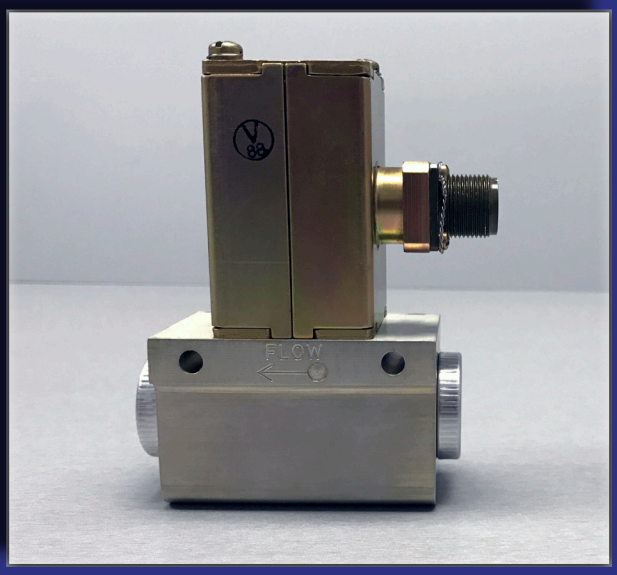
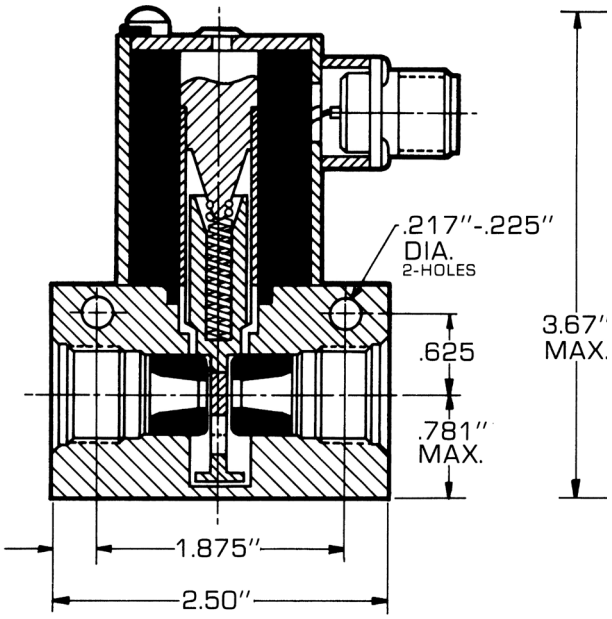
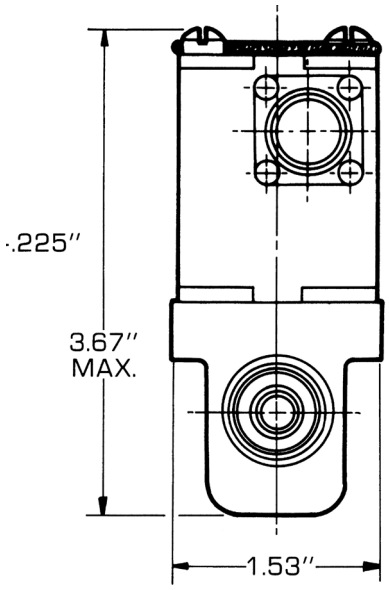
V14500

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

Valcor Engineering Corporation







◄ FLOW ►

DESCRIPTION

V14500 solenoid valves are designed for use with aviation fuels, non-corrosive gases, and non-aromatic hydraulic fluids. They are well-suited for the extreme vibration, temperature, and cycle life requirements found in the most severe aircraft operating conditions. Compact size and low weight allow these valves to be used in the tightest space available. Valcor's proprietary floating seal technology provides tight shut-off, long service life, and the ability to handle particulates in the fluid stream without leaking. These valves are direct acting, do not require system pressure to operate, and are available in normally closed or normally open configuration.

APPLICATION

V14500 valves are typically used on aircraft APUs and engine fuel systems. They are also compatible with many non-corrosive gases and liquids. They are particularly suitable for low pressure drop applications, and where particulate in the process fluid may be present.

FEATURES

- Maximum Operating Pressure: 0-1000 PSIG
- Proof Pressure: 1500 PSIG
- Burst Pressure: 3000 PSIG
- Leak Rate: Internal is 0.5 cc/hr liquid, 15 cc/min gas. External is 0 cc/min at 1000 PSIG
- Temperature: -65°F to +350°F
- Current: 1.07 amps at 30 VDC at 70°F; 18-30 VDC
- Electrical Connection: MS 3102A-10SL-4P side-mount standard
- Wetted Materials: Aluminum, CRES 303, 430F, 302, Carbon, Fluorosilicone
- 1/2" ports
- Weight: 1.25 lbs.
- Self-cleaning, wear compensating, seal design
- MIL-F-8615 and MIL-V8610 compliant

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

Valcor Engineering Corporation
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Operating Pressure & Flow Ranges

	Equiv. Sharp Edged Orifice CD=0.65	Cv	Operating Pressure (PSIG) 30 OHM Coil	47 OHM Coil	Ambient Temp.	Min. Volts DC
Normally Closed Configuration	0.11	0.25	1-850	0-550	165°F	18
	0.15	0.46	1-330	0-210	165°F	18
	0.23	1.03	1-125	0-80	165°F	18
	0.31	1.85	1-63	0-40	165°F	18
	0.37	2.70	1-31	0-20	165°F	18
Normally Open Configuration	0.11	0.25	1-1000	0-900	165°F	18
	0.15	0.46	1-700	0-430	165°F	18
	0.23	1.03	1-230	0-150	165°F	18
	0.31	1.85	1-110	0-70	165°F	18
	0.37	2.70	1-55	0-35	165°F	18

These ratings are based on using JP4 Aviation Fuel. Other orifice sizes, both larger and smaller, are available. 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	19 OHM Coil, Continuous or Intermittent 30 OHM Coil, Continuous (Depends on application, cooling effect of fluid, etc.)
Current	At 30 VDC and 70°F 1.07 amps max., for 19 OHM Coil 1.07 amps max., for 30 OHM Coil
Electrical Connector	MS 3102A-10SL-4P is standard. Receptacle location can be on top or side of the solenoid. Contact Valcor for other options.

Leakage

External	Zero over range of 0 to 1000 PSIG
Internal	Liquid Service: 0.5 cc/hr max. Gas Service: As low as 15 scc/min. depending on application.

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