

ASV50

ANTI-SUCTION VALVE (1/2" NPT)

Installation Instructions



www.clean-logix.com

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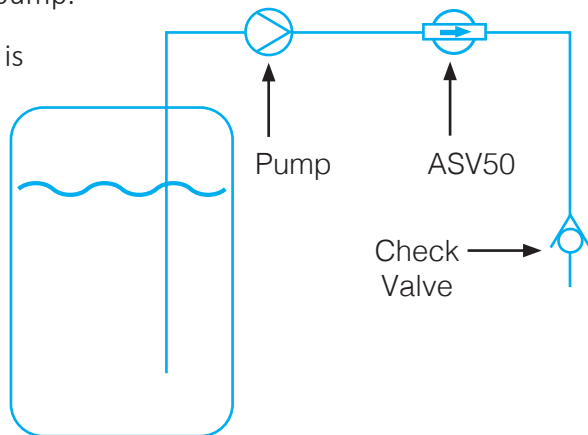
1 Overview

The ASV Anti Suction Valve is an anti siphoning device for pump dispense and CIP injection applications for chemicals or other liquids. In the forward flow direction, the ASV behaves similarly to a check valve with a cracking pressure of 5 PSI. Unlike a check valve, fluid flow is blocked when suction is applied to the outlet regardless of how strong the suction is. **The ASV does not prevent backflow of fluid** and should be used in conjunction with a check valve in most cases for this reason.

The ASV will prevent siphoning in situations where suction is present at the chemical injection point such as the suction side of a pump in a CIP loop.

2 Install

- Attach pipe adapters/hose barbs as necessary (included if purchased as **-KIT**).
- Identify flow direction using the arrow on the bottom of valve.
- Install ASV after the pump.
- Ensure a check valve is installed at the injection point or manifold to prevent backflow and maintain a full supply line.



3 Troubleshooting

Suction or Siphoning is still occurring

Cause	Solution
ASV is installed backwards	Verify arrow matches flow path, if incorrect uninstall and re-install.
Head pressure is occurring	Move ASV to a higher point in the fluid line and/or closer to the pump. Install heavier spring to support head pressure (included).
The spring has failed	Depressurize line and open the ASV to inspect the spring. Replace as necessary.

ASV is leaking

Cause	Solution
The diaphragm has failed	Depressurize line and open the ASV to inspect the diaphragm. Replace as necessary.
The cap of the ASV is loose or not fully seated against the diaphragm	Depressurize line and open the ASV, ensure diaphragm and internal components are positioned properly. Reconnect the cap and twist until sealed. Tighten to 90-lb using torque wrench, if necessary.

"Chugging" or Flow Disruption

Occurs when there is negative pressure (suction) on valve outlet, during forward flow (pumping).

Cause	Solution
Pumping flow rate is too low (less than ~5 GPM)	Increase pumping flow rate or install a check valve at plumbing discharge point (3 psi for most applications)
Insufficient backpressure - Outlet plumbing has an unrestricted, open discharge point and/or has a large diameter (greater than 1/2" ID)	Reduce diameter of outlet plumbing or install a check valve at plumbing discharge point (3 psi for most applications)
Insufficient backpressure - Outlet plumbing has a discharge point that is greater than 36" below the valve	Move valve closer to discharge point (lower). Install a check valve at plumbing discharge point (3 PSI for most applications)
Insufficient backpressure - Outlet plumbing is oriented vertically below valve	