V64000 2-Way Normally Closed Coaxial Shut-Off Solenoid Valve







DESCRIPTION

V64000 valves are direct acting, coaxial, poppet solenoid shut-off valves that are well-suited for the extreme vibration, temperature, and cycle life requirements found in the most severe satellite and spacecraft operating conditions. The compact size and low weight allow these valves to be used in the tightest space available. Its coaxial design allows for minimal pressure drop and use a poppet with a resilient seal for tight shut-off. These valves do not require system pressure to operate and are available in a normally closed configuration.

APPLICATION

V64000 valves are extensively used as thruster valves in missile and spacecraft applications where size and weight limitations are critical. These valves are available in single and redundant valve assemblies, and suitable for all propellants and inert gases (hot and cold gas).

FEATURES

- Maximum Operating Pressure: 0-1500 PSIG
- Proof Pressure: 2250 PSIG
- Burst Pressure: 3000 PSIG
- Leak Rate: Internal is 0 scc/h. External is 1x10⁻⁶ scc/s
- Temperature: +10°F to +250°F
- Current: 1.5 amps at 30 VDC at 70°F; 18-30 VDC
- Electrical Connection: 36" 22 AWG pigtails standard
- Wetted Materials: 430, 302, 303, 304L, PTFE
- 1/4" OD line
- Fully customizable for your application



Single Valve Assembly Shown.

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Operating Pressure & Flow Ranges

		Operating Pressure (psig)	Orifice (ESEO)	Temp. Range	Fluid	Voltage (VDC)	Weight (lbs)	Response (ms)
Series Redundant	-021-W	430	0.080″	+40°F to +160°F	Hydrazine	28	0.9	<15
Series Redundant	-36-W	250	0.090"	+14°F to +122°F	$GH_2 \& GO_2$	28	1.1	15
Series Redundant	-31-W	220	0.024"	+19°F to +250°F	MMH/NTO	28	0.4	<6
Single	-37-W	250	0.104"	+14°F to +250°F	MMH/NTO	28	0.7	10
Single	-37-1-W	265	0.104"	+10°F to +250°F	MMH/NTO	28	0.8	10
Single	-37-2-W	400	0.104"	+10°F to +250°F	MMH/NTO	28	0.8	10

Other orifice sizes, both larger and smaller, are available. However, ratings would change accordingly. For higher temperatures, the pressure rating must be reduced.

Electrical Data

Voltage	18 to 30 VDC
Duty	Continuous
Other Available Coils	Coils can be made with higher or lower resistance, depending upon customer system avionics.
Electrical Connector	Per customer specifications.

Leakage

External Internal 1 x 10⁻⁶ scc/sec He 0 cc/min at 1500 PSIG

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