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SVC & SHC Series

*Installation & Maintenance Instructions for
SVC & SHC Sanitary Check Valves*

Please read these instructions carefully!

Your Steriflow product will provide you with long, trouble-free service if it is correctly installed and maintained. Spending a few minutes now reading these instructions can save hours of trouble and downtime later. When making repairs, use only genuine Steriflow Valve parts, available for immediate shipment from the factory.

Description

The SVC is a sanitary vertical check valve, while the SHC is a sanitary horizontal check valve. Both models offer a simple design that allows flow of the medium in one direction while preventing back flow of the medium in the opposite direction.

The valves consist of the following components:

1. Body or Inlet Body
2. Valve Disc
3. Cover O-Ring or Body Gasket
4. Cover or Outlet Body
5. Bolts for Horizontal, Tri-Clamp or Vertical

All metal components that are in contact with the medium are made from 316/316L stainless steel.

Intended Service

The SVC/SHC check valves are intended to be used in gas and liquid applications where the medium is chemically compatible with the seals, disc materials and 316/316L SST metal parts. See the product data sheet and your specific model number to determine maximum pressure and temperature ratings for your application.

Installation

As shown in the exploded view drawing, note that the valve does not use a spring. Flow direction must be in the direction of the arrow stamped on the valve body.

Welding Cautions

When welding the SVC/SHC valves into place, use caution to protect the o-ring seals in the body and disc from the heat during welding. To insure that heat damage to the seals does not occur, disassemble the valve and remove the valve disc and body / cap o-ring. *Please see Replacement of Valve Disc and / or Body / Cap O-Ring to remove these items.*

SVC Check Valve

Normal orientation is with the SVC installed in a vertical upflow line so as to allow gravity to assist in closing the disc. Consult your Steriflow representative, or the factory if you wish to use the SVC in a vertical downflow, or drain application.

SHC Check Valve

Valve must be installed in a horizontal line with the cap facing upwards for the valve to function.

Function

Upon reaching an inlet pressure of 0.3 psi (0,02 bar), the valve will open and allow flow to pass through. With increasing pressure, the valve opens completely and increases the flow through. As the pressure and flow increases, the differential pressure across the valve may change, not necessarily in proportion with the flow increase. The maximum differential pressure across the valve is 3.0 psi (0,02 bar), at full open capacity rating (see SVC/SHC data sheet for Cv/Kv values).

A reduction in the differential pressure will cause the valve disc to move towards the seat, ultimately closing completely once the differential pressure is lower than 0.3 psi (0,02 bar). Upon closing, the medium is prevented from flow backwards out of the inlet of the valve body.

Maintenance

The valve does not require regular maintenance. Should the disc o-ring become damaged or worn and a leakage exists, the entire valve disc (with injection molded o-ring) should be replaced.

Replacement of Valve Disc and/or Body/Cap O-Ring

With the pressure of the media relieved or by-passed, loosen and remove the cover bolts or body clamp. Remove cover or top outlet body. Remove valve disc and o-ring or gasket and replace if worn or damaged with a new spare part. Make sure the smaller face of the valve disc is facing the valve seat, which is in the direction of the valve inlet. Replace cover or top outlet body. Insert bolts in cover and cross tighten 1/4 turn past hand-tight.

Exploded Views

