

# V70000

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

Valcor Aerospace- 2-Way Direct-Acting Solenoid Valve



## DESCRIPTION

The series 70000 are direct-acting, solenoid shut-off valves with a balanced poppet design. They have high flow capability at minimum size and weight. These valves employ a simple construction containing only one moving part. The solenoid, which is packless type, directly actuates the poppet. The plunger itself contains a captured elastomeric insert at its lower end. This insert directly seals against the seat, which is part of the valve body. A spring is used to return and maintain the plunger in the de-energized position. Pressure forces are dynamically and statically balanced through the dynamic "O" ring seal on the solenoid poppet plunger, allowing the use of a lightweight, compact solenoid.

## APPLICATION

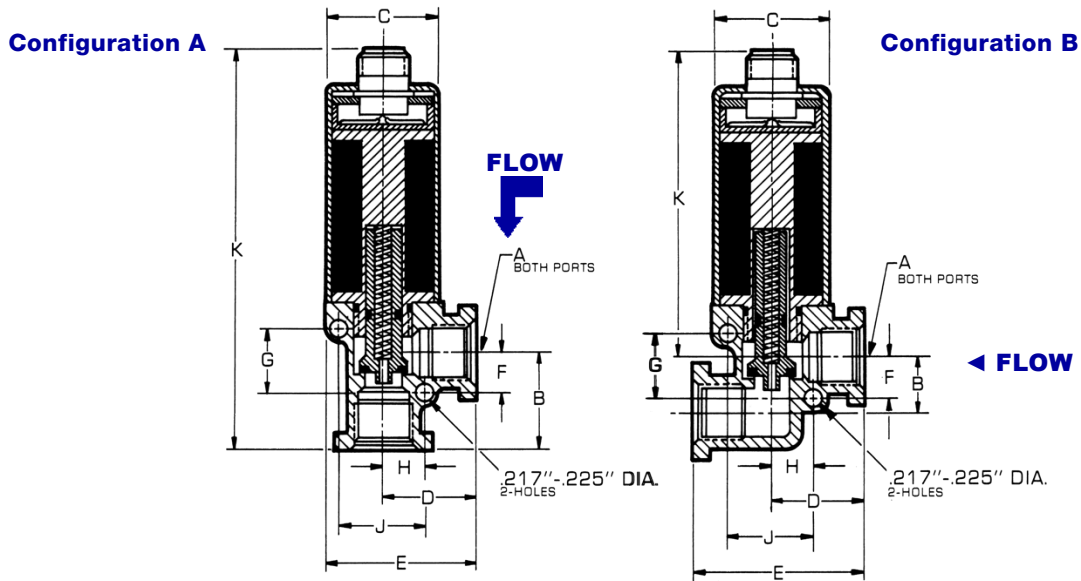
Series 70000 valves are most frequently used where bubble tight sealing is essential. It can be used for hydraulic, fuel, and pneumatic and most other commonly used non-corrosive fluids and gases.

## FEATURES

- 2-Way Shut-Off
- 3/8", 1/2" and 3/4" O.D. Line
- Configurations: Normally Closed, Normally Open
- Temperature: -65°F to +165°F (Standard Construction), -65°F to +450°F (Special Construction)
- Pressure Range: 0-1000 PSIG Maximum
- Proof Pressure: 1500 PSIG
- Burst Pressure: 3000 PSIG Minimum
- Weight: 1.3 lbs. (approx.) with 3/8" port, 1.7 lbs. (approx.) with 1/2" port, 2.0 lbs. (approx.) with 3/4" port



# SOLENOID VALVE SERIES 70000



## Tabulation

Port Size	A	B	C	D	E	F	G	H	I
-6	1.25"	1.31"	1.06"	1.75"	.50"	.75"	.50"	1.00"	4.78"
-8	1.31"	1.50"	1.22"	2.00"	.56"	.87"	.56"	1.15"	5.63"
-12	1.65"	1.87"	1.63"	2.63"	.75"	1.50"	1.50"	1.50"	6.25"

Port Size	A	B	C	D	E	F	G	H	I
-6	.59"	1.31"	1.06"	2.00"	.50"	.75"	.50"	1.00"	3.53"
-8	.76"	1.50"	1.22"	2.25"	.56"	.87"	.56"	1.15"	4.31"
-12	1.60"	1.87"	1.63"	3.00"	.75"	1.50"	1.50"	1.50"	4.38"

## Specifications

### Operating Pressure and Flow Ratings

Port Size	Equiv. Sharp Edged Orifice CD = .65	Operating* Pressure (PSIG)	Ambient Temp.	Min. Volts DC	Cv
-6	.200	0-1000	165°F	18	.78
-8	.298	0-1000	165°F	18	1.70
-12	.460	0-500	165°F	18	4.15

## Electrical Data

Voltage	18 to 30 VDC (higher ratings available)
Duty	Continuous
Current	1.5 amps max. at 30 VDC and at 70°F
Electrical Connector	MS3102-10SL-4P is standard

## Leakage

External	Zero over range of 0 to 1000 PSIG
Internal	Liquid Service, zero drops/minute. Gas Service, 4 bubbles/minute

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.