

# V19800

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

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



## DESCRIPTION

This Valcor valve is a two way, (normally closed or normally open), solenoid-operated shut-off valve used to control the flow of aviation fuels, non-corrosive gases, or non-aeromatic hydraulic fluids. The V19800 is designed for face seal mounting, allowing it to be mounted independently or on a manifold. This design will minimize the size and space needed in your system for these solenoid valves. The valves also utilize Valcor's floating seal design for tight sealing, minimal wear, and particulate resistance.

## APPLICATION

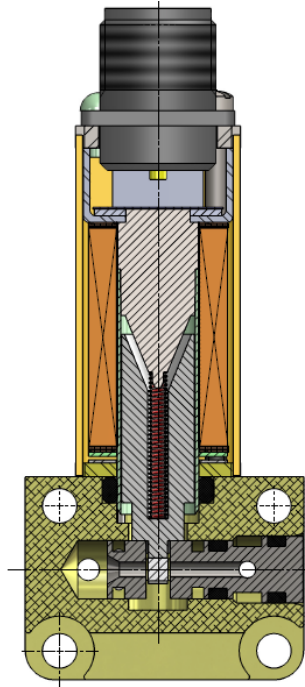
This type of valve is used on many APUs and engines. APUs can use multiple valves manifolded together, for engine starting, running, and purging the fuel manifolds. These valves can also be used as firewall shut-off, deicing, and pilot valves for larger valves on commercial or military aircraft.

## FEATURES

- Available in Normally Open and Normally Closed
- Temperature: -65°F to +250°F
- Operating Pressure: 0-1200 PSIG
- Proof Pressure: 1800 PSIG Max
- Burst Pressure: 2400 PSIG Max
- Flow: ESEO wup to 0.185", Cd=0.65
- Low Current
- 1.3 amps @ 30 vdc @ 72°F (47 Ohms)
- Lightweight: 0.75 to 1.5 lbs approx.
- Low internal leakage: Liquid—0.5 cc/hr. Gas—15 scc/minute.
- Low external leakage: zero over range of 0 to 1500 PSIG
- Carbon floating seal: Tight leakage, reduce wear & friction
- Voltage: 18 to 30 vdc
- No minimum operating pressure is required for tight sealing



## SOLENOID VALVE SERIES V19800



### 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			
0.085	0-1200	0-1000	165°F	18	.14
0.102	1-600	0-400	165°F	18	.21
0.185	0-90	0-60	165°F	18	.67

##### NORMALLY OPEN CONFIGURATION

0.085	1-1200	0-1000	165°F	18	.14
0.102	0-800	0-600	165°F	18	.21
0.185	0-110	0-90	165°F	18	.67

*These ratings are based on using JP4 Aviation Fuel. 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 1.3 amps, for 30 OHM Coil
Electrical Connector	MS 3102A-10SL-4P is standard. Other types are available. Location of receptacle of top or side of the solenoid is operational.

### Leakage

External	Zero over range of 0 to 1500 PSIG
Internal	Liquid Service, 0.5 cc/hr max. range from 12" head to max. pressure. Gas service, as low as 15 scc/min., depending on application.