

# **Key Operation Ball Valves**



## **Key Operation Ball Valves**

Key Operation Ball Valve (a ball valve that can be opened or closed with Master Key) was first developed by BMT in 2007. Key Operation Ball Valve is secured against undesired manipulation that can lead to massive system failures, leakage of hazardous gases or fluids, ultimately, catastrophic damages and losses.



#### **Features**

- The valve can only be operated 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 On and Off positions
- Compact design
- Low operating torques
- Variety of End connections

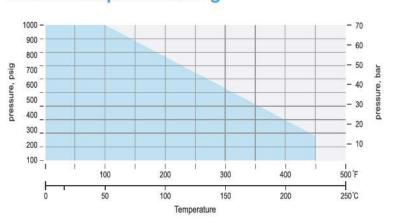
### **Specifications**

- Pressure rating: 1000psig (69bar) @100 °F (38 °C)
- Temperature rating: -20 °C~ 232 °C
- Body material: 316 stainless steel
- Port Connections: 1/4 to 1 in. and 6 to 25mm
- Orifice: 5.0 to 16.0mm

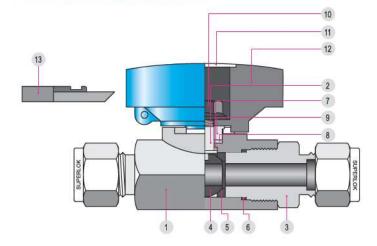
#### **Testing**

- 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**



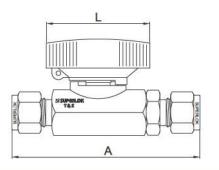
No.	Component	Material Grade ASTM Specification				
*1	Body	A185-F316 / A276-316 / A351-CF8M				
*2	Stem	A276-316				
*3	End Connector	A276-316				
*4	Ball	A276-316				
*5	Ball Seal	PTFE				
*6	Connector Seal	PTFE				
*7	Lower Stem Seal	PTFE				
*8	Upper Stem Seal	PTFE				
*9	Stem Washer	A276-304			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

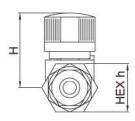
<sup>\*</sup> Wetted components

<sup>-</sup> Components can limit the pressure and temperature ranges of the valve. Please consult BMT (SUPERLOK) sales representative for your specific application.

#### **Table of Dimensions**

#### SBVL210 Series





Part No.		Orifice	Cv	End Connection	Dimensions			
					h	Α	Н	L
SBVL 210	S6M	5.0	1.25	6mm SUPERLOK	18.0	79.8	32.3	42.0
	S4	5.0		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**

#### 1. Valve Series

□ SBVL210

#### 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

#### 4. Handle Color

- □ (Blank)= Blue (Standard)
- □ RD = Red
- BK = Black
- \* For special sizes and configurations, please consult BMT (SUPERLOK) sales representative.

#### 2. End Connection

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

#### 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

#### 5. Valve Type\*

- □ (Blank) = Standard Type
- □ OT = Open Free Type
- □ CT = Close Free Type
- \* Please refer to page 2 for the valve types.





## BMT Co., Ltd.

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Check/Relief/Excess Flow Valves

High Pressure Valves

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**Bend Fittings** 

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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)