

# P356

## Low Pressure Differential/Gage Transducers

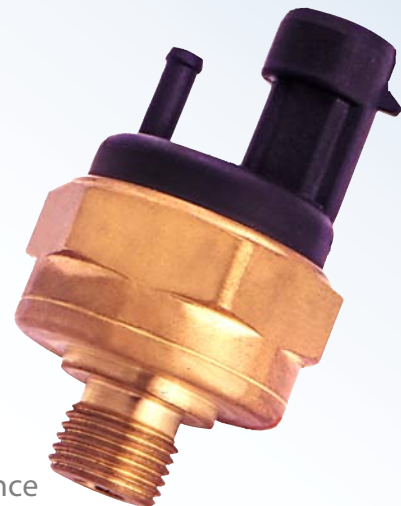
### Description

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 5v ± 0.002 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 ±0.25 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 ±0.08 Vdc  
**Full Pressure:** 4.50 ±0.08 Vdc  
**Ratiometricity:** 1.5% of F.S.  
**Total Error Band:** ≤ 2.0% of Span (-20°C to + 100°C)  
**Output Impedance:** < 100 Ω  
**Operating Temperature:** -30°C to + 100°C  
(Seal Material Dependent)

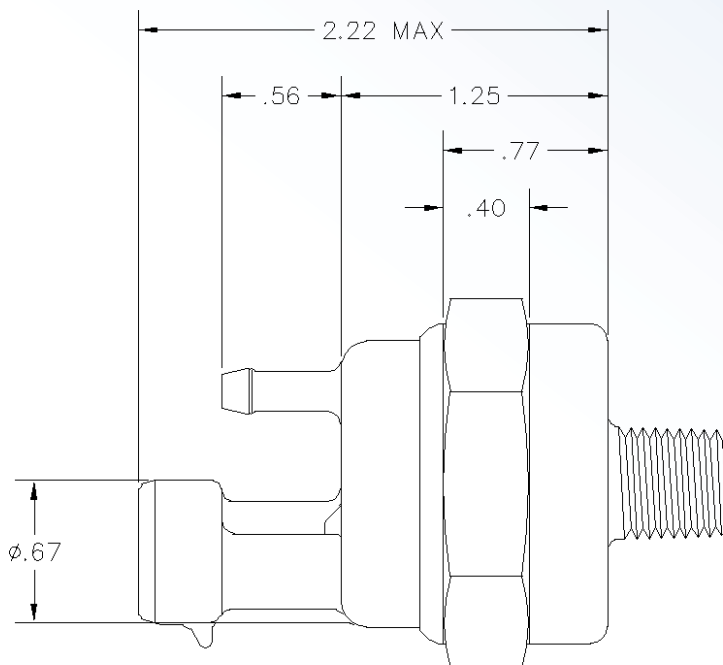
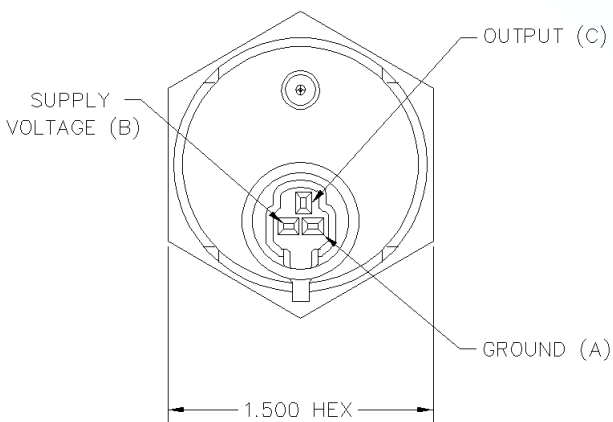
**Storage Temperature:** -40°C to + 125°C  
**Service Life:** 10 Million Full Pressure Cycles  
**Vibration:** 10G's P-P Sinusoidal, 10 Hz – 2 kHz  
**Shock:** 75 G's ½ Sine Wave  
**Stability:** ±0.5% of Full Span over 1-Year  
**Humidity:** 99% Non Condensing  
**Weight:** 128 grams Max  
**Electrical 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



# P356

## Low Pressure Differential/Gage Transducers

### 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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14501 Princeton Avenue | Moorpark, CA 93021

Tel (805) 523-2000 | Fax (805) 523-7125

Web: [www.kavlico.com](http://www.kavlico.com) | E-Mail: [sales@kavlico.com](mailto:sales@kavlico.com)