P356Low Pressure Differential/Gage Transducers

Description

The model P356 is based on Kavlico's field-proven ceramic capacitive technology. The brass housing surrounds a low-pressure transducer designed specifically for pressures between 0.5 PSI and 5 PSI. It is available in both gage (with a protective cap) and differential versions.

The P356 package has a built-in Metri-Pack 150, electrical connector, a ¼-18 NPT main pressure fitting and a ¼" hose fitting for the differential reference port (low side).

Features

- Superior Long Term Stability
- · Excellent Repeatability/Hysteresis
- EMI/RFI Protection
- Low Power Consumption
- · Linear Amplified Output
- Temperature Compensated Over a Large Range
- Over-Voltage, Reverse Polarity & Short Circuit Protection
- Ten Million Cycle Life Expectancy
- Outstanding Shock & Vibration Performance
- · Main Port Suitable for Dry & Wet Media



- Water Tower Levels
- Waste Water Systems
- Crankcase Over-Pressure
- Plant Automation Equipment
- Pneumatic Controls
- Filter Monitoring
- Leak Detection

Standard Full Scale Pressure Ranges

0-.5, 1.0 , 1.3 and 5.0 PSIG, PSID - 0.5 to + 0.5, -1 to +1 PSIG, PSID

Technical Specifications

Note: Performance Specifications with $5v \pm 0.002$ Vdc supply at 25° C

Pressure Ranges:

Proof Pressure: Burst Pressure: Supply Voltage: Supply Current: Response Time:

Output Voltage:
Zero/Null Pressure:
Full Pressure:
Ratiometricity:
Total Error Band:
Output Impedance:
Operating Temperature:

0 – 0.5 PSI through 0 – 5.0 PSI Gage or Differential 2x Hi-side (1 PSI low-side)

3x Hi-side (3 PSI low-side) 5.00 ±0.25 Vdc 3 mA (Max)

15ms Max to 63% of F.S. Pressure with Step Change on Input.

0.50 ±0.08 Vdc 4.50 ±0.08 Vdc 1.5% of F.S.

≤ 2.0% of Span (-20°C to + 100°C)

< 100 Ω

-30°C to + 100°C

(Seal Material Dependent)

Storage Temperature:

Service Life: Vibration: Shock: Stability: Humidity: Weight:

Electrical Termination:
Preferred Mounting Position:
Pressure Connection:
Recommended Interface

Impedance:

Over-Voltage Protection: Reverse Polarity Protection:

Material-Main housing:

-40°C to + 125°C

10 Million Full Pressure Cycles 10G's P-P Sinusoidal, 10 Hz – 2 kHz

75 G's 1/2 Sine Wave

±0.5% of Full Span over 1-Year

99% Non Condensing 128 grams Max

128 grams Max
Metri-Pack 150 Fle

Metri-Pack 150, Electrical Connector

1/4-18 NPT and 1/4 Tube (low-side)

Min. Load 25 kΩ 16 Vdc

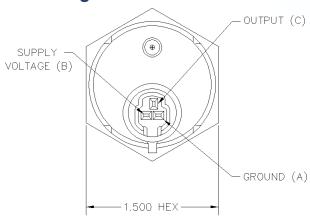
-5 Vdc

CA360 Brass



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Outline Drawings



How to Order

P356 Low Pressure Differential/Gage Transducers

Pressure Ranges

A 0 - 0.5 PSI DA ± 0.5 PSI 1 0 - 1.0 PSI D1 ± 1.0 PSI 1.3 0 - 1.3 PSI 3 0 - 3.0 PSI 5 0 - 5.0 PSI

Reference

D DifferentialG Gage

Seal Material

D Fluorocarbon (Viton) -20 to 125°C E Fluorosilicone -40 to 125°C

Pressure Connection

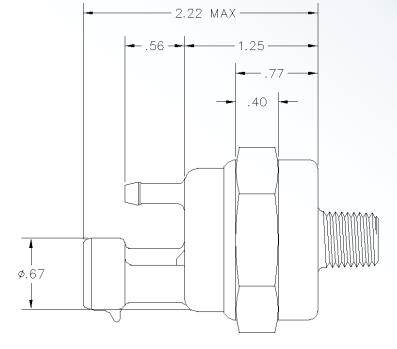
1 1/4-18 NPT (External Threads)

Electrical Connection

- A With mating connector, w/12", 18 AWG leads
- C Without mating connector

P356 - 5 G - E 1 A Example: P356-5G-E1A

Contact Kavlico for accuracy options, custom packaging, alternative pressure ranges, pressure connections or other OEM or application specific requirements.



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