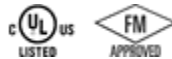


# RCV RISER CHECK VALVE



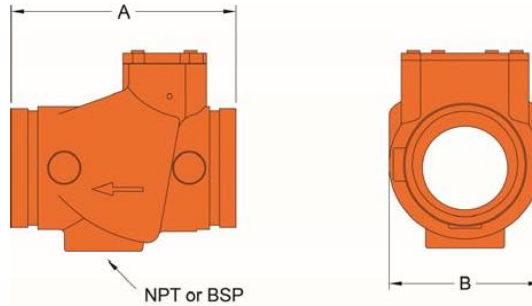
For pressure rating, listing, and approval information, refer to data sheet or visit SHURJOINT website [www.shurjoint.com](http://www.shurjoint.com) for details or contact your SHURJOINT representatives.

The Model RCV Riser Check Valve has been designed for use in the risers of wet type fire protection systems. The single clapper design features dual springs for non-slamming operation and the streamlined body and wide-open clapper design provide for low friction loss. This valve can be installed in the vertical or horizontal position and the EPDM rubber faced clapper provides a non-stick leak-tight seal with as little as 5 feet (1.5 meters) of head. The drain is factory tapped at 1¼" or 2" NPT (or BSP) and two bosses on each side are provided for pressure gauges if required. The Model RCV check valve is tested to UL 312. Check valves are supplied with our standard painted finishes, i.e., orange or RAL3000 red. Optional finishes such as hot dipped zinc galvanized, and custom epoxy coatings are available.

#### material specification

- **Valve Body & Bonnet:**  
Ductile Iron to ASTM A536, Gr. 65-45-12, min. tensile strength 65,000 psi (448 MPa).
- **Surface Finish:**  
Orange color painted or red RAL3000 color painted
  - Hot dip galvanized (optional).
  - Epoxy coated in red RAL3000 or other colors (optional).
- **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 +230°F (+110°C). Also good for services for water with acid, water with chlorine or chloramines, deionized water, seawater and wastewater, dilute acids, oil-free air and many chemicals. Not recommended for petroleum oils, minerals oils, solvents and aromatic hydrocarbons.  
Maximum Temperature Range: -30°F (-34°C) to +230°F (+110°C)\*.  
\*EPDM seat for water services is not recommended for steam services.
  - Other options: Grade "T" - Nitrile,  
Grade "O" - Fluoroelastomer,  
Grade "L" - Silicone  
Grade "E" - EPDM
- **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).



Model RCV Riser Check Valve

Nominal Size	Pipe O.D.	Max. Working Pressure (CWP)*	Dimensions		Drain	Weight
			A	B		
in	in	PSI	in	in	NPT or BSP	lbs
mm	mm	Bar	mm	mm	in	kg
2½	2.875	300	7.48	4.50	1¼	10.96
65	73.0	20	190	114		
76.1	3.000	300	7.48	4.50	1¼	11.29
	76.1	20	190	114		
3	3.500	300	7.00	4.50	1¼	10.98
	80	88.9	20	178		
4	4.500	300	8.50	5.75	2	18.68
	100	114.3	20	216		
139.7	5.500	300	13.00	8.25	2	51.35
	139.7	20	330	210		
5	5.563	300	13.00	8.25	2	52.36
	125	141.3	20	330		
165.1	6.500	300	12.00	8.25	2	50.23
	165.1	20	305	210		
6	6.625	300	12.00	8.25	2	50.82
	150	168.3	20	305		

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

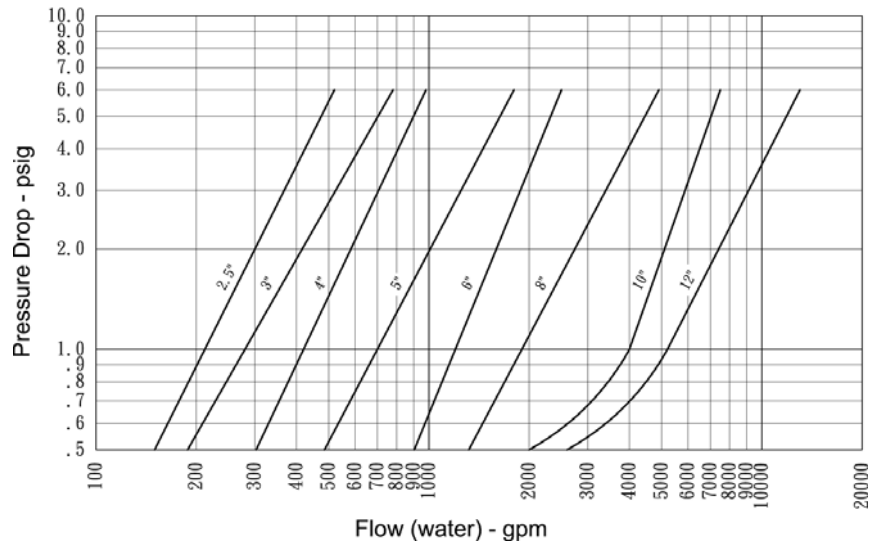
**Flow Data**

Equivalent length and Cv Value for flow of water are shown left (water temperature at +68°F or +20°C).

\*At 15 feet/sec, (4.6m/s) Velocity of water.

Model RCV Riser Check Valve			
Valve Size	Actual O.D.	Equivalent Length of Sch. 40 pipe*	Cv Value
in	in	feet	
mm	mm	meter	
2½	2.875	7.8	210
65	73.0	2.4	
3	3.500	16.5	270
80	88.9	5.0	
4	4.500	23.9	430
100	114.3	7.3	
5	5.563	24.0	700
125	141.3	7.3	
6	6.625	25.6	1250
150	168.3	7.8	

RCV - Riser Check Valve



**General note**

- 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.
- Max. End Load is calculated based on the maximum working pressure (CWP).
- Listed and or Approved Pressures are pressure ratings for fire protection systems, tested and approved by various approval bodies. Please always refer to the latest approval data posted on the Shurjoint website.
- 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.