

# V4700

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

Valcor Aerospace - 2-Way Direct Acting Shut-Off Valve



## DESCRIPTION

Series 4700 are direct acting, solenoid shut-off valves. They permit flow to be shut off in either direction and allow either of the two ports to be used as the pressure port. Series 4700 valves are extremely reliable because their simple construction contains only two moving parts. They are lightweight and compact. Valve shut-off is accomplished by use of Valcor's "Floating Seal" Principle. This utilizes an optically flat seat disc against an equally flat seat. The gate-type action actually wipes the seat clean with each valve operation. The wiping action virtually keeps the valve from being affected by contaminants.

## APPLICATION

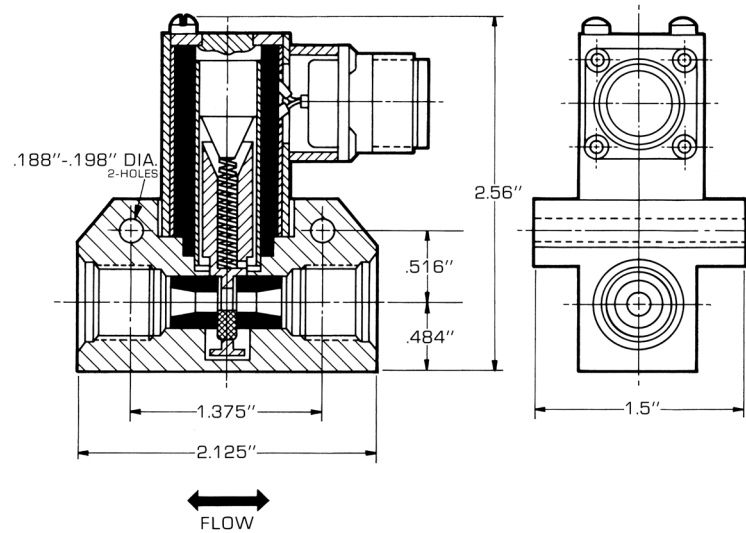
Series 4700 valves are designed for use with most common non-corrosive fluids and gases. They are widely used in many current aircraft fuel systems. The series is particularly suitable for low pressure drop requirements and contaminated liquid systems.

## FEATURES

- 2-way Shut-Off
- Gate-Type Design
- Floating Seal
- 3/8" O.D. Line
- Configurations: Normally Closed/Normally Open
- Temperature: -65°F to +165°F (Standard Static Seals)/-65°F to +450°F (Special Static Seals)
- Pressure range: 0-1200 PSIG Maximum
- Proof pressure: 1500 PSIG
- Bursting pressure: 3000 PSIG
- Weight: 0.44 lbs (approx.)



## SOLENOID VALVE SERIES 4700



### Specifications

#### Operating Pressure and Flow Ranges

##### NORMALLY CLOSED CONFIGURATION

Equiv. Sharp Edged Orifice CD =.65	Operating Pressure (PSIG)		Ambient Temp.	Min. Volts DC	Cv
	30 OHM Coil	47 OHM Coil			
.085	0-1200	0-1000	165°F	18	.14
.102	1-600	0-400	165°F	18	.21
.185	0-90	0-60	165°F	18	.67
.230	0-40	0-25	165°F	18	1.17

##### NORMALLY OPEN CONFIGURATION

.085	1-1200	0-1000	165°F	18	.14
.102	0-800	0-600	165°F	18	.21
.185	0-110	0-90	165°F	18	.67
.230	.50	0-40	165°F	18	1.17

These ratings are based on using JP4 Aviation Fuel. Other orifice sizes, both larger and smaller, are available. However, ratings would change accordingly. For higher temperatures, the pressure rating must be reduced. The following table approximates the derating required.

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

### Electrical Data

Voltage	18 to 30 VDC
Duty	30 OHM Coil, Continuous or Intermittent 47 OHM Coil, Continuous (Depends on application, cooling effect of fluid, etc.)
Current	At 30 VDC and at 72°F 1.07 amps max., for 30 OHM Coil 0.68 amps max., for 40 OHM Coil
Electrical Connector	MS 3102A-10SL-4P is standard. Other types are available. Receptacle location can be on top or side of the solenoid. For other options, contact your Valcor representative.

### Leakage

External	Zero over range of 0 to 2200 PSIG
Internal	Liquid Service, 0.5 cc/hr max. range from 12" head to max. operating pressure. Gas service, as low as 15 scc/min. depending on application.