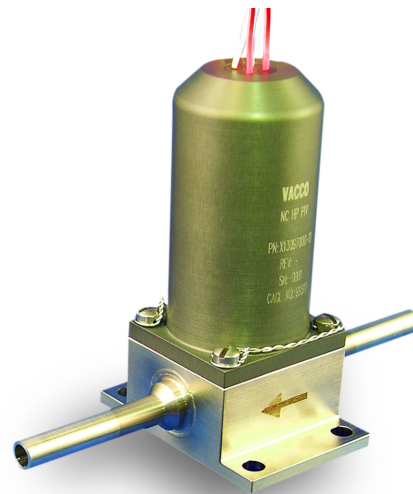


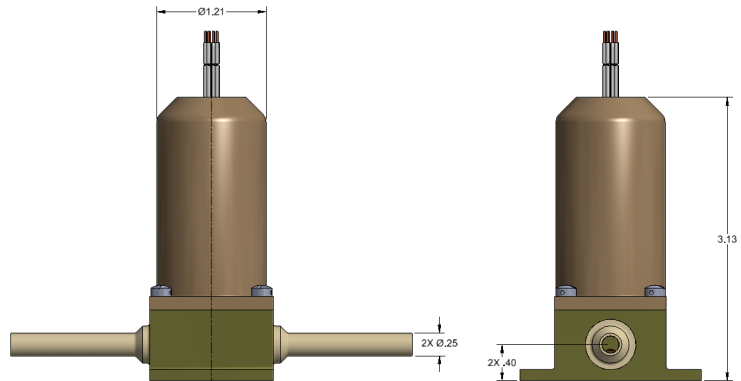
The VACCO Normally Closed Positive Isolation Valve (PIV) is an ordinance-free “Drop-In” replacement for Pyrovalve applications. Features include all-welded titanium construction and a robust, electrically redundant non-pyro actuator. The normally closed PIV features a Frangible Seat that provides a positive seal against internal leakage after actuation. The thick-walled, all-welded titanium pressure boundary prevents external leakage when open or closed.

The PIV actuation mechanism opens the valve with a 100% force margin independent of inlet pressure. The PIV eliminates the explosion hazard, blow-by and shock loads inherent to traditional Pyro Valves.



Features

- High Operating Pressure (5,000 psi/345 bar)
- Positive Isolation:
 - Hermetic Titanium Barrier
 - Burst Tested to 20,000 psi
- All Welded Against Leakage
- Robust Actuation Mechanism:
 - Eliminates Pyrotechnic Charge
 - Low Shock
 - Precludes Blow-By
 - Electrically Redundant
 - Uses Existing Driver Circuits
- Frangible Seat:
 - High Flow Capacity
 - Minimal Debris Generation
 - Positive Retention of Seat Parts

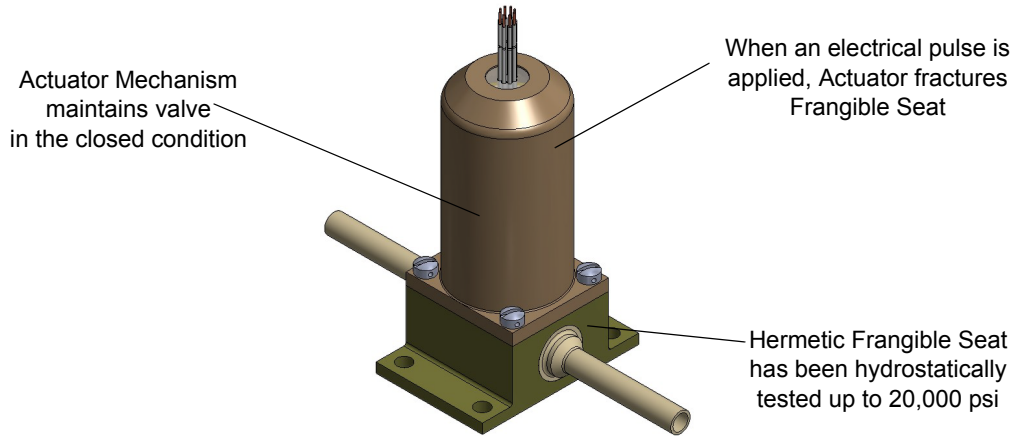


Operating Parameters

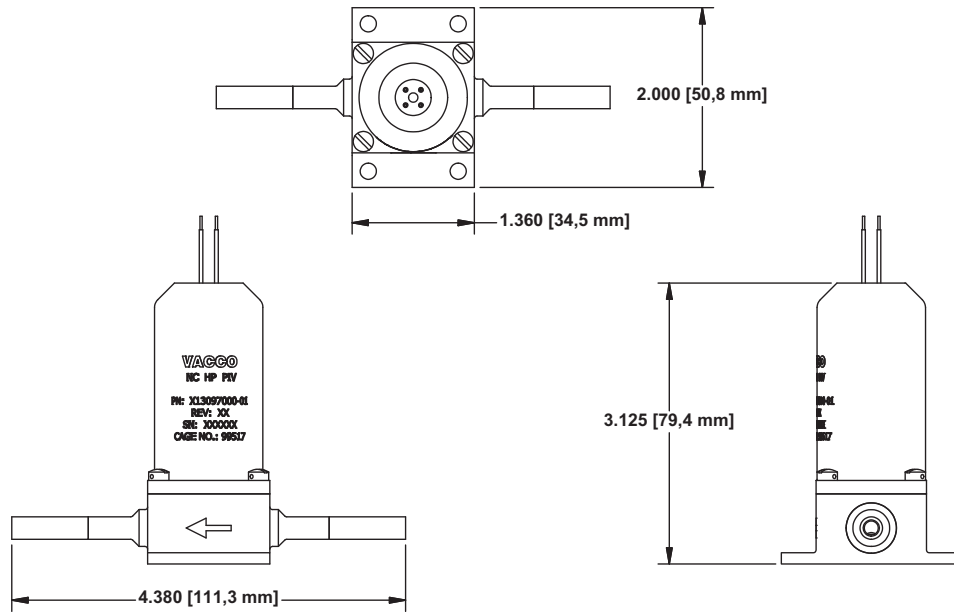
Inlet / Outlet Pressure Range... 0 to 5000 psig/345 bar	Inlet/Outlet Tubes 1/4" or 3/8" Ti
Proof Pressure 7500 psig/517 bar	Iso Valve Response <120 sec
Burst Pressure 12500 psig/862 bar	Internal Leakage <1 X 10 ⁻⁶ sccs GHe
Operating Temperature -34°C to +77°C	External Leakage <1 X 10 ⁻⁶ sccs GHe
Flow Capacity..... 0.128 inch ESEOD/3.25 mm	Weight 0.50 lbs (227 gms) max
Operating Voltage 24 to 32 VDC	

Performance characteristics are based on customer requirements. As such, they are not representative of component capabilities or limitations.

Functional Diagram



Envelope Drawing



Electrical Schematic

