

# V27200 - Corrosive

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

Valcor Aerospace - 2-Way Direct Acting Solenoid Valve

## DESCRIPTION

Series 27200-Corrosive are direct-acting coaxial, poppet solenoid shutoff valves. They feature an extremely clean flow passage design through the center of the solenoid resulting in very low pressure drop. These valves are extremely lightweight in relation to their flow to pressure ratings. Sealing is accomplished by means of a conical hardened, ground and lapped stellite stem, which seals on a polished stellite seat. A crushed metal gasket nose piece permits easy assembly and disassembly of all critical parts. All valves contain only two moving parts for long trouble free service. The solenoid plunger and poppet assembly are designed for consistent alignment action.

## APPLICATION

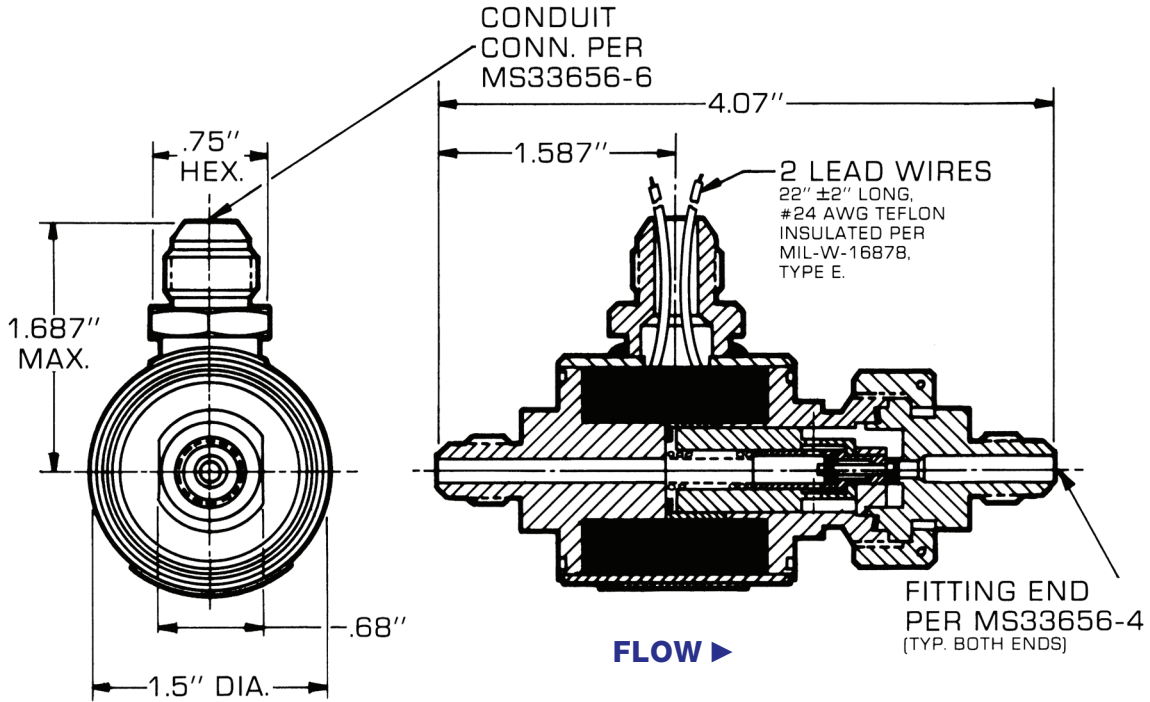
Series 27200-Corrosive valves are designed to handle extremely corrosive liquids and gases, as well as other difficult to handle fluids. They are primarily used in fluorine service in many advanced rocket engines. All are easy disassembled for cleaning and flushing in applications where fluid media must be removed from the system after use. Welded solenoid construction and metal-to-metal seating make this series particularly suitable for cryogenic applications, including submergence into liquid nitrogen.

## FEATURES

- 2-way Shutoff
- 1/4" and 3/8" O.D. Line
- Configuration: Normally Closed, Normally Open
- Temperature: -400°F to +200°F
- Pressure range: 0-3000 PSIG  
Maximum
- Proof pressure: 4500 PSIG
- Burst pressure: 7500 PSIG  
Minimum
- Weight: 1 lbs (approx.)



**SOLENOID VALVE SERIES 27200 CORROSIVE**



**Specifications**

**Operating Pressure and Flow Ratings**

Equiv. Sharp Edged Orifice CD = .65	Operating Pressure (PSIG)		Ambient Temp.	Min. Volts DC	Cv
	30 OHM Coil	47 OHM Coil			
.060	3000	--	80°F	18	.07
.140	500	1500	80°F	18	.38
.275	275	500	165°F	18	.56

*As the maximum operating pressure requirement is decreased, the actual flow capability of the valve can be increased by increasing the plunger stroke.*

*For higher temperature applications a decrease of maximum operating pressure would result. The degree of this derating would be dependent on your actual operating conditions. Consult factory*

**Electrical Data**

Voltage	18 to 30 VDC
Duty	Continuous
Current	1.5 amps max. at 30 VDC and at 70°F (standard coil)
Electrical Connector	MS receptacles standard

**Leakage**

External	Zero, Mass spectrometer tight
Internal	Liquid Service, 1 cc/hr Gas Service, 2 scc/minute