MOOG | SPACE | PROPULSION | DUAL LINE ISOLATION LATCH VALVES

## **DUAL LINE ISOLATION LATCH VALVES**



Moog torque motor valves, originally developed for Galileo, LEASAT, INSAT, and Minuteman, have been in production for more than four decades. The latch valve is a bi-stable design that will stay in the last open or closed commanded position. The valve design utilizes a single torque motor and command signal to control two separate, hermetically sealed pressurant or propellent lines.









## KEY ADVANTAGES

- All welded design to prevent external leakage
- PTFE seal and stainless steel construction
- Direct microswitch position indication
- Transition tubes available for stainless to titanium

## **DUAL LINE ISOLATION LATCH VALVES**

## PERFORMANCE CHARACTERISTICS



Valve	Model 51-138, 51-235 1/4" Line, Torque Motor, Stainless Steel
Max Operating Pressure, MEOP	298 psia (20.5 bar)
Proof Pressure	685 psia (47.2 bar)
Burst Pressure	1600 psia (110 bar)
Back Pressure Relief (BPR)	30-200 psid (1.4 – 13.8 bar)
Max Delta P	5 psid at 0.022 lbm/s H₂0
Operating Voltage Range	18 to 42.5 Vdc
Max Response Time	20 msec
Power Consumption	7.6 watts at 28 Vdc, 70F
Leakage, Internal	1 scc/hr GHe
Leakage, External	1x10 <sup>-6</sup> scc/s GHe
Cycle Life	10,000 cycles
Mass	1.39 lbm (0.63 kg) max
Operating Temperature Range	14 to 140 °F (-10 to 60 °C)



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