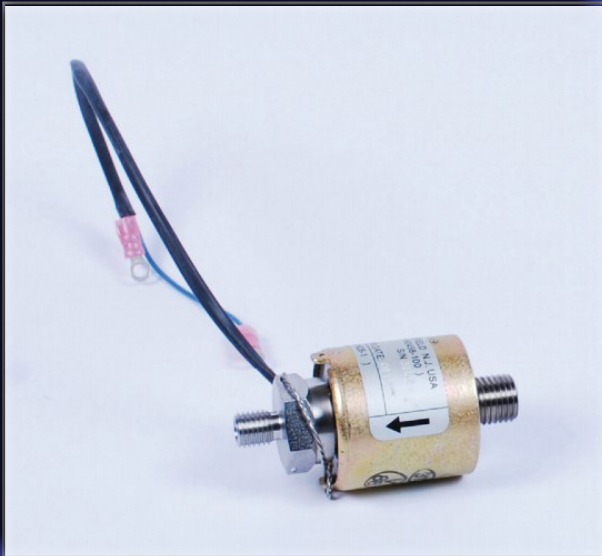


V27200

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



Valcor Engineering Corporation



DESCRIPTION

V27200 solenoid valves are designed to control high flows of non-corrosive liquids and gases. (A modified version is available for corrosive gas and liquid service.) They are well-suited for extreme vibration, temperature, and cycle life requirements found in the most severe flight operating conditions. They utilize a poppet design that incorporates a non-metallic resilient seat for tight shut-off and long service life. For high pressure, high flow, and/or high temperature applications, a metal to metal seat is used. Compact size and low weight allow these valves to be used in the tightest space available. They are direct acting, do not require system pressure to operate, and are available in normally closed or normally open configuration.

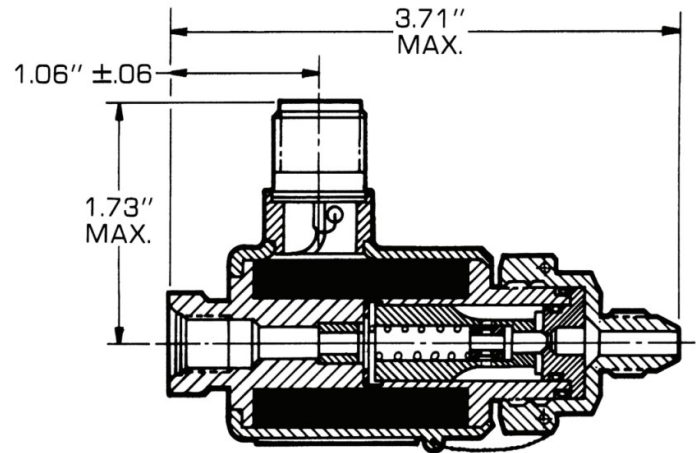
APPLICATION

V27200 valves are used in a wide variety of aircraft, missile, and spacecraft applications where the coaxial design saves space and weight.

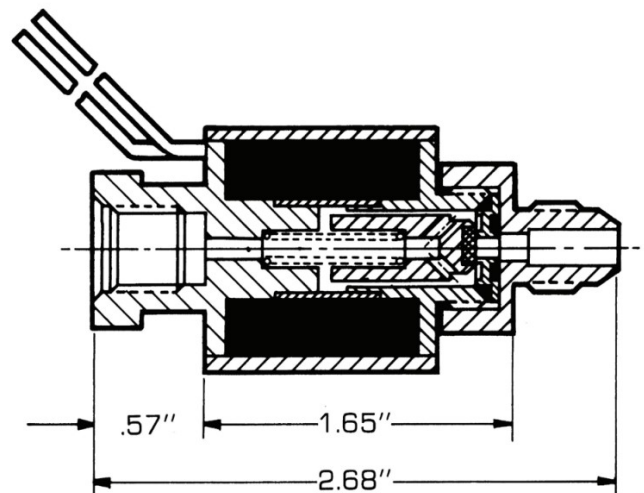
FEATURES

- Maximum Operating Pressure: 0-4000 PSIG
- Proof Pressure: 6000 PSIG
- Burst Pressure: 7500 PSIG
- Flow Rate: Cv available range from 0.02 to 0.42
- Leak Rate: Internal is 0 cc/3 min liquid, 10 cc/hr gas. External is 0 cc/hr
- Temperature: -65°F to +350°F
- Current: 1.5 amps at 30 VDC at 70°F; 18-30 VDC
- Electrical Connection: 36" pigtailed to MIL-W-1687A standard. MS connector available.
- Wetted Materials: CRES 303, 430F, 302, Fluorosilicone
- 1/8" or 1/3" OD line ports
- Weight: 0.45 lbs.
- Fully customizable to your application

CONFIGURATION A



CONFIGURATION B



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

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Operating Pressure & Flow Ranges

Configuration	Equiv. Sharp Edged Orifice CD=0.65	Cv	Operating Pressure (PSIG)		Ambient Temp.	Min. Volts DC
			30 OHM Coil	47 OHM Coil		
Configuration A	0.03	0.02	1-3000	0-4000	165°F	18
	0.06	0.07	1-1250	0-1900	165°F	18
Configuration B	0.09	0.15	1-630	0-900	165°F	18
	0.12	0.28	0-220	0-330	165°F	18
	0.15	0.42	0-50	0-75	165°F	18

These ratings are based on using JP4 Aviation Fuel. For higher temperatures, the pressure rating must be reduced. The following table approximates the derating required.

Temperature	Derating Factor
250°F	0.71
350°F	0.62

Electrical Data

Voltage	18 to 30 VDC
Duty	Continuous
Current	1.5 amps max. at 30 VDC and at 70°F
Available Coil Windings	In many cases, the current draw can be reduce to 0.95 amps max. at 30 VDC and 70°F by use of a higher resistant winding without materially affecting the basic rating. In addition, other windings can be furnished for higher pressures or flow ratings for intermittent duty service. Higher resistance winding can also be provided, but pressure and flow ratings must be decreased.
Electrical Connector	Pigtail leads (36" long) made of #22 or #24 wire to MIL-W-1687A Type EE are standard. MS receptacles mounted on the solenoid shell can be provided.

Leakage

External	Zero over range of 0 to 4000 PSIG
Internal	Liquid Service: 0 drops/3min. Gas Service: 10 scc/hr. typical. Better ratings are achievable via special sealing techniques.

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