

P356

Low Pressure Differential/Gage Transducers

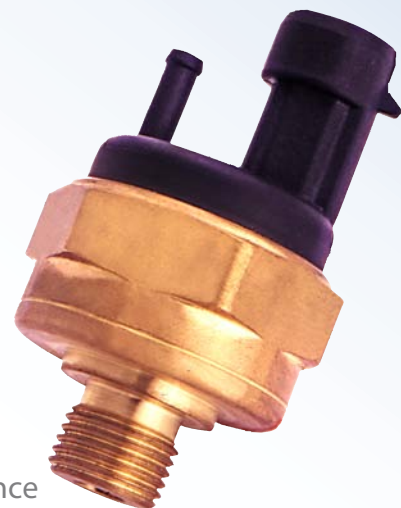
Description

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



Applications

- 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 $5\text{v} \pm 0.002\text{ Vdc}$ supply at 25°C

Pressure Ranges: 0 – 0.5 PSI through 0 – 5.0 PSI
Gage or Differential
Proof Pressure: 2x Hi-side (1 PSI low-side)
Burst Pressure: 3x Hi-side (3 PSI low-side)
Supply Voltage: $5.00 \pm 0.25\text{ Vdc}$
Supply Current: 3 mA (Max)
Response Time: 15ms Max to 63% of F.S. Pressure with Step Change on Input.

Output Voltage:
Zero/Null Pressure: $0.50 \pm 0.08\text{ Vdc}$
Full Pressure: $4.50 \pm 0.08\text{ Vdc}$
Ratiometricity: 1.5% of F.S.
Total Error Band: $\leq 2.0\%$ of Span (-20°C to $+100^\circ\text{C}$)
Output Impedance: $< 100\ \Omega$
Operating Temperature: -30°C to $+100^\circ\text{C}$
(Seal Material Dependent)

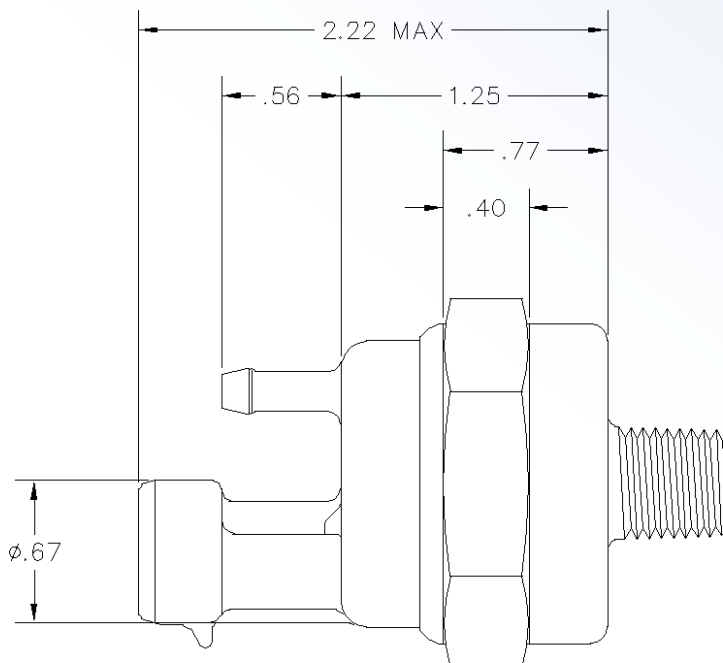
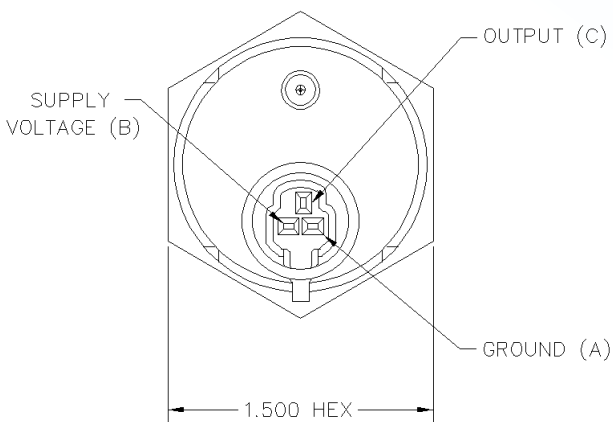
Storage Temperature: -40°C to $+125^\circ\text{C}$
Service Life: 10 Million Full Pressure Cycles
Vibration: 10G's P-P Sinusoidal, 10 Hz – 2 kHz
Shock: 75 G's ½ Sine Wave
Stability: $\pm 0.5\%$ of Full Span over 1-Year
Humidity: 99% Non Condensing
Weight: 128 grams Max
Electrical Termination: Metri-Pack 150, Electrical Connector
Preferred Mounting Position: None
Pressure Connection: ¼-18 NPT and ¼ Tube (low-side)
Recommended Interface
Impedance: Min. Load 25 kΩ
Over-Voltage Protection: 16 Vdc
Reverse Polarity Protection: -5 Vdc
Material-Main housing: 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	Differential
G	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)
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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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