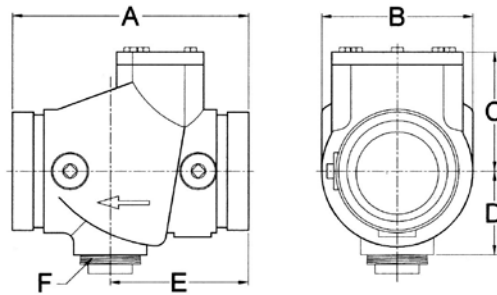


MODEL SJ-900 SWING CHECK VALVE

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 Size	Pipe O.D.	Max. Working Pressure (CWP)*	ASME/ANSI Pressure Class Rating [^] @100°F/@38°C	Dimensions						Weight	
				A	B	C	D	E	F		
in mm	in mm	PSI Bar	PSI Nom. Class	in mm	in mm	in mm	in mm	in mm	in mm	Drain	Lbs Kgs
2½ 65	2.875 73.0	300 20	300 150	7.48 190	4.50 114	3.75 95	2.50 64	4.00 102	1¼" NPT	11.0 5.0	
76.1 mm	3.000 76.1	300 20	300 150	7.48 190	4.50 114	3.75 95	2.50 64	4.00 102	1¼" BSP	10.8 4.9	
3 80	3.500 88.9	300 20	300 150	7.00 178	4.50 114	3.75 95	2.50 64	4.00 102	1¼" NPT	10.8 4.9	
4 100	4.500 114.3	300 20	300 150	8.50 216	5.75 146	4.60 117	3.15 80	5.00 127	2" NPT	18.3 8.3	
139.7 mm	5.500 139.7	300 20	300 150	13.00 330	8.25 210	7.00 178	4.50 114	7.64 194	2" BSP	51.7 23.5	
5 125	5.563 141.3	300 20	300 150	13.00 330	8.25 210	7.00 178	4.50 114	7.64 194	2" NPT	51.7 23.5	
165.1 mm	6.500 165.1	300 20	300 150	12.00 305	8.25 210	7.00 178	4.50 114	7.00 178	2" BSP	51.7 23.5	
6 150	6.625 168.3	300 20	300 150	12.00 305	8.25 210	7.05 178	4.50 114	7.00 178	2" NPT	51.7 23.5	
8 200	8.625 219.1	300 20	300 150	14.37 365	10.23 260	8.54 217	5.50 140	10.00 254	2" NPT	99.7 45.3	
10 250	10.750 273.0	300 20	300 150	20.00 508	14.37 365	10.75 273	7.25 184	10.00 254	2" NPT	217.8 99.0	
12 300	12.750 323.9	300 20	300 150	24.00 610	15.67 398	12.87 327	8.54 217	12.00 305	2" NPT	342.3 155.6	
200 JIS	8.516 216.3	300 20	300 150	14.37 365	10.23 260	8.54 217	5.50 140	10.00 254	2" BSP	99.7 45.3	
250 JIS	10.528 267.4	300 20	300 150	20.00 508	14.37 365	10.75 273	7.25 184	10.00 254	2" BSP	216.7 98.5	
300 JIS	12.539 318.5	300 20	300 150	24.00 610	15.67 398	12.87 327	8.54 217	12.00 305	2" BSP	342.3 155.6	

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

[^] The ASME/ANSI pressure class rating is not the design or maximum pressure rating, rather is provided for those that are accustomed to specifying or using ASME/ANSI pressure class rated components such as flange, valves, etc.

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 mm	in mm	feet meter	in mm	in mm	feet meter
2½ 65	2.875 73.0	7.0 2.1	6 150	6.625 168.3	24.0 7.3
3 80	3.500 88.9	15.0 4.6	8 200	8.625 219.1	38.0 11.6
4 100	4.500 114.3	24.0 7.3	10 250	10.750 273.0	65.0 19.8
5 125	5.563 141.3	24.0 7.3	12 300	12.750 323.9	85.0 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 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 to ASTM D2000. Good for cold & hot water up to +180°F (+82°C). 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.

- **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:

- **ASME/ANSI Pressure-Temperature Rating** is provided as an aid in selecting a proper coupling to incorporate with other piping components (valves, flanges, and etc.) that are used in the same system and carry the ASME/ANSI rating. Select a Class 150 coupling to incorporate with Class 150 valves and flanges.
- **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 disassembly and or removal of any components.
- **The 10 Year 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.

Job Name:	System No.	Location:
Contractor:	Approved:	Date:
Engineer:	Approved:	Date:

Shurjoint product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact **Shurjoint** Technical Service. **Shurjoint** reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligations to make such changes and modifications on **Shurjoint** products previously subsequently sold.