



## Vacuum Solenoid Valve VSH-683

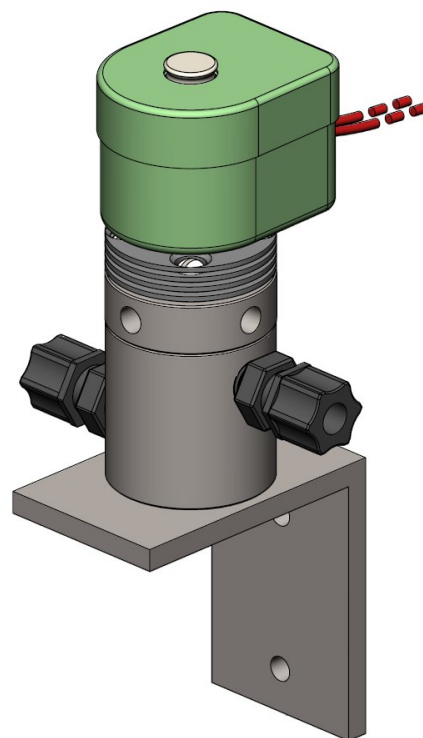
The Hydro Instruments vacuum solenoid valve is designed to operate in the vacuum line of Hydro Instruments gas feed systems up to 3,000 PPD (60 kg/hr) capacity. The valve is designed for vacuum operation only and must never be used under pressure conditions. The valve's function is to be fully opened or fully closed in response to an electrical input.

### Features

- Up to 3,000 PPD (60 kg/hr) Chlorine or Sulfur Dioxide
- Rugged construction for maximum durability
- Easily serviceable—Maintenance kits available
- Wall mounting bracket included
- 120VAC and 240VAC options available

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. Refer to the installation example on the back of this bulletin.



### Ordering Information

| Product No.    | Description                                      | Weight   |
|----------------|--------------------------------------------------|----------|
| VSH-683-100-1  | 100 PPD (2 kg/hr), 1/4" NPT x 3/8" tube, 120VAC  | 3.5 lbs. |
| VSH-683-100-2  | 100 PPD (2 kg/hr), 1/4" NPT x 3/8" tube, 240VAC  | 3.5 lbs. |
| VSH-683-250-1  | 250 PPD (4 kg/hr), 1/4" NPT x 1/2" tube, 120VAC  | 3.5 lbs. |
| VSH-683-250-2  | 250 PPD (4 kg/hr), 1/4" NPT x 1/2" tube, 240VAC  | 3.5 lbs. |
| VSH-683-500-1  | 500 PPD (10 kg/hr), 1/2" NPT x 5/8" tube, 120VAC | 3.5 lbs. |
| VSH-683-500-2  | 500 PPD (10 kg/hr), 1/2" NPT x 5/8" tube, 240VAC | 3.5 lbs. |
| VSH-683-2000-1 | 3,000 PPD (60 kg/hr), 1" NPT, 120VAC             | 4.5 lbs. |
| VSH-683-2000-2 | 3,000 PPD (60 kg/hr), 1" NPT, 240VAC             | 4.5 lbs. |



## 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. For placement within the system refer to the below figure.

### 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.

