

# SBVH360 Ball Valves

## Three-piece High-pressure Type

### Features

- Compact design
- High flow rate with maximum orifice
- Variety of End Connections
- Anti blow-out stem design
- Each and every valve is tested at the factory
- Fire safety design available

### Specifications

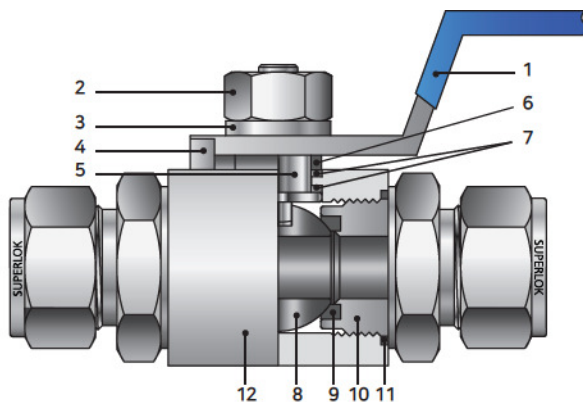
- Pressure rating : 6000psig (414bar)@70°F (21°C)
- Temperature rating : -22 to 300°F (-30 to 150°C) with PCTFE seat  
-65 to 500°F (-54 to 260°C) with PEEK seat
- Body material : 316 stainless steel and Brass
- Port Connections : 1/4 to 1 in. and 6 to 25mm
- Orifice : 10.0 to 19.0mm



### 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 (Optional).

### Materials of Construction

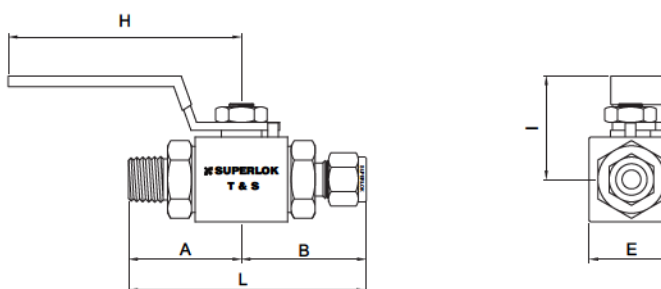


No.	Component	Material Grade / ASTM Specification
		Stainless Steel
1	Handle	SS304 Lever handle with PVC color coated
2	Lock Nut	Stainless Steel
3	Spring Washer	
4	Pin	
*5	Stem	SS316 / A276
6	Stem Washer	SS304 / A276
*7	Stem Packing	PTFE
*8	Ball	SS316 / A276
*9	Seat	PCTFE (Standard)
*10	End Connector	SS316 / A276
*11	Connector Seal	PTFE
*12	Body	SS316 / A276

※ Wetted components

## Table of Dimensions

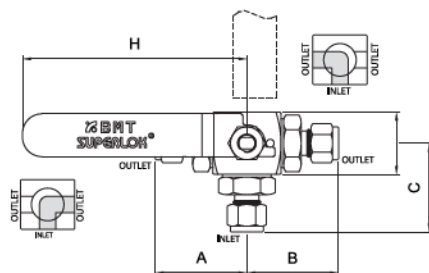
### SBVH360 Series(2-Way)



Part No.	Orifice	Cv	End Connections	Dimensions					
				A	B	L	H	I	E
SBVH3601	S4	1.2	1/4" SUPERLOK	45.7	45.7	91.4	115	38.5	32.0
	S6	3.7	3/8" SUPERLOK	47.5	47.5	94.4			
	S8	7.5	1/2" SUPERLOK	49.8	49.8	99.6			
	F4N		1/4" FEMALE NPT	37.0	37.0	74.0			
	F6N		3/8" FEMALE NPT	38.0	38.0	76.0			
	F8N		1/2" FEMALE NPT	41.5	41.5	83.0			
	M4N	3.7	1/4" MALE NPT	42.1	42.1	84.2			
	M6N	7.2	3/8" MALE NPT	42.1	42.1	84.2			
M8N	7.5	1/2" MALE NPT	47.0	47.0	94.0				
SBVH3602	F8N	10.0	1/2" FEMALE NPT	45.5	45.5	91.0	165	51.9	40.0
	F12N		3/4" FEMALE NPT	51.0	51.0	102.0			
	M12N		3/4" MALE NPT	52.5	52.5	105.0			
	S10		5/8" SUPERLOK	54.0	54.0	108.0			
	S12		3/4" SUPERLOK	54.0	54.0	108.0			
SBVH3603	F12N	19.0	3/4" FEMALE NPT	54.0	54.0	108.0	165	57.0	50.0
	F16N		1" FEMALE NPT	62.5	62.5	125.0			
	S12		3/4" SUPERLOK	61.9	61.9	123.8			
	S16		1" SUPERLOK	66.4	66.4	132.8			
	M12N		3/4" MALE NPT	59.0	59.0	118.0			
	M16N		1" MALE NPT	63.8	63.8	127.6			

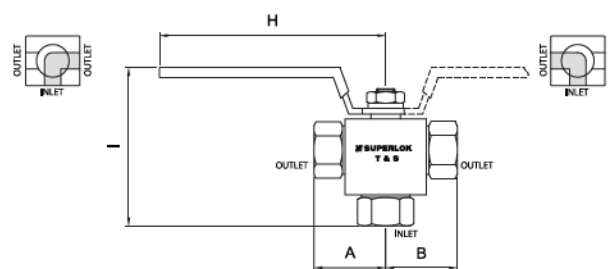
### SBVH360-3S Series (3-Way)

Side Inlet Port



### SBVH360-3 Series (3-Way)

Bottom Inlet Port



Part No.	Orifice	End Connections	Dimensions				
			A	B	I	H	C
SBVH36013 & SBVH36013S	S4	1/4" SUPERLOK	45.7	45.7	91.4	115	53.3
	S6	3/8" SUPERLOK	47.2	47.2	94.4		
	S8	1/2" SUPERLOK	49.8	49.8	99.6		
	F4N	1/4" FEMALE NPT	37.0	37.0	74.0		
	F6N	3/8" FEMALE NPT	38.0	38.0	76.0		
	F8N	1/2" FEMALE NPT	41.5	41.5	83.0		
SBVH36023 & SBVH36023S	S10	5/8" SUPERLOK	54.0	54.0	108.0	165	65.3
	S12	3/4" SUPERLOK	54.0	54.0	108.0		
	F8N	1/2" FEMALE NPT	45.5	45.5	91.0		
	F12N	3/4" FEMALE NPT	51.0	51.0	102.0		
SBVH36033 & SBVH36033S	S12	3/4" SUPERLOK	61.9	61.9	123.8	165	69.8
	S16	1" SUPERLOK	66.4	66.4	132.8		
	F12N	3/4" FEMALE NPT	59.0	59.0	118.0		
	F16N	1" FEMALE NPT	63.8	63.8	127.6		

- 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.

## Pressure & Temperature Rating

### 2-Way Straight

Valve Series	Materials			Pressure Rating @-54 to 21°C (-65 to 70°F)	Temperature Rating
	Seat	Stem Packing	End Connector Seal		
3601	PVDF	PTFE		6000psig (413bar)	-30 to 130°C (-22 to 265°F)
	PCTFE				-30 to 150°C (-22 to 300°F)
	PEEK				10000psig (689bar)
3602 & 3603	PVDF			5000psig (344bar)	-23 to 191°C (-10 to 375°F)
	PCTFE			6000psig (413bar)	
	PEEK				

### 2-Way Angle & 3-Way

Valve Series	Materials			Pressure Rating @-54 to 21°C (-65 to 70°F)	Temperature Rating
	Seat	Stem Packing	End Connector Seal		
3601	PVDF	PTFE	VITON	4000psig(275bar)	-30 to 130°C (-22 to 265°F)
	PCTFE				-30 to 150°C (-22 to 300°F)
	PEEK				6000psig(413bar)
3602 & 3603	PVDF			3000psig(206bar)	-23 to 191°C (-10 to 375°F)
	PCTFE			4000psig(275bar)	
	PEEK				

## Ordering Information

Example :	<b>SBVH3602</b>	<b>- S</b>	<b>12</b>	<b>- PE</b>	<b>- M</b>
	1	2	3	4	5

### 1. Valve Series

#### 2-Way straight

- SBVH3601
- SBVH3602
- SBVH3603

#### 2-Way Angle

- SBVH3601A
- SBVH3602A
- SBVH3603A

#### 3-Way : Bottom Inlet Port

- SBVH36013
- SBVH36023
- SBVH36033

#### 3-Way : Side Inlet Port

- SBVH36013S
- SBVH36023S
- SBVH36033S

### 2. End Connection

- S = SUPERLOK Tube Fitting
- F = Female Thread
- M = Male Thread

### 3. Connection Size

#### Tube O.D Designator

Tube O.D (inch)	1/4	3/8	1/2	5/8	3/4	1
Designator	4	6	8	10	12	16

#### Pipe Thread Designator

Size(inch)	1/4	3/8	1/2	3/4	1
Screwed NPT	4N	6N	8N	12N	16N
Screwed BSPT	4R	6R	8R	12R	12R

### 4. Seat Material

- (Blank)= PCTFE(Standard)
- PV = PVDF
- PE = PEEK

### 5. Body Material

- (Blank)= 316 Stainless Steel
- M = ALLOY (Monel)

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