

# V20000

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

Valcor Aerospace - 2-Way Direct Acting Solenoid Valve



## DESCRIPTION

The series 20000 are direct acting, solenoid shut-off valves with Venturi flow paths. They are available with single or dual-stage coils. Series 20000 valves are designed to be compact and lightweight and have a minimum of moving parts. There are no dynamic "O" rings on the single coil design and only one on the dual-coil design. This series employs Valcor's "Floating Seal" Principle, which results in tight seating by means of an optically flat floating seal disc on an equally flat seat. The gate-type wiping action of the seal disc cleans the seat, making the valve virtually contaminant proof.

## APPLICATION

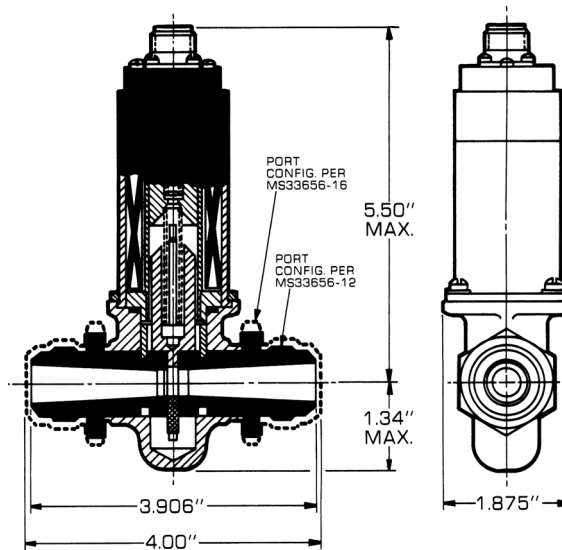
Series 20000 2-way valves are widely used in air and fuel vapor systems and are applicable to all commonly used non-corrosive fluids and gases.

## FEATURES

- 2-Way Shut-off
- Gate-Type Design
- Floating Seal
- 1" OD Line
- Configurations: Normally Open, Normally Closed
- Temperature: -65°F to +450°F (Standard Construction), -425°F to +165°F (Modifications)
- Pressure Range: 0-400 PSIG Maximum
- Burst Pressure: As high as 1000 PSIG depending on operating pressure. Construction would change in keeping with higher burst pressure.
- Weight: 2.1 lbs typical depending on the type of ports and configuration



## SOLENOID VALVE SERIES 20000



### 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			
.37	1-150	0-400	250°F	18	2.75
.55	1-120	0-400	250°F	18	6.00
.75	1-60	0-250	250°F	18	11.00

##### NORMALLY OPEN CONFIGURATION

.37	1-150	0-200	70°F	18	2.75
.55	1-40	0-170	70°F	18	6.00
.75	1-10	0-140	70°F	18	11.00

*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
350°F	.62
450°F	.54

### Electrical Data

Voltage	18 to 30 VDC
Duty	Continuous
Current (Dual Coil)	At 28 VDC and at 70°F Inrush - 17.0 amps max. for a duration of 50 milliseconds max. Holding - 0.9 amps max.
Current (Single Coil)	At 28 VDC and at 70°F, 1.4 amps max.
Electrical Connector	MS 3102A-10SL-4P is standard. Pigtail leads or other receptacles can be provided. Receptacle location can be on top or side of the solenoid. For other options, contact your Valcor representative.
Explosion Proof	Valves meet explosion proof test of MIL-E-5272

### Leakage

External	Zero over range of 0 to 750 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.