High Pressure Key Operation Ball Valves SBVL360 Series

Features

- Locking handle in On and Off positions
- High flow capacity in a compact design
- Low operating torques
- Positive handle stops
- Variety of End connections



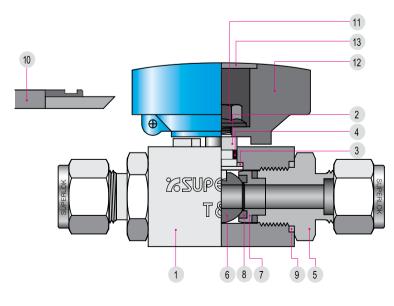
Specifications

- Pressure rating: 6000psig (413bar) @70 °F(21 °C) with standard PCTFE seat
- Temperature rating: -65 to 350 °F (-54 to 177 °C) with standard PCTFE seat
- Body material: 316 stainless steel
- Port connections: 1/4 to 3/4 in. and 6 to 25mm

Testing

- Each and every valve is tested with nitrogen at 1000psig (69bar).
- Valve have max allowable leak rate of 0.1 cm³/min
- Shell testing is performed on demand.

Materials of Construction

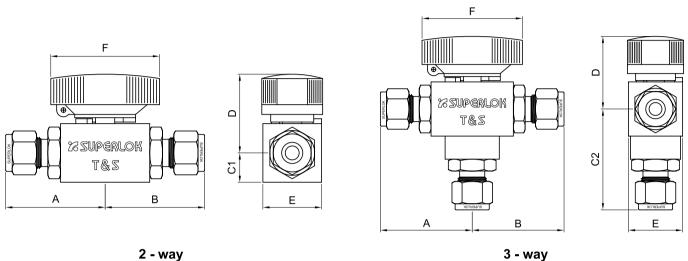


| No. | Component | Material Grade ASTM Specification | | |
|-----|----------------|--------------------------------------|--|--|
| *1 | Body | A276-316 / A351-CF8M | | |
| *2 | Stem | SS316 / A276 | | |
| *3 | Thrust Washer | PEEK | | |
| *4 | O-Ring | NBR | | |
| *5 | End Connector | A276-316 | | |
| *6 | Ball | A276-316 | | |
| *7 | Seal Retainer | A276-316 | | |
| *8 | Ball Seal | PCTFE | | |
| *9 | Connector Seal | PTFE | | |
| 10 | Master Key | Zinc | | |
| 11 | Nut | Stainless Steel | | |
| 12 | Handle | Aluminum | | |
| 13 | Handle Cap | Aluminum | | |

* Wetted components

Table of Dimensions

SBVL360



2 - way

| Part No. | | 0.15 | _ | | Dimensions | | | | | | |
|-----------------|------|------------|------|-----------------|------------|------|------|------|------|------|------|
| | | Orifice Cv | | End Connection | А | В | C1 | C2 | D | Е | F |
| | S6M | | | 6mm SUPERLOK | 43.8 | 43.8 | 12.0 | 43.8 | 33.7 | 24.0 | 42.0 |
| SBVL3601 | S4 | 4.8 | 1.04 | 1/4" SUPERLOK | 43.8 | 43.8 | | 43.8 | | | |
| or SBVL36013 | F2N | 4.8 | | 1/8" FEMALE NPT | 34.0 | 34.0 | | 34.0 | | | |
| | M4N | | | 1/4" MALE NPT | 40.2 | 40.2 | | 40.2 | | | |
| | S8M | | 2.34 | 8mm SUPERLOK | 45.2 | 45.2 | 13.5 | 53.2 | 36.2 | 27.0 | 50.0 |
| | S10M | | | 10mm SUPERLOK | 46.0 | 46.0 | | 54.0 | | | |
| SBVL3602 | S6 | 6.4 | | 3/8 " SUPERLOK | 45.7 | 45.7 | | 53.7 | | | |
| or SBVL36023 | F4N | 0.4 | | 1/4" FEMALE NPT | 38.4 | 38.4 | | 46.4 | | | |
| | M4N | | | 1/4" MALE NPT | 41.1 | 41.1 | | 49.1 | | | |
| | M6N | | | 3/8" MALE NPT | 41.1 | 41.1 | | 49.1 | | | |
| | S12M | 9.5 | 5.57 | 12mm SUPERLOK | 59.2 | 59.2 | | 69.2 | | | |
| | S16M | | | 16mm SUPERLOK | 59.2 | 59.2 | | 69.2 | | | |
| SBVL3603 or | S8 | | | 1/2" SUPERLOK | 59.4 | 59.4 | 16.0 | 69.4 | 41.5 | 32.0 | 60.0 |
| | S12 | 10.2 | 6.42 | 3/4" SUPERLOK | 59.2 | 59.2 | | 69.2 | | | |
| SBVL36023 | F6N | 10.3 | 0.42 | 3/8" FEMALE NPT | 49.5 | 49.5 | | 59.5 | | | |
| | F8N | | | 1/2" FEMALE NPT | 54.6 | 54.6 | | 64.6 | | | |
| | M8N | | | 1/2" MALE NPT | 56.4 | 56.4 | | 66.4 | | | |

- 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.

Technical Data

Temperature and Pressure Rating

| Seat | Tanana andara Datina | Pressure Rating | @ 100°F (38°C) | Pressure Rating @ Max. Temperature | | |
|----------|-----------------------------|--------------------|-------------------------------|------------------------------------|---------------|--|
| Material | Temperature Rating | Stainless Steel | less Steel Brass Stainless St | | Brass | |
| PCTFE | -65 to 300°F (-54 to 148°C) | 6000psig (413 bar) | 3000psig (207 bar) | 1000psig@300°F (68.9bar@148°C) | 700psig@300°F | |
| PEEK | -65 to 450°F (-54 to 232°C) | 6000psig (413 bar) | 3000psig (207 bar) | 700psig@400°F (48bar@200°C) | (48bar@200°C) | |
| PTFE | -65 to 300°F (-54 to 148°C) | 1500psig (103 bar) | 1500psig (103 bar) | 250psig@300°F (17.2bar@148°C) | | |

Ordering Information

| Example : | SBVL 3602 | - 56 - | ΡΕ | - RD - | ОТ | |
|-----------|-----------|--------|----|--------|----|--|
| Liampie . | 1 | 2 3 | 4 | 5 | 6 | |

1. Valve Series

| 2-Way | 3-Way |
|----------|-----------|
| SBVL3601 | SBVL36013 |
| SBVL3602 | SBVL36023 |
| SBVL3603 | SBVL30233 |

2. End Connection

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

3. End Connection Size

Tube O.D Designator

| Tube OD (inch) | 1/4 | | 3/8 | 1/2 | | 3/4 | |
|----------------|-----|----|-----|-----|-----|-----|--|
| Designator | 4 | | 6 | 8 | | 12 | |
| Tube OD (mm) | 6 | 8 | 10 | 12 | 16 | 20 | |
| Designator | 6M | 8M | 10M | 12M | 16M | 20M | |

Pipe Thread Designator

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

4. Handle Color

□ *(Blank)*= PCTFE □ **PE** = PEEK □ **PT** = PTFE

5. Handle Color

□ **(Blank)**= Blue (Standard) □ **RD** = Red □ **BK** = Black

6. Valve Type*

□ (*Blank)* = Standard Type □ OT = Open Free Type □ CT = Close Free Type □ ST = Special Type

* Please refer to page 296 for the valve types.