

SWC Series Swing Check Valves, Sizes 3"-36", AWWA C508

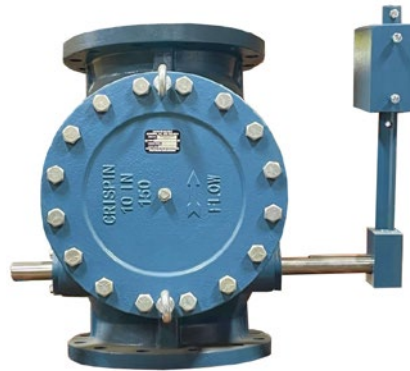
An AWWA C508 Swing Check Valve for Sewage and Slurry Applications

SWC SERIES ADVANTAGES

- ✓ AWWA C508 Compliant
- ✓ Large Diameter Pivot Shaft Construction
- ✓ Accepts Air Cushion and Oil Control Devices
- ✓ O-Ring Design
- ✓ Standard Rubber Disc Seats and Stainless Steel Body Seats can be changed while the valve is in line
- ✓ Class 125/150 & 250/300 Available
- ✓ Valve can be mounted horizontally or vertically

SWC SERIES OPTIONS

- ✓ Limit Switches upon request
- ✓ Optional Air Cushions available in Commercial or Bronze Cylinders
- ✓ Available in both Lever & Weight and outside Lever & Spring designs
- ✓ Optional double outside Levers for Weight or Spring
- ✓ Optional Configurations ensure compliance with the American Iron & Steel Act, the Buy America Act, the Buy American Act and the Build America Buy America Act



The SWC Series Swing Check Valve from Crispin provides users with an AWWA C-508-1 solution for more arduous check valve applications, including sewage and slurry. The SWC Series design takes over when the RF Rubber Flapper Series and the TD Tilting Disc Series are not optimal.

Designed with a heavy-duty pivot shaft, the SWC Series can accept both air cushion as well as oil cushion devices. The substantial shaft diameter is ideal for those difficult applications where back pressure can reach higher values quickly.

In order to reduce hammer and protect the system itself, these back pressures need to be absorbed by a cushion. This requirement generates a larger amount of torque on the pivot shaft than commodity type valves cannot handle.

Once pump pressure exceeds the back pressure on the down-stream side of the valve disc, the SWC Series moves the disc out of the flow by displacing the seat disc to the upper portion of the valve body. With standard rubber disc seats and stainless steel body seats, the SWC's "no-cost" upgrades make the valve ideal for aggressive water and sewage applications found in many areas.

Upon pump shut down, the disc will stroke closed when velocity begins to slow and stop. With the incorporation of a rubberized disc face, the resultant drip-tight seating will protect the system from costly leakage. Please note that C-508 allows for two laying length dimensions. If replacing an existing unit, be sure to verify the face to face dimensions of the valve before ordering.



PRODUCT LINE

SWC Series Swing Check Valves, Sizes 3"-36"

SHEET

SWC Series Design Features

DATE

3/18/2025

REVISION

0

DOC. NO.

D-CV-SWC-DF-r0

SWC SERIES DESIGN FEATURES

- **Body Seat**

Many valve designs incorporate a threaded-in seat. Especially in larger sizes, replacement of this seat is almost impossible, let alone while the valve remains inline. In the SWC Series, the body seat is held in place for stainless steel set screws. Both the Body Seat and the Disc Seat can be easily accessed and changed by removing the valve cover while the valve is inline.

- **O-Ring Design**

Most swing check valve designs rely on the use of packing of "stuffing boxes." The SWC Series uses o-rings that are easily replaceable and readily available.

- **Pivot Shaft**

Larger valve diameters require a larger body and disc arm, and standard designs can't incorporate a diameter large enough to use an Oil Control device. Even with lighter duty valves that use Air Cushions, any back pressure outside the normal operating range can cause severe damage and wear. The diameter of the SWC Series pivot shaft sets it apart from commodity type swing check valves.

- **Full Waterway Flow Area**

With a flow area that is greater than or equal to the nominal valve size, the SWC Series has a lower head loss characteristic than a Silent Check Valve. It can also be mounted both horizontally and vertically on the project's pipeline.

- **Disc**

Most standard designs hold the disc in place via a single connection to the disc arm, which can cause vibration. The SWC Series Disc Arm connects the pivot shaft to the Disc itself, Pinned to the arm in two places, the disc won't tilt or vibrate on the arm during operation.

- **Through Shaft**

Internalizing the shaft on one end can increase wear of the unit dramatically. On the SWC Series, the Pivot Shaft extends through both sides of the body, allowing it to be changed to either side of the unit, and making installation more manageable.

- **Lever & Weight or Lever & Spring Closure Options**

Lever & Weight is standard, but a Lever & Spring is available for applications where high pressure, high flow velocities, and insufficient back pressure occur. Please contact the factory for more information.

- **Dashpots and Cushions**

Available as options, Dashpots and Cushions are designed to give the customer control over the opening and closing speeds of the valve, which can be very helpful in eliminating down line surges and valve wear. Dashpots are field adjustable and available in both side and bottom mountings. Side mountings can also be added later. Both designs utilize a high quality hydraulic cylinder to impact disc movement. Air Cushions can also be added to the unit's exterior and offer a simple, cost-effective way to absorb the slamming common to most swing check units.



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