V27200-C

2-Way Normally Open or Normally Closed Shut-Off Solenoid Valve For Corrosive Service





DESCRIPTION

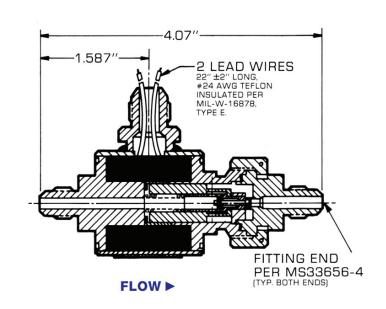
The V27200-C valve is designed for controlling extremely corrosive liquids and gases, as well as other difficult to handle fluids. It is frequently used to control fluorine in many advanced rocket engines. Its coaxial design allows for minimal pressure drop and is easily disassembled for cleaning in applications where the process media must be removed from the valve after use. The welded solenoid construction and metal-tometal seating make this valve particularly suitable for cryogenic applications and will operate when totally submerged in liquid nitrogen.

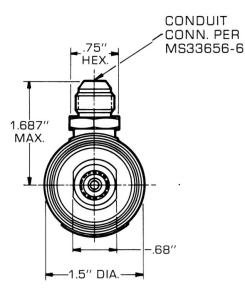
APPLICATION

The V27200-C is typically used to control highly corrosive propellants in rockets.

FEATURES

- Maximum Operating Pressure: 0-3000 PSIG
- Proof Pressure: 4500 PSIG
- Burst Pressure: 7500 PSIG
- Flow Rate: Cd=0.65
- Leak Rate: Internal is 1.0 cc/hr liquid, 2 cc/min gas. External is 0 cc/min at 1500 PSIG
- Temperature: -400°F to +200°F
- Current: 1.5 amps at 30 VDC at 70°F; 18-30 VDC
- Electrical Connection: MS connector standard
- Wetted Materials: CRES 303, 430F, 302, Fluorosilicone
- 1/4" or 3/8" OD line inlet/outlet ports
- Weight: 1.0 lbs.
- Fully customizable to your application





Custom designs are our specialty. Contact us today to see how we can help on your next project. Valcor Engineering Corporation 2 Lawrence Road | Springfield, NJ 07081 (973) 467-8400 | aircraft@valcor.com www.valcor.com 2-Way Normally Open or Normally Closed Shut-Off Solenoid Valve for Corrosive Service



Operating Pressure & Flow Ranges

| Equiv. Sharp Edged Orifice | Operating Pressure (PSIG) | | | | |
|-------------------------------|----------------------------------|-------------|-------------|---------------|---------------|
| CD=0.65 | Cv | 30 OHM Coil | 47 OHM Coil | Ambient Temp. | Min. Volts DC |
| 0.06 | 0.07 | 3000 | | 80°F | 18 |
| 0.14 | 0.4 | 500 | 1500 | 80°F | 18 |
| 0.275 | 1.5 | 275 | 500 | 165°F | 18 |

As the maximum operating pressure requirement is decreased, the actual flow capability of the valve can be increased by increasing the plunger stroke.

For higher temperature applications, a decrease of maximum operating pressure would result. The degree of this derating would be dependent on your actual operating conditions. Contact Valcor for more information.

Electrical Data

| Voltage | 18 to 30 VDC |
|----------------------|---|
| Duty | Continuous |
| Current | 1.5 amps max. at 30 VDC and at 70°F (standard coil) |
| Electrical Connector | MS receptacles are standard. |

Leakage

ExternalZero, Mass spectrometer tightInternalLiquid Service: 1 cc/hour
Gas Service: 2 scc/minute

Custom designs are our specialty. Contact us today to see how we can help on your next project.

Valcor Engineering Corporation 2 Lawrence Road | Springfield, NJ 07081 (973) 467-8400 | aircraft@valcor.com www.valcor.com