

V44700 - Direct Acting Series

2-Way Normally Open or Normally Closed
Shut-Off Solenoid Valve

Valcor Aerospace - 2-Way Direct Acting Solenoid Valve



DESCRIPTION

The series 44700 are direct acting, solenoid shut-off valves with all welded body construction for both high temperature and cryogenic service. Series 44700 valves are extremely reliable because their simple construction contains only three moving parts. Valve shut-off is accomplished by use of Valcor's "Floating Seal" Principle. This utilizes an optically flat seal disc automatically cleans the seats and makes the valves virtually contaminant proof. The disc is carried by the plunger. The necked configuration provides excellent isolation of the solenoid and the main body. The seat and seal configuration utilizes a Venturi flow path to minimize pressure drop across the valve.

APPLICATION

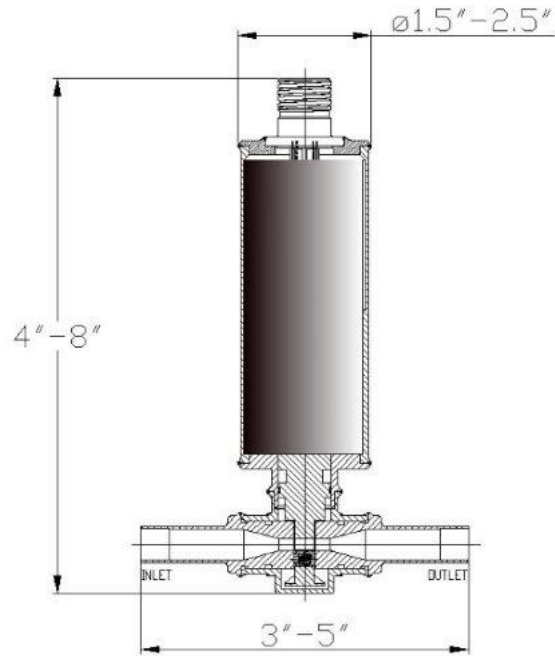
Series 44700 valves are designed to handle hot gases and corrosive fluids with true, in-line flow. They are also ideally suited for cryogenic service because of their packless construction and lack of close fitting parts.

FEATURES

- 2-Way Shut-Off
- Gate-Type Design
- 1/4", 3/8" and 1/2" O.D. Line
- Configuration: Normally Closed, Normally Open
- Temperature: -65°F to +165°F (Ambient), -425°F to +650°F (Fluid)
- Pressure range: 0-1000 PSIG Maximum
- Proof pressure: 1500 PSIG
- Burst pressure: 2500 PSIG Minimum
- Weight: 1.5 lbs to 2.4 lbs., depending on pressure and flow rate



SOLENOID VALVE SERIES 44700



Tabulation

| Port Size | Orifice | Cv |
|-----------|---------|------|
| -4 | .100 | .20 |
| -6 | .235 | 1.00 |
| -8 | .310 | 1.85 |

Specifications

Operating Pressure and Flow Ratings

| Equiv. Sharp Edged Orifice CD = .65 | Operating Pressure (PSIG) | Ambient Temp. | Min. Volts DC | Cv |
|--|------------------------------|---------------|---------------|------|
| .100 | 1-1000 | 165°F | 18 | .19 |
| .235 | 1-150 | 165°F | 18 | 1.50 |
| .310 | 1-60 | 165°F | 18 | 1.85 |

These ratings are based on using water

Electrical Data

| | |
|----------------------|--------------------------------|
| Voltage | 18 to 30 VDC |
| Duty | Continuous |
| Current | 1.5 amps at 28 VDC and at 70°F |
| Electrical Connector | To suit customer requirements |

Leakage

| | |
|----------|--|
| External | Zero over range of 0 to 750 PSIG |
| Internal | Liquid Service, 0.5 cc/hr max. Gas Service, 20 scc/min. typical |