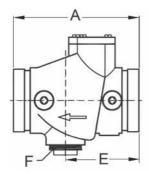


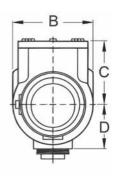
MODEL SJ-900 SWING CHECK VALVE

The *Shurjoint* Model SJ-900 Swing Check Valve is a grooved-end check valve featuring a spring-loaded wide-open clapper and a non-stick leak tight EPDM rubber seal. With a rated working pressure of 300 psi (20 bar), the valve can be installed in the horizontal or vertical position (upward flow only). Valves are tested to API 598.

Important Note: The placement of check valves too close to sources of unstable flows may damage the system and reduce valve life. Sound piping practices dictate check valves should always be installed a minimum of five (5) times the pipe diameter downstream from pumps, reducers, elbows and the like. Distances between three (3) and five (5) times are allowable when flow velocity does not exceed eight (8) feet per second (2.4 mps). Distances less than three diameters are not recommended and will void any warranty.







| Model SJ-900 Swing Check Valve | | | | | | | | | | | | | |
|--------------------------------|--------|-----------------------------|-------|-------|------------|------|-------|-------|--------|--|--|--|--|
| Nominal | Pipe | Max. Working Pressure | | | Dimensions | | | | | | | | |
| Size | O.D. | (CWP)* | Α | В | С | D | E | F | Weight | | | | |
| in | in | PSI | in | in | in | in | in | Drain | Lbs | | | | |
| mm | mm | Bar | mm | mm | mm | mm | mm | | Kgs | | | | |
| 2½ | 2.875 | 300 | 7.48 | 4.50 | 3.75 | 2.50 | 4.00 | 11/4" | 11.0 | | | | |
| 65 | 73.0 | 20 | 190 | 114 | 95 | 64 | 102 | NPT | 5.0 | | | | |
| 76.1 mm | 3.000 | 300 | 7.48 | 4.50 | 3.75 | 2.50 | 4.00 | 11/4" | 10.8 | | | | |
| | 76.1 | 20 | 190 | 114 | 95 | 64 | 102 | BSP | 4.9 | | | | |
| 3 | 3.500 | 300 | 7.00 | 4.50 | 3.75 | 2.50 | 4.00 | 11/4" | 10.8 | | | | |
| 80 | 88.9 | 20 | 178 | 114 | 95 | 64 | 102 | NPT | 4.9 | | | | |
| 4 100 | 4.500 | 300 | 8.50 | 5.75 | 4.60 | 3.15 | 5.00 | 2" | 18.3 | | | | |
| | 114.3 | 20 | 216 | 146 | 117 | 80 | 127 | NPT | 8.3 | | | | |
| 139.7 mm | 5.500 | 300 | 13.00 | 8.58 | 7.00 | 4.50 | 7.64 | 2" | 51.7 | | | | |
| | 139.7 | 20 | 330 | 218 | 178 | 114 | 194 | BSP | 23.5 | | | | |
| 5 | 5.563 | 300 | 13.00 | 8.58 | 7.00 | 4.50 | 7.64 | 2" | 51.7 | | | | |
| 125 | 141.3 | 20 | 330 | 218 | 178 | 114 | 194 | NPT | 23.5 | | | | |
| 165.1 mm | 6.500 | 300 | 12.00 | 8.25 | 7.00 | 4.50 | 7.00 | 2" | 51.7 | | | | |
| | 165.1 | 20 | 305 | 210 | 178 | 114 | 178 | BSP | 23.5 | | | | |
| 6 | 6.625 | 300 | 12.00 | 8.25 | 7.05 | 4.50 | 7.00 | 2" | 51.7 | | | | |
| 150 | 168.3 | 20 | 305 | 210 | 178 | 114 | 178 | NPT | 23.5 | | | | |
| 8 | 8.625 | 300 | 14.37 | 10.47 | 8.54 | 5.50 | 10.00 | 2" | 99.7 | | | | |
| 200 | 219.1 | 20 | 365 | 266 | 217 | 140 | 254 | NPT | 45.3 | | | | |
| 10 | 10.750 | 300 | 20.00 | 14.37 | 10.75 | 7.25 | 10.00 | 2" | 217.8 | | | | |
| 250 | 273.0 | 20 | 508 | 365 | 273 | 184 | 254 | NPT | 99.0 | | | | |
| 12 | 12.750 | 300 | 24.00 | 15.51 | 12.87 | 8.54 | 12.00 | 2" | 342.3 | | | | |
| 300 | 323.9 | 20 | 610 | 394 | 327 | 217 | 305 | NPT | 155.6 | | | | |
| 200 JIS | 8.516 | 300 | 14.37 | 10.47 | 8.54 | 5.50 | 10.00 | 2" | 99.7 | | | | |
| | 216.3 | 20 | 365 | 266 | 217 | 140 | 254 | BSP | 45.3 | | | | |
| 250 JIS | 10.528 | 300 | 20.00 | 14.37 | 10.75 | 7.25 | 10.00 | 2" | 216.7 | | | | |
| | 267.4 | 20 | 508 | 365 | 273 | 184 | 254 | BSP | 98.5 | | | | |
| 300 JIS | 12.539 | 300 | 24.00 | 15.51 | 12.87 | 8.54 | 12.00 | 2" | 342.3 | | | | |
| | 318.5 | 20 | 610 | 394 | 327 | 217 | 305 | BSP | 155.6 | | | | |

^{*}Working pressure is based on connection with roll- or cut-grooved standard wall carbon steel pipe.



Flow Data

Equivalent Length of Sch. 40 pipe

| Model SJ-900 Swing Check Valve | | | | | | | | | | |
|--------------------------------|----------------|----------------------|---------------|---------------|----------------------|--|--|--|--|--|
| Valve Size | Actual O.D. | Equivalent Length | Valve Size | Actual O.D | Equivalent Length | | | | | |
| in | in | feet | in | in | feet | | | | | |
| mm | mm | meter | mm | mm | meter | | | | | |
| 21/2 | 2.875 | 7.0 | 6 | 6.625 | 24.0 | | | | | |
| 65 | 73.0 | 2.1 | 150 | 168.3 | 7.3 | | | | | |
| 3 | 3.500 | 15.0 | 8 | 8.625 | 38.0 | | | | | |
| 80 | 88.9 | 4.6 | 200 | 219.1 | 11.6 | | | | | |
| 4 | 4.500 | 24.0 | 10 | 10.750 | 65.0 | | | | | |
| 100 | 114.3 | 7.3 | 250 | 273.0 | 19.8 | | | | | |
| 5 | 5.563 | 24.0 | 12 | 12.750 | 85.0 | | | | | |
| 125 | 141.3 | 7.3 | 300 | 323.9 | 25.9 | | | | | |

MATERIAL SPECIFICATIONS

Valve Body & Bonnet:

Ductile Iron to ASTM A536, Gr. 65-45-12 and or to ASTM A395, Gr. 65-45-15, min. tensile strength $65,000\,\mathrm{psi}$ (448 MPa).

Surface Finish:

Painted Black.

☐ Epoxy Coated Black.

Clapper:

Stainless steel Type 304 of ASTM A240 (2½" – 4"), Ductile iron ASTM A536 Gr. 65-45-12 (5" –12").

Clapper Facing:

Grade "E" EPDM (Color code: Green stripe) Good for cold & hot water up to +230oF (+110oC). Also good for services for water with acid, water with chlorine, deionized water, seawater and waste water, dilute acids, oil-free air and many chemicals. Not recommended for petroleum oils, minerals oils, solvents and aromatic hydrocarbons.

Maximum Temperature Range: -30oF (-34oC) to +230oF (+110oC)*. *EPDM seat for water services are not recommended for steam services.

Seat Ring:

Bronze C83600 of ASTM B505.

Facing Retainer, Cap Screw, Lock Nuts:

Stainless steel Type 304.

• Hinge Pin:

Stainless steel Type 303 of ASTM A582.

• Spring:

Stainless steel Type 302 of ASTM A313.

Set Screw:

Heat-treated carbon steel hexagonal set screw to ASTM A183, Gr. 2, minimum tensile strength 110,000 psi (758 MPa).

General Notes:

- Maximum Working Pressure (CWP) listed is the maximum cold water pressure for general piping services tested to ASTM F1476 and or AWWA C606 methods. Figures listed are based on roll-or cut-grooved standard wall carbon steel pipe. For other pipe schedules or pipe materials, contact Shurjoint for additional information.
- Field Joint Test: For one time only the system may be tested hydrostatically at 1½ times the maximum working pressure listed (AWWA C606 5.2.3).
- Warning: Piping systems must always be depressurized and drained before attempting to uninstall the SJ-900 valve.
- The Limited Warranty applies to manufacturing defects only and does not cover severe service/temperature applications or wear parts.
- Shurjoint reserves the right to change specifications, designs and or standard without notice and without incurring any obligations.