



# Integral Bonnet Bar Stock Needle Valves

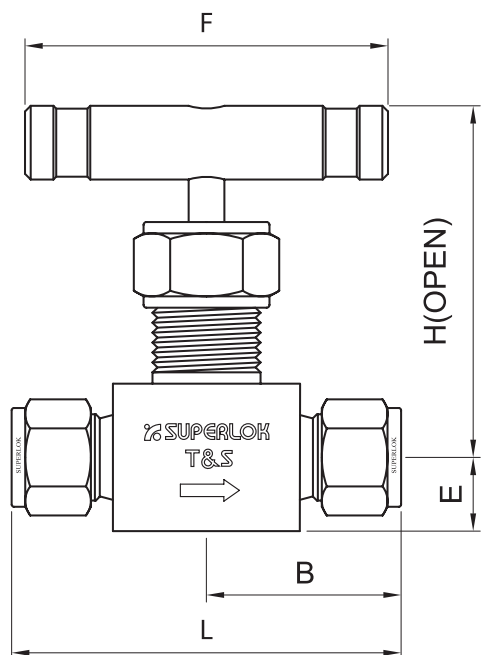
High Technology Valve & Fitting Series



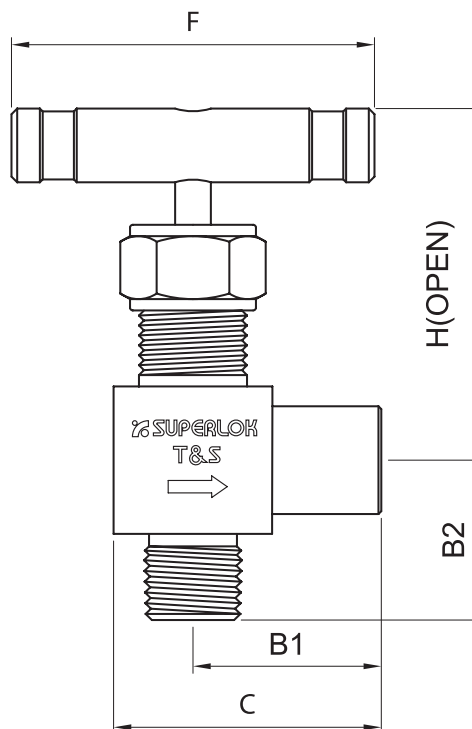
 **BMT Co., Ltd.**  
[www.superlok.com](http://www.superlok.com)

# SBNV Series

## STRAIGHT TYPE



## ANGLE TYPE



## Table of Dimensions

Order Number		Orifice (mm)	Cv	End Connection		Dimension (mm)								
Series	Part No.			Inlet	Outlet	L	B	B1	B2	C	E	F	H	
SBNV1	F	4N	4.4	0.37	1/4" Female NPT		47.6	23.8	25.4	25.4	36.5	11.1	45.0	51.0
	F	4R			1/4" ISO Female									
	M	4N			1/4" Male NPT		49.2	24.6	-	-	-	-		
	MF	4N			1/4" Male NPT	1/4" Female NPT	48.4	23.8	25.4	26.2	36.5	11.1		
	MS	4N-4			1/4" Male NPT	1/4" SUPERLOK	53.3	28.7	28.7					
	S	4			1/4" SUPERLOK		62.4	31.2		-	-	-		
SBNV2	F	6N	6.3	0.73	3/8" Female NPT		64.0	32.0	31.8	31.8	48.6	16.8	64.0	63.0
	F	8N			1/2" Female NPT					35.8				
	F	8R			1/2" ISO Female					31.0				
	MF	6N			3/8" Male NPT	3/8" Female NPT	64.3	35.8	-	-	-	-		
	MF	8N			1/2" Male NPT	1/2" Female NPT								
	MF	12N-8N			3/4" Male NPT	1/2" Female NPT	63.6	-	-	-	-			
	MS	6N-8			3/8" Male NPT	1/2" SUPERLOK	73.7	41.9	-	-	-	-		
	S	6			3/8" SUPERLOK		78.2	39.1	-	-	-	-		
	S	8			1/2" SUPERLOK		83.8	41.9	-	-	-	-		

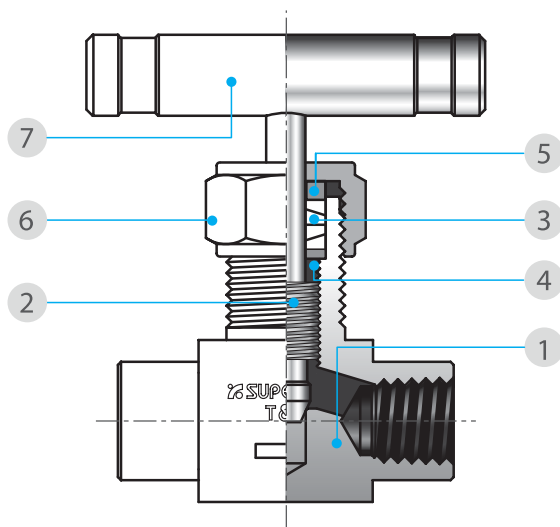
Dimension shown with **SUPERLOK** nuts measure in the finger-tight, where applicable.  
All dimensions are for reference only, subject to change.

If require angle type valves, add-A to the end of ordering number.(ex:SBNV1-S-4-A)

## Features

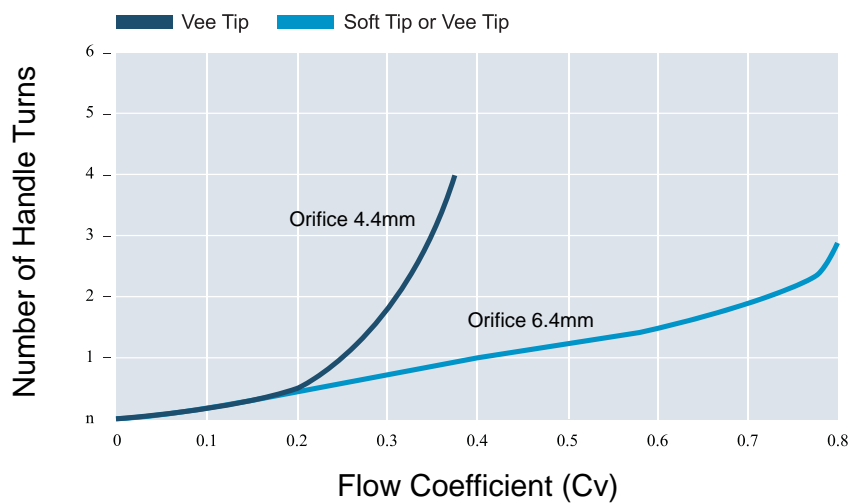
- Pressure rating up to 6000psig(413bar)
- Temperature rating from -65°F to 450°F(-54°C to 232°C) with standard PTFE packing
- Straight and angle pattern body style

## Materials of Construction

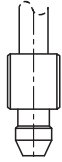


NO.	Description	Material
1	Body	SS316
2	Soft Tip	PCTFE
	Vee Tip	SS316
3	Packing	PTFE
4	Packing Support	SS316
5	Packing Gland	SS316
6	Packing Nut	SS316
7	Bar Handle	SS316
	Knob Handle	Phenolic

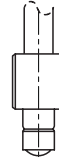
## Flow Characteristics



## Stem Tips Available



Vee Stem (Standard)



Soft Seat Stem

## Temperature & Working Pressure

ASME Class	2500
Material Name	SS 316
Temperature °F (°C)	Working Pressure psig(bar)
-65(-53) to 100(37)	6000(413)
200(93)	5160(355)
250(121)	4910(338)
300(148)	4660(321)
350(176)	4470(307)
400(204)	4280(294)
450(232)	4130(284)
500(260)	3980(294)
600(315)	3760(259)

## Temperature & Pressure Rating

Body Material	Stem Tip	Temperature Rating	Pressure Rating @ -65°F ~ 100°F (-54°C ~ 38°C)
316 Stainless Steel	Vee	-65°F ~ 450°F (-54°C ~ 232°C)	6000psig
	Soft Seat (PCTFE)	-65°F ~ 200°F (-54°C ~ 93°C)	

■ The above rating is for a standard valve with PTFE packing.

## Packing and Body Materials & Temperature and Pressure Rating

Packing Material	Body Material	Temperature	Pressure Rating @ Temp. Rating
PTFE (Standard)	316 Stainless Steel	-65°F ~ 450°F (-54°C ~ 232°C)	4130 psig
PEEK		-65°F ~ 600°F (-54°C ~ 315°C)	3760 psig

## Testing

- Every Integral Bonnet Bar Stock Needle Valve is factory tested with nitrogen at 1000psig(69bar) to max leak of 0.1SCCM.
- Hydrostatic shell test is performed at 1.5 times the working pressure.