

V14100

3-Way Normally Open or Normally Closed Solenoid Valve

Valcor Aerospace - 3-Way Direct Acting Solenoid Valve



DESCRIPTION

The series 14100 valves are direct acting, 3-way solenoid valves. They are compact, lightweight and employ a gate-type design. Series 14100 valves utilize Valcor's "Floating Seal" Principle that provides a pair of wear-compensating seals which seal on lapped stainless seats. The gate-type action wipes the seat clean with each valve operation. The wiping action keeps the valve virtually free of contaminants. All valves are direct acting with the plunger spring loaded for return to its original position. An optional manual override feature is available in this series.

APPLICATION

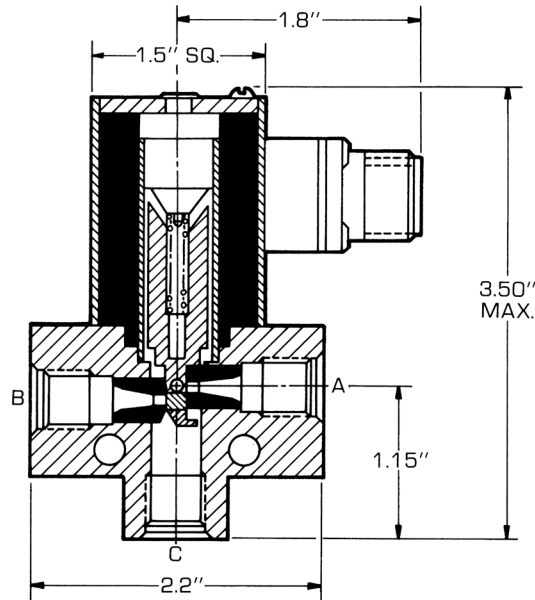
The 3-way, 2-position design of series 14100 valves meet applications requiring a selection or diversion of a fluid to a common channel. They can also be used at low pressure levels as a normally closed 3-way. Fluid media can be fuel, hydraulic, pneumatic or engine bleed air.

FEATURES

- 3-Way, 2-Position
- Gate-Type Design
- Floating Seal
- 1/4" O.D. Line
- Plug-in mounting option for manifold mounting
- Configuration: Normally Closed, Normally Open, Diverter
- Temperature: -65°F to +275°F (Standard Construction), -65°F to +650°F (Special Construction)
- Pressure range: 0-500 PSIG Maximum
- Proof pressure: 175 PSIG (Standard Construction)
- Burst pressure: 300 PSIG (Standard Construction)
- Weight: 0.52 lbs (approx.) (Standard Construction), 0.75 lbs (approx.) (Special Construction)

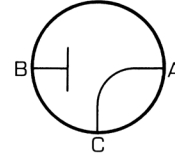


SOLENOID VALVE SERIES 14100

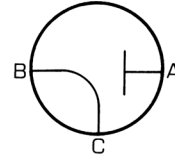


FLOW SCHEMATIC

DE-ENERGIZED



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Specifications

Operating Pressure and Flow Ranges

Equiv. Sharp Edged Orifice CD = .65	Standard Construction	Special Construction	Ambient Temp.	Min. Volts DC	Cv
.06	1-150	0-500	275°F	18	.07

These ratings are based on using JP4 Aviation Fuel. Other orifice size, 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	Continuous
Current	1 amp max. at 30 VDC and at 70°F
Electrical Connector	MS 3102A-10SL-4P is standard. Pigtails and other receptacles are available

Leakage

External	Zero over range of 0 to 2200 PSIG
Internal	Liquid Service, 0.5 cc/hr Gas Service, 15 cc/min.