION**

Compact Switchboard

Motor Control Center (MCC)

**Smart Distribution Board** 

Energy Management System (EMS)

#### **COMPONENTS (BMT PATENTED)**

MCBS (Molded Case Busbar System)

MCPD (Molded Case Power Distributor)

Smart-eye (AC/DC Meter)