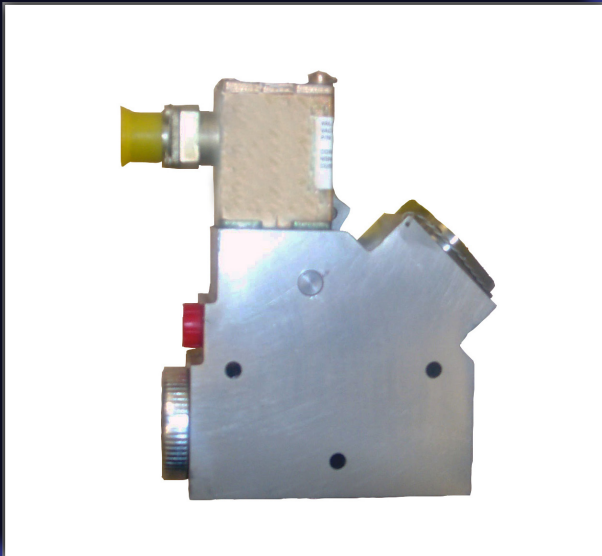


V80000

2-Way Normally Open or Normally Closed High Flow/High Pressure Solenoid Valve



Valcor Engineering Corporation



DESCRIPTION

V80000 are compact pilot operated solenoid valves designed to control high flows at high pressures of non-corrosive and corrosive gases and liquids including fuel, hydraulic fluid and water. Their compact size and low weight allow these valves to be used in the tightest space available. They are well-suited for the extreme vibration, temperature, and cycle life requirements found in the most severe aircraft operating conditions. V80000 valves are available in a normally closed or normally open configuration.

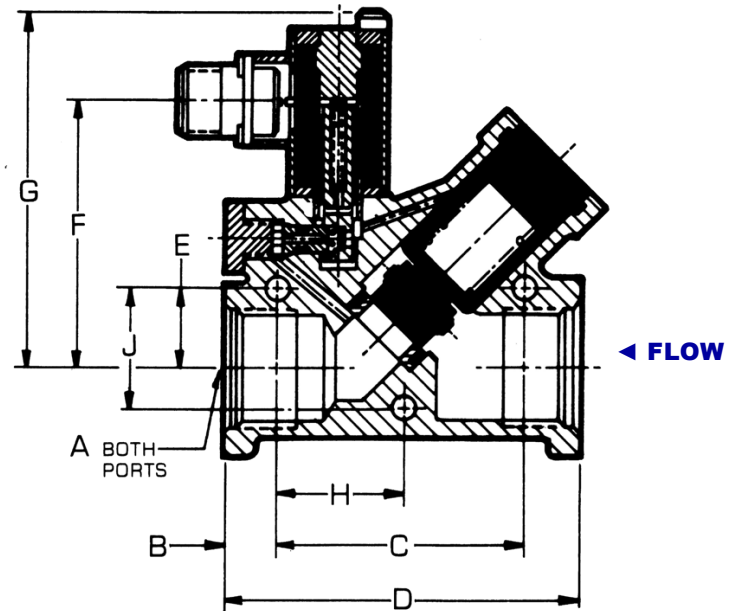
APPLICATION

V80000 valves are typically used on high flow aircraft pneumatic, fuel, and cooling systems under high pressure.

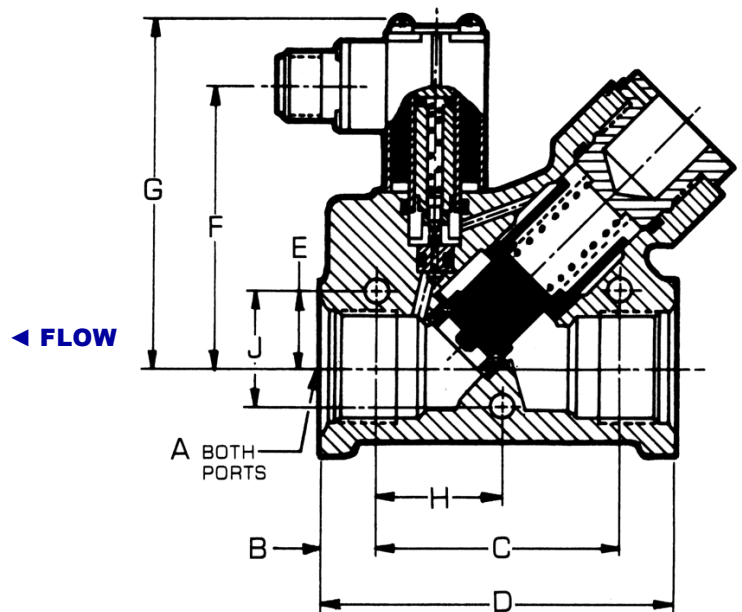
FEATURES

- Maximum Operating Pressure: 50-3000 PSIG
- Proof Pressure: 5800 PSIG
- Burst Pressure: 9000 PSIG
- Flow Rate: Cv: 2.5, 6.1 and 11.5; Cd=0.65
- Leak Rate: Internal is 1.0 cc/hr liquid, 6 cc/hr gas. External is 0 cc/min at 6000 PSIG
- Temperature: -65°F to +250°F (standard), -65°F to +450°F (special construction)
- Wetted Materials: Aluminum, CRES 303, 430F, 302, Fluorosilicone, Vespel
- 1/2", 3/4" and 1" OD line ports
- Weight: 1/2" ports=0.8 lbs. 3/4" ports=1.2 lbs. 1" ports=1.8 lbs.
- Three 0.218" dia. clearance panel-mounting holes in body
- 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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Tabulation

Port Size	Inches								
	A	B	C	D	E	F	G	H	J
-8	0.44	1.94	2.81	0.53	2.41	3.09	1.03	0.81	
-12	0.56	2.28	3.41	0.72	2.59	3.22	1.19	1.09	
-16	0.56	2.69	3.81	0.81	2.69	3.38	1.41	1.41	

Operating Pressure & Flow Ranges

Port Size	Equiv. Sharp Edged Orifice CD=0.65	Cv	Operating Pressure (PSIG)	Ambient Temp.	Min. Volts DC
-8	0.36	2.5	50-3000	165°F	18
-12	0.57	6.1	50-3000	165°F	18
-16	0.78	11.5	50-3000	165°F	18

These ratings are based on using hydraulic fluids. 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 (higher ratings available)
Duty	Continuous
Current	1.07 amps max. at 30 VDC at 70°F
Electrical Connector	MS 3102A-10SL-4P is standard. Pigtail leads and other receptacles are available.

Leakage

External	Zero over range of 0 to 6000 PSIG
Internal	Configuration A: Liquid Service, available down to 1 cc/hr max. Configuration B: Gas Service, available down to 6 scc/hr max.

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