

V44700C for Cryogenic Service

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



Valcor Engineering Corporation



DESCRIPTION

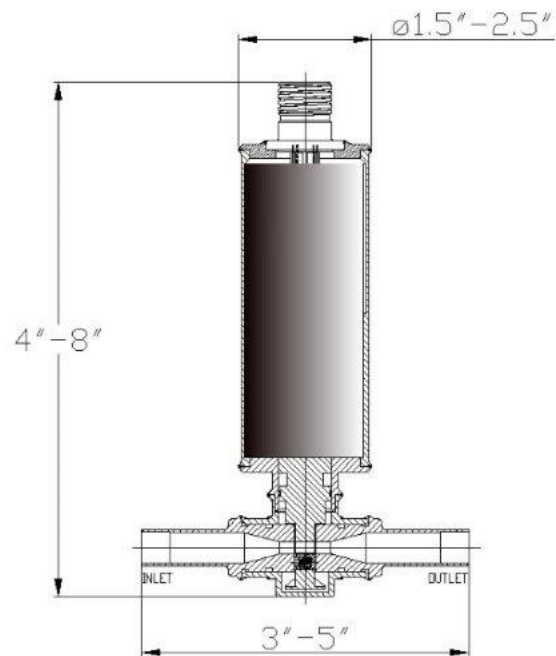
V44700C valves are designed for controlling cryogenic gases and liquids. Their compact size and low weight allow these valves to be used in the tightest space available. They utilize Valcor's proprietary floating seal technology, which provides tight shut-off, long service life, and the ability to handle particulates in the fluid stream without leaking. These valves are direct acting, and do not require system pressure to operate. The all-welded construction provides a leak-proof pressure boundary seal, enabling their use in contained space environments. They are well-suited for the extreme vibration, temperature, and cycle life requirements found in the most severe aircraft and over the road vehicle operating conditions.

APPLICATION

V44700C valves are used in stationary and mobile fuel cell applications for controlling liquid or gaseous hydrogen and oxygen. They are particularly suitable for low pressure drop applications, and where particulate in the process fluid may be present.

FEATURES

- Maximum Operating Range: 0-1000 PSIG
- Proof Pressure: 1500 PSIG
- Burst Pressure: 2500 PSIG
- Flow Rate: Cv: 0.20, 1.5 and 1.85; Cd=0.65
- Temperature: -65°F to +165°F (ambient), -425°F to +650°F (fluid)
- Wetted Materials: CRES 303, 430F, 302, Carbon
- Weight: 1.4 to 2.4 lbs.
- 1/4", 3/8", and 1/2" OD line
- All-welded pressure vessel ensures a leak-free pressure boundary seal
- Position indication options available



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

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www.valcor.com

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Operating Pressure & Flow Ranges

Port Size	Equiv. Sharp Edged Orifice CD=0.65	Cv	Operating Pressure (PSIG)	Ambient Temp.	Min. Volts DC
-04	0.100	0.2	1-1000	165°F	18
-06	0.235	1.05	1-150	165°F	18
-08	0.310	1.85	1-60	165°F	18

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	0 cc/min at 1500 PSIG
Internal	Liquid Service: 0.5 cc/hr Gas Service: 20 sccm at 1000 PSIG

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