Pipeline Accessories Check Valve

Stainless Steel

| Model | WSSCV |
|--------------------------------|--|
| Sizes | 1/2", 3/4", 1", 1 ¹ /4", 1 ¹ /2", 2", 3" |
| Connections | NPT, SW |
| Body Material | 316 Stainless Steel |
| PMO Max. Operating Pressure | 500 PSIG |
| PMA Max. Allowable Pressure | 750°F PSIG @ 100°F |
| TMA Max. Allowable Temperature | 850°F @ 420 PSIG |

Note: WSSCV with 1/4 PSI cracking pressure is required for all mechanical pump applications. The 5 PSIG cracking pressure version is also available. See model code chart.



| Size/Connection | Model Code | Cracking Pressure* PSI | Weight Ibs |
|--------------------|-----------------------------|----------------------------------|----------------------|
| 1/2″ | WSSCV-12-N-0 | 0.25 | 1.0 |
| 3/4" | WSSCV-13-N-0 | 0.25 | 1.5 |
|]" | WSSCV-14-N-0 | 0.25 | 2.3 |
|]1/4″ | WSSCV-15-N-0 | 0.25 | 3.5 |
| 11/2" | WSSCV-16-N-0 | 0.25 | 5.3 |
| 11/2" | WSSCVQF-16-N-0 [†] | 0.00 | 5.3 |
| 2″ | WSSCV-17-N-0 | 0.25 | 8.5 |
| 3″ | WSSCV-19-N-0 | 0.25 | 21 |
| 1/2″ | WSSCV-12-N-5 | 5.0 | 1.0 |
| 3/4″ | WSSCV-13-N-5 | 5.0 | 1.5 |
|]″ | WSSCV-14-N-5 | 5.0 | 2.3 |
|]1/4″ | WSSCV-15-N-5 | 5.0 | 3.5 |
| 11/2" | WSSCV-16-N-5 | 5.0 | 5.3 |
| 2″ | WSSCV-17-N-5 | 5.0 | 8.5 |
| 3″ | WSSCV-19-N-5 | 5.0 | 21 |
| Socket Weld | | | |
| Size/Connection SW | Model Code | Cracking Pressure* PSI | Weight Ibs |
| 1/2″ | WSSCV-12-SW-0 | 0.25 | 1.0 |
| 3/4″ | WSSCV-13-SW-0 | 0.25 | 1.5 |
|]″ | WSSCV-14-SW-0 | 0.25 | 2.3 |
|]1/4″ | WSSCV-15-SW-0 | 0.25 | 3.5 |
| 11/2″ | WSSCV-16-SW-0 | 0.25 | 5.3 |
| 2″ | WSSCV-17-SW-0 | 0.25 | 8.5 |
| 3″ | WSSCV-19-SW-0 | 0.25 | 21 |
| 1/2″ | WSSCV-12-SW-5 | 5.0 | 1.0 |
| 3/4″ | WSSCV-13-SW-5 | 5.0 | 1.5 |
|]″ | WSSCV-14-SW-5 | 5.0 | 2.3 |
|]1/4″ | WSSCV-15-SW-5 | 5.0 | 3.5 |
| 11/2" | WSSCV-16-SW-5 | 5.0 | 5.3 |
| 2″ | WSSCV-17-SW-5 | 5.0 | 8.5 |

Differential Pressure at which valve opens and flow occurs.

3″

WSSCVQF is a special design check valve for use on the inlet side of t the PMPT & PMPNT Pumps. It is center-guided and contains no spring. Used for increasing fill rate of pump.

WSSCV-19-SW-5

8.5

21

5.0

Typical Applications

The Model WSSCV is an all stainless steel in-line check valve for steam, gas, or liquid service. It provides tight shut-off, minimizes water hammer and also stops recycling of pumps by preventing back flow of liquid. Used in the petrochemical, pulp & paper, textile and food & beverage industries. The WSSCV all stainless steel check valves will operate much longer and are less problematic than bronze or cast iron check valves.

Features & Options

- 316 Stainless Steel Body and Internals
- Low cracking pressure on spring (1/4 PSI) to minimize resistance and maximize flow.
- Available with optional 5 PSI cracking pressure (must specify at time of order)
- Available with NPT, SW, or optional Flanged connections
- Spring made from Inconel-X-750 to handle extreme temperature as well as corrosive applications
- Body is seam-welded to eliminate O-rings or gasket seals which can be affected by high temperature steam or hot condensate
- Spring assisted closing of check valve to minimize noise and wear

Sample Specification

Check valve shall have a 316 stainless steel body and disc. Spring shall be made from Inconel-X-750. Check valve body to be seam welded together to eliminate need for O-ring or gasket.

| MATERIALS | |
|-----------|---------------------|
| Body | 316 Stainless Steel |
| Disc | 316 Stainless Steel |
| Spring | Inconel-X-750 |

Stainless Steel





| DIMENSIONS & SPECIFICATIONS - inches | | | | | | | | | |
|--------------------------------------|----------|----------|----------|----------|---------------|----------|----------|--|--|
| Size | 1/2″ | 3/4″ | 1″ | 11/4″ | 1 1/2″ | 2″ | 3″ | | |
| MODEL CODE | WSSCV-12 | WSSCV-13 | WSSCV-14 | WSSCV-15 | WSSCV-16 | WSSCV-17 | WSSCV-19 | | |
| A | 2.69 | 3.00 | 3.32 | 3.81 | 4.75 | 5.03 | 6.87 | | |
| В | 1.62 | 2.12 | 2.56 | 3.06 | 3.44 | 4.38 | 6.19 | | |
| Weight (lbs) | 1.1 | 1.5 | 1.9 | 3.8 | 4.7 | 7.7 | 18.8 | | |
| Standard Cracking Pressure* | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | | |
| Optional Cracking Pressure* | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | |
| Cv | 7 | 13 | 22 | 39 | 54 | 93 | 180 | | |

* Note: Differential Pressure at which valve opens and flow occurs (PSI).



WSSCV Check Valve Construction