

# Key Operation Ball Valves

Key Operation Ball Valves (a ball valve that can be opened or closed with Master Key) were first developed by BMT in 2007. Key Operation Ball Valves are secured against undesired manipulation that can lead to system failures.



## Features

- The valve can only be operated by inserting Master Key into the handle.
- Applicable to various types of valves such as ball, needle, diaphragm, and bellows valves.
- Accidents caused by inadvertent or unauthorized operation can be prevented.
- Ideal to use in areas populated or opened to unauthorized individuals, preventing accidents resulted from undesired manipulation.

## Options

- **Standard type:** The locking function works at both open and closed positions as the Master Key is taken out from the handle.
- **Open-Free type:** At fully-opened position, it is impossible to close the valve without the insertion of the key. Suitable for systems where the stop of flow from inadvertent or unauthorized manipulation may lead to catastrophic results.
- **Close-Free Type:** At fully-closed position, it is impossible to open the valve without the insertion of the key. Suitable for systems where the start of fluid flow from inadvertent or unauthorized may lead to catastrophic results.

# Low Pressure Key Operation Ball Valves

## SBVL210 Series

### Features

- Locking handle in both On and Off positions
- Compact design
- Low operating torques
- Variety of End connections



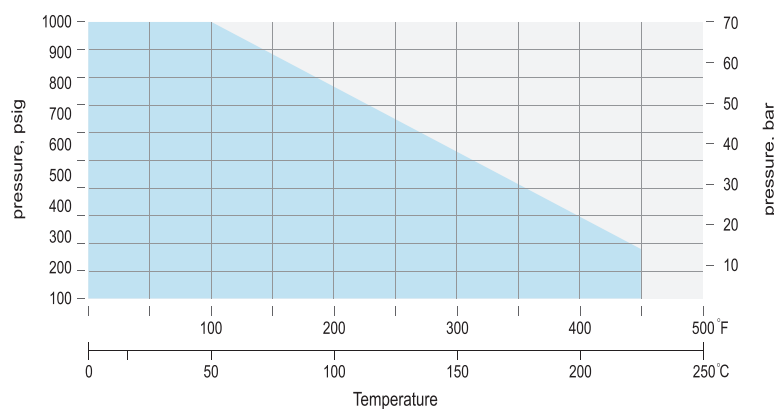
### Specifications

- Pressure rating: 1000psig (69bar) @100 °F (38 °C)
- Temperature rating
- Body material: 316 stainless steel
- Port Connections: 1/4 to 1 in. and 6 to 25mm
- Orifice: 5.0 to 16.0mm

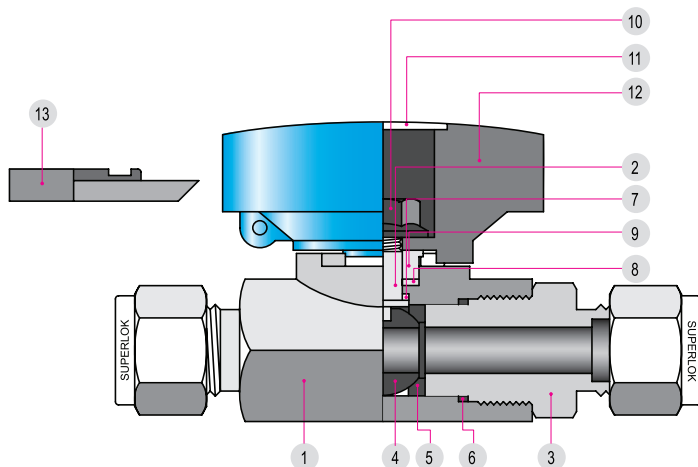
### Testing

- Each and every valve is tested with nitrogen at 1000psig (69bar).
- The valves have max allowable leak rate of 0.1 cm<sup>3</sup>/min
- Shell testing can be performed upon request.

### Pressure-Temperature Rating



### Materials of Construction

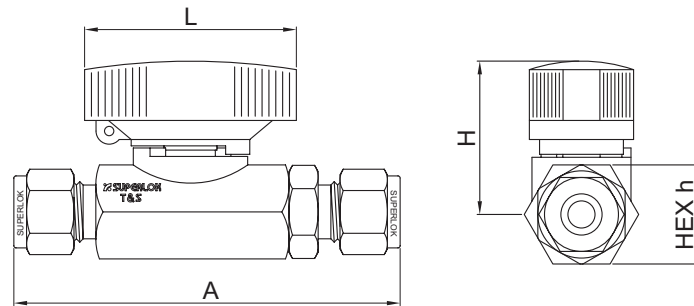


No.	Component	Material Grade ASTM Specification
*1	Body	A185-F316 / A276-316 / A351-CF8M
*2	Stem	A276-316
*3	End Connector	A276-316
*4	Ball	A276-316
*5	Ball Seal	PTFE
*6	Connector Seal	PTFE
*7	Lower Stem Seal	PTFE
*8	Upper Stem Seal	PTFE
*9	Stem Washer	A276-304
10	Nut	Stainless Steel
11	Handle Cap	Aluminum
12	Handle	Aluminum
13	Master Key	Zinc

\* Wetted components

## Table of Dimensions

### SBVL210 Series



Part No.	Orifice	Cv	End Connection	Dimensions				
				h	A	H	L	
SBVL 210	S6M	5.0	1.25	6mm SUPERLOK	18.0	79.8	32.3	42.0
	S4			1/4" SUPERLOK				
	S10M	7.0	2.5	10mm SUPERLOK	22.2	91.5	35.6	50.0
	S6			3/8" SUPERLOK				
	S12M	9.0	9.5	12mm SUPERLOK	27.0	101.4	37.6	50.0
	S8			1/2" SUPERLOK				
	S16M	12.5	12.7	16mm SUPERLOK	31.8	107.0	40.4	60.0
	S12			3/4" SUPERLOK				
S25M	16.0	17.5	25mm SUPERLOK	38.1	131.0	43.5	60.0	
S16			1" SUPERLOK					

- 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 :	<b>SBVL 210</b>	-	<b>S8</b>	-	<b>RD</b>	-	<b>OT</b>
	1		2 3		4		5

### 1. Valve Series

- SBVL210

### 2. End Connection

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

### 3. End Connection Size

#### Tube O.D

Tube O.D (inch)	1/4	3/8	1/2	3/4	1
Designator	4	6	8	12	16
Tube O.D (inch)	6	10	12	16	25
Designator	6M	10M	12M	16M	25M

#### Pipe Thread

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

### 4. Handle Color

- (Blank) = Blue (Standard)
- RD = Red
- BK = Black

### 5. Valve Type\*

- (Blank) = Standard Type
- OT = Open Free Type
- CT = Close Free Type

\* Please refer to page 282 for the valve types.