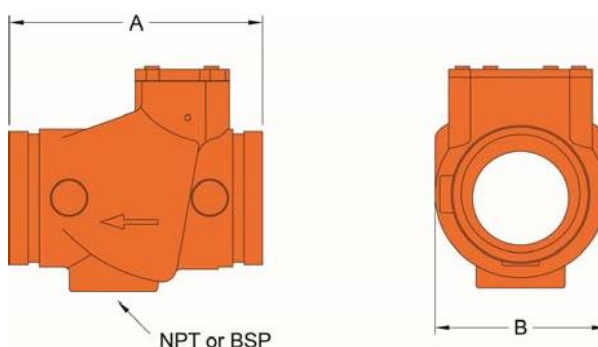


## MODEL RCV RISER CHECK VALVE

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.



For Fire Protection pressure rating, listing, and approval information, refer to Data Sheet B-42 or visit **SHURJOINT** website, [www.shurjoint.com](http://www.shurjoint.com) for details or contact your **SHURJOINT** Representative.



| 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         | Kgs    |
| 2½                          | 2.875     | 300                          | 7.48       | 4.50 | 1¼         | 10.96  |
| 65                          | 73.0      | 20                           | 190        | 114  |            | 4.98   |
| 76.1 mm                     | 3.000     | 300                          | 7.48       | 4.50 | 1¼         | 11.29  |
|                             | 76.1      | 20                           | 190        | 114  |            | 5.13   |
| 3                           | 3.500     | 300                          | 7.00       | 4.50 | 1¼         | 10.98  |
| 80                          | 88.9      | 20                           | 178        | 114  |            | 4.99   |
| 4                           | 4.500     | 300                          | 8.50       | 5.75 | 2          | 18.68  |
| 100                         | 114.3     | 20                           | 216        | 146  |            | 8.49   |
| 139.7 mm                    | 5.500     | 300                          | 13.00      | 8.25 | 2          | 51.35  |
|                             | 139.7     | 20                           | 330        | 210  |            | 23.34  |
| 5                           | 5.563     | 300                          | 13.00      | 8.25 | 2          | 52.36  |
| 125                         | 141.3     | 20                           | 330        | 210  |            | 23.80  |
| 165.1 mm                    | 6.500     | 300                          | 12.00      | 8.25 | 2          | 50.23  |
|                             | 165.1     | 20                           | 305        | 210  |            | 22.83  |
| 6                           | 6.625     | 300                          | 12.00      | 8.25 | 2          | 50.82  |
|                             | 6.625     | 20                           | 305        | 210  |            | 23.10  |

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

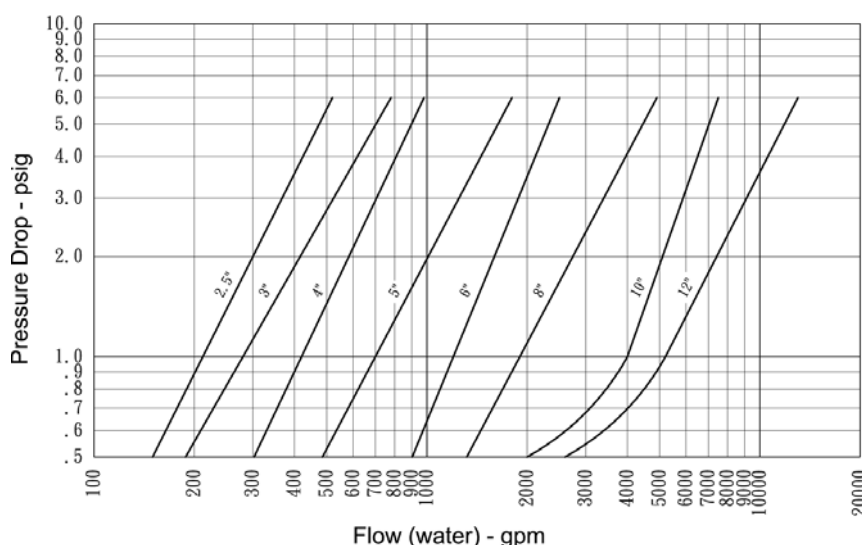
## Flow Data

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<br>mm                    | in<br>mm       | feet<br>meter                      |          |
| 2½<br>65                    | 2.875<br>73.0  | 7.8<br>2.4                         | 210      |
| 3<br>80                     | 3.500<br>88.9  | 16.5<br>5.0                        | 270      |
| 4<br>100                    | 4.500<br>114.3 | 23.9<br>7.3                        | 430      |
| 5<br>125                    | 5.563<br>141.3 | 24.0<br>7.3                        | 700      |
| 6<br>150                    | 6.625<br>168.3 | 25.6<br>7.8                        | 1250     |

RCV - Riser Check Valve



## 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:

Orange color painted or red RAL3000 color painted

- ☐ Hotdipgalvanized (Option).
- ☐ Epoxy coated in red RAL3000 or other colors (Option).

### • 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 waste water, 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 are not recommended for steam services.

- ☐ Other options: Grade "T" Nitrile, Grade "O" Fluoroelastomer, Grade "L" Silicone, Potable water use Grade "E" gaskets, etc. are also available upon request.

### • 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.
- **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 to uninstall the RCV 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.

**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.