



Vacuum Solenoid Valve VSH-683

The Hydro Instruments vacuum solenoid valve is designed to operate in the vacuum line of Hydro Instruments gas feed systems up to 500 PPD (10 kg/h) capacity. The valve is designed for vacuum operation only and must never be used under pressure conditions. The valve's function is to be fully opened or fully closed in response to an electrical input.

Features:

- Up to 500 PPD (10 kg/h) Chlorine or Sulfur Dioxide.

Includes:

- PVC body with valve seat.
- Inlet and outlet tubing connectors.
- Wall mounting bracket.
- Solenoid for 120VAC / 60Hz or 240VAC / 60Hz.

The Hydro Instruments Vacuum Solenoid Valve is designed for trouble-free service. However, should an issue arise parts are readily available for servicing the solenoid valve.

When installing the solenoid valve, it should be placed in the high vacuum side of the system between the metering device (this includes remote meter panels and automatic control valves) and the ejector. Any secondary check valves in the vacuum line should then be placed between the solenoid valve and the ejector. (See Figure 1)



Ordering Information

Model: VSH-683- - -IS

Capacity

100 – 100 PPD
250 – 250 PPD
500 – 500 PPD

Power

1 – 120 VAC
2 – 240 VAC

Product No.	Description
VSH-683-100-1-IS	100 PPD (2 kg/h), 3/8" tubing connectors, 120VAC
VSH-683-100-2-IS	100 PPD (2 kg/h), 3/8" tubing connectors, 240VAC
VSH-683-250-1-IS	250 PPD (4 kg/h), 1/2" tubing connectors, 120VAC
VSH-683-250-2-IS	250 PPD (4 kg/h), 1/2" tubing connectors, 240VAC
VSH-683-500-1-IS	500 PPD (10 kg/h), 5/8" tubing connectors, 120VAC
VSH-683-500-2-IS	500 PPD (10 kg/h), 5/8" tubing connectors, 240VAC

Installation & Maintenance Instructions

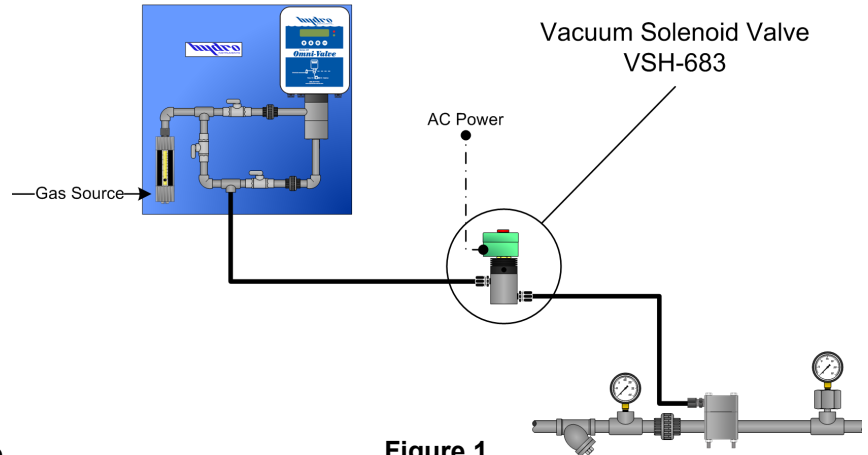
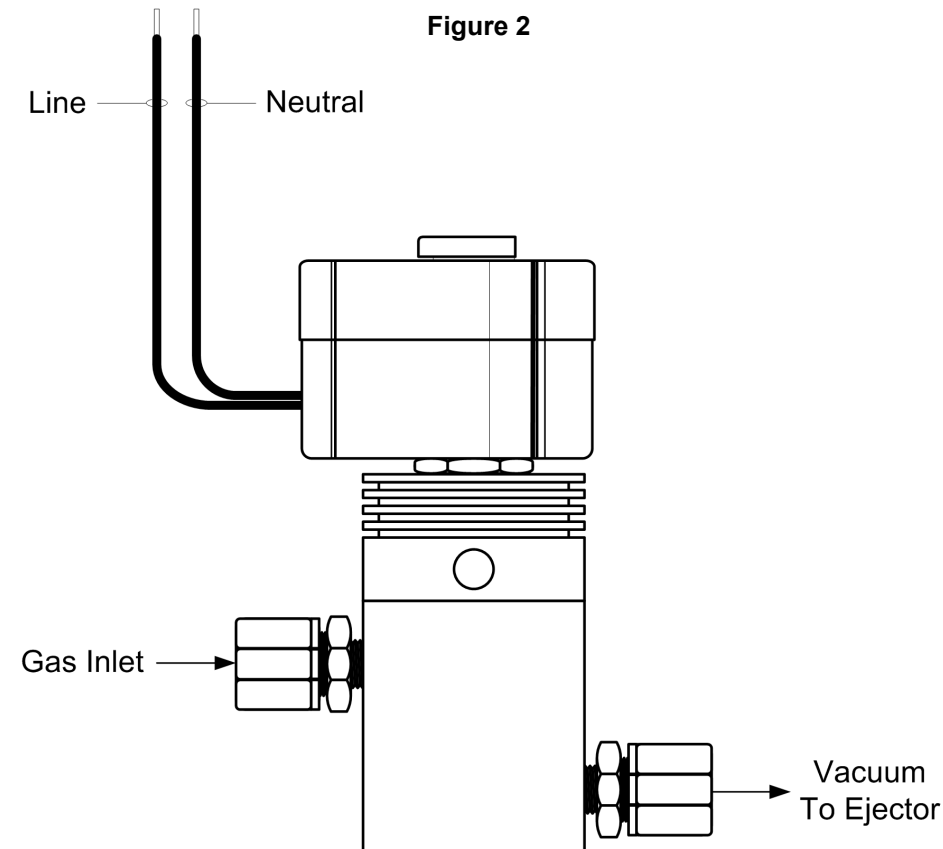
The solenoid is designed to perform best when mounted vertically. A wall mounting bracket is supplied to ensure proper installation. The gas enters the valve body through the upper most connection and the vacuum source is applied to the lower connection (See Figure 2). For placement within the system see figure 1.

Solenoid Valve Temperature

The vacuum solenoid is designed for continuous duty, but will become extremely hot during long periods of operation. This is normal. Use caution when handling the solenoid when hot.

Electrical Connection

The solenoid valve uses a two wire electrical connection. Make sure to turn off electrical power on the circuit before wiring the solenoid valve. Using spade terminals or similar connect the two wires to line and neutral. These connections can be made on either wire and are not dependent on which. Before putting the vacuum solenoid valve into service be sure to energize the coil a few times to ensure proper operation. You should hear a loud metallic click when power is applied. This indicates proper operation.



Maintenance

Periodically exercise the valve and check the internal valve parts for elastomer degradation, chemical build-up or excessive wear. The frequency of maintenance on the vacuum solenoid valve is dependent on application conditions. A complete set of spare parts are available as a rebuild kit or purchased individually. Consult Hydro Instruments or a factory authorized representative for details.