



PIEZO Fast Valve

Features

Body Design

- Normally open valve
- Multiport configuration offering large variety in function
- Various fitting configuration
- Extremely low internal volume

Materials

Body.....	.316L VAR Stainless Steel
Rugosity.....	Ra= 6 μ in average (0.15 μ m)
Diaphragm.....	NiCo Alloy (Elgiloy®)
Seat.....	PCTFE
Weight.....	< 300g (0.66 lbs)

Fittings

- 1/4" VCR
- 1.5" W-Seal
- 1.125" W-Seal
- 1.125" C-Seal

Piezo Actuator Feature

Cycles.....Up to 10,000,000

Verification & Packaging

- 100% inspection with boroscope
- Warranty certificate for standard process
- Stainless Steel plugs on fittings
- Vacuum sealed double packaging with N₂ purge

Benefits

- More reliable than a solenoid valve
- More stable
- Fast response time
- No air system required



Ratings

Specifications

Dead volume.....	< 1.0 cm ³ (0.06 in ³)
Flow coefficient.....	Cv=0.07
Open speed.....	< 5 msec
Close speed.....	< 5 msec
Maximum frequency.....	10 Hz

Temperature

Operating.....-10°C to 150° (14°F to 300°F)

Pressure

Maximum operating.....10 bar (145 psig)
Minimum operating.....10 mTorr

Valve Life Expectancy

Cycles.....Up to 10,000,000

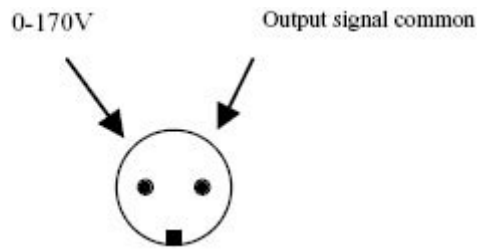
Helium Leak Rate

External.....< 5.10⁻¹⁰ atm cm³/s
Across seat.....< 2.10⁻⁹ atm cm³/s

Electrical Connections

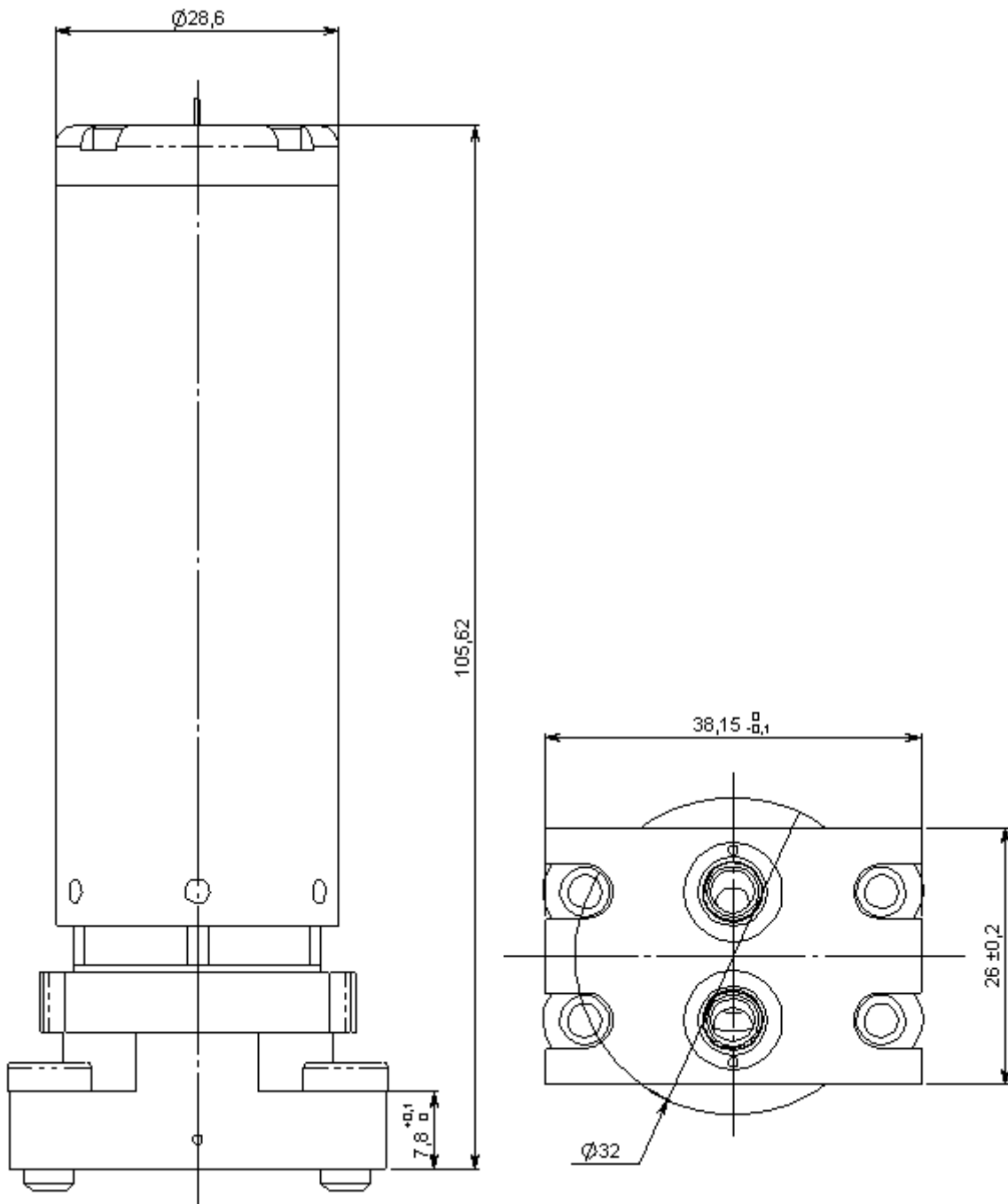
Power supply.....+ 24 VDC
Valve voltage.....0-170 VDC
Male Fischer.....D102 Z051-130 socket
Option: Piezo electrical interface board available for 0-5V control (0V opens the valve, 5V closes the valve)

Electrical Connection



Male fischer D102 Z051-130 socket

Dimensions



Dimensions for 1.5" W-Seal valve

qualiflow therm