

V80000

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

Valcor Aerospace– 2-Way Piloted Solenoid Valve

DESCRIPTION

The series 80000 are compact, lightweight, shut-off valves which are operated by solenoid pilot valves. The pilot valves do not require either separate pilot pressure or vent ports to function. The main ports are in-line type. These valves are available in two basic construction: a metal-to-metal design (Configuration A) and a soft seal design (Configuration B). In Configuration A, the main valve consists of a spring-loaded piston which carries an optically flat stainless steel poppet. This poppet aligns itself so that it seats against the “leak tight” lapped, stainless, steel seat. This configuration is generally used for fluid systems. Configuration B is similar to A except that it utilizes a soft O-Ring seat for bubble tight sealing of high pressure gases. It is generally used for gas applications.

APPLICATION

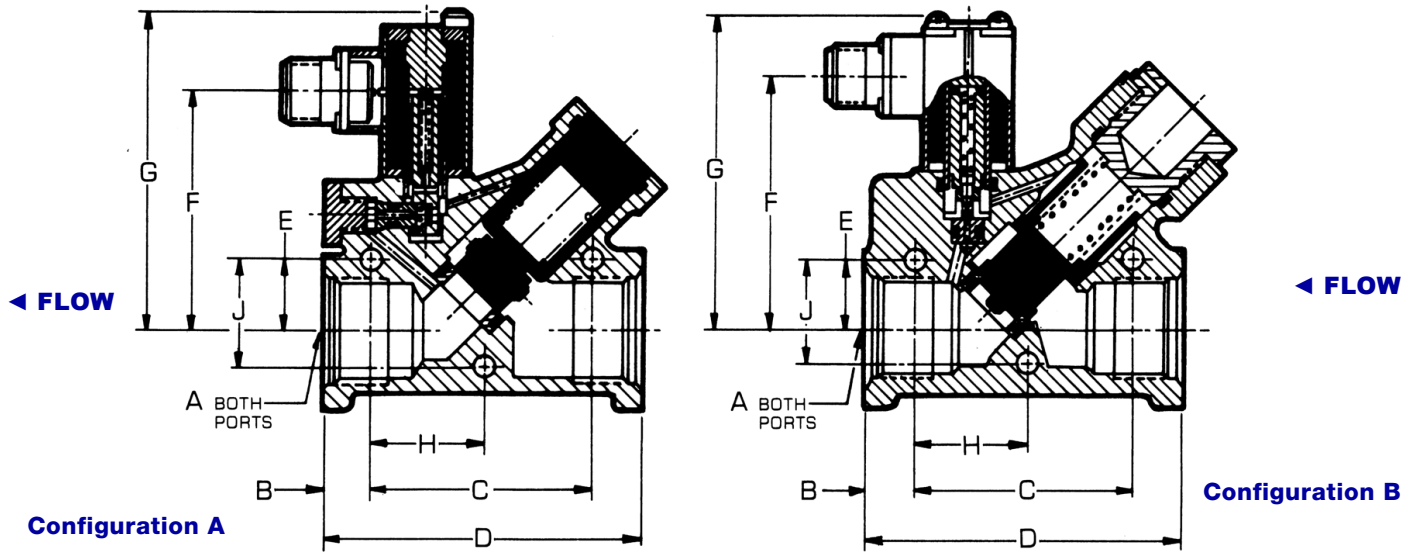
Series 80000 valves are designed for high flow systems in the medium to high pressure range. This valve type is particularly well suited for fuel, oil, water, gases, and either non-corrosive fluids or corrosive fluids (with proper material selections). This valve is available in high pressure options as well.

FEATURES

- 2-Way Shut-off
- 1/2”, 3/4” and 1” O.D. Line
- Configuration: Normally Closed, Normally Open
- Temperature: -65°F to +250°F (Standard Construction), -65°F to +450°F (Special Construction)
- Pressure Range: 50-3000 PSIG Maximum
- Proof pressure: 5800 PSIG
- Burst pressure: 9000 PSIG
- Weight: 0.8 lbs (approx.) with 1/2” port, 1.2 lbs (approx.) with 3/4” port, 1.8 lbs. (approx.) with 1” port



SOLENOID VALVE SERIES 80000



Tabulation

Port Size	A	B	C	D	E	F	G	H
-8	.44"	1.94"	2.81"	.53"	2.41"	3.09"	1.03"	.81"
-12	.56"	2.28"	3.41"	.72"	2.59"	3.22"	1.19"	1.09"
-16	.56"	2.69"	3.81"	.81"	2.69"	3.38"	1.41"	1.41"

Specifications

Operating Pressure and Flow Ratings

Port Size	Equiv. Sharp Edged Orifice CD = .65	Operating* Pressure (PSIG)	Ambient Temp.	Min. Volts DC	Cv
-8	.36	50-3000	165°F	18	2.5
-12	.57	50-3000	165°F	18	6.1
-16	.78	50-3000	165°F	18	11.5

Electrical Data

Voltage	18 to 30 VDC (higher ratings available)
Duty	Continuous
Current	1.07 amps max. at 30 VDC and at 70°F
Electrical Connector	MS3102A-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. maximum. Configuration B: Gas Service, available down to 6 scc/hour maximum.

Temperature	Derating Factor
250°F	.71
350°F	.62
450°F	.54

* These ratings are based on using hydraulic fluids. For higher temperatures, the pressure rating must be reduced. The following table approximates the derating required.