P992
Low Range Differential Pressure Sensor

RoHS

Description

The P992 series of pressure sensors incorporates a silicon capacitive sensing element in a compact package.

Using a 5 Vdc input, the sensors provide a 0.25 to 4.0 Vdc output proportional to pressure. Internal temperature compensation provides an accurate, easy to use device.

The innovative design eliminates mounting position effects found on other low pressure differential sensors currently available in the market.

Features

- Rugged Package
- Backward Compatible Mounting Configurations
- Amplified Temperature Compensated Linear Output
- No Position Sensitivity
- EMI/RFI & ESD Protected
- Frequency Output Option
- Superior Output Signal Stability

Applications

- Variable Air Volume Systems (VAV)
- Filter Pressure Monitoring
- Duct Air Flow
- Modulated Furnace Controls
- Combustion Air Flow
- Gaseous Leak Detection

Standard Full Scale Pressure Ranges

- 2, 5, 10" H_20
- ±1, ±2, ±5" H_20

Technical Specifications

Note: Performance Specifications with 5v ± 0.002 Vdc supply at 25°C

Differential Pressure Ranges: (inches of H_20)	2, 5, 10, ±1, ±2, and ±5
Proof Pressure:	1.0 PSI (either port)
Burst Pressure:	1.5 PSI (either port)
Supply Voltage:	5.0 ± 0.5 Vdc
Supply Current:	4mA Max.
Output Voltage (Ratiometric):	0.25 to 4.0 Vdc
Calibration Tolerance (at 5.0 Vdc supply and no load):	
Zero/Null Pressure	0.25 Vdc ±60 mV
Span	3.75 Vdc ±60 mV
Voltage Ratiometricity:	±1.5% of span Max. 4.75 to 5.25 Vdc supply
Temperature Effects (0 to 60°C):	±2% of span Max.
Output Impedance:	100 Ohms Max.
Service Life	10,000,000 cycles Min.
Shock:	10G at 6ms duration
Vibration:	1G from 20 Hz to 1200 Hz
Operating Temperature:	0 to 60°C
Storage Temperature:	-40°C to +95°C
Humidity:	95% RH, non-condensing
Weight:	2.5 oz. Max.
Electrical Termination:	
Option A & B	3 solderable pins, tin plated
Option C	Lead wires, 24 AWG, 12" long
Preferred Mounting Position:	None
Pressure Connection:	1/8" diameter tube fitting with barb for 3/16 ID tubing
Recommended Interface Impedance:	25K Ohm Min. resistance between transducer output and ground, in parallel with 0.2 uF Max. capacitance
Over-voltage Protection:	16 Vdc
Reverse Polarity Protection:	-6 Vdc

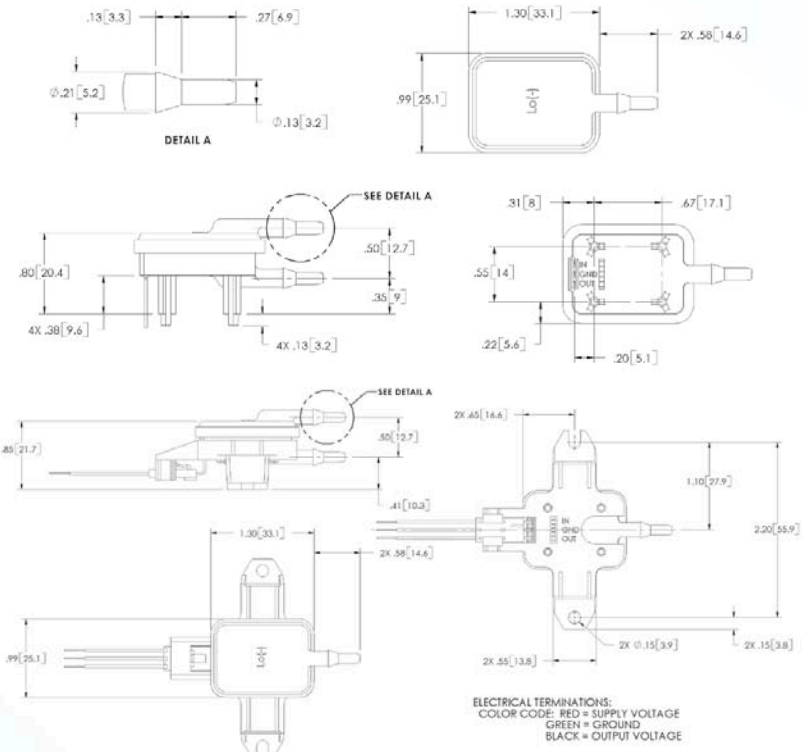
CE

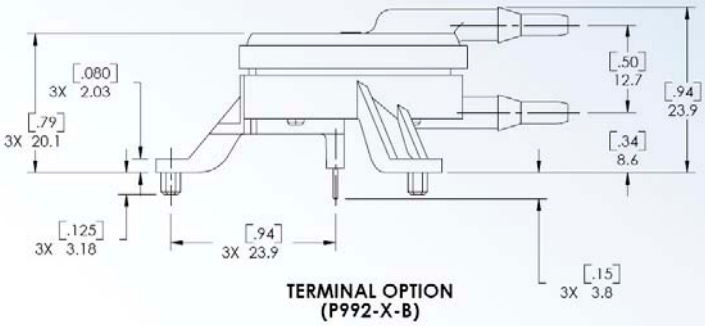
CST
CUSTOM SENSORS & TECHNOLOGIES

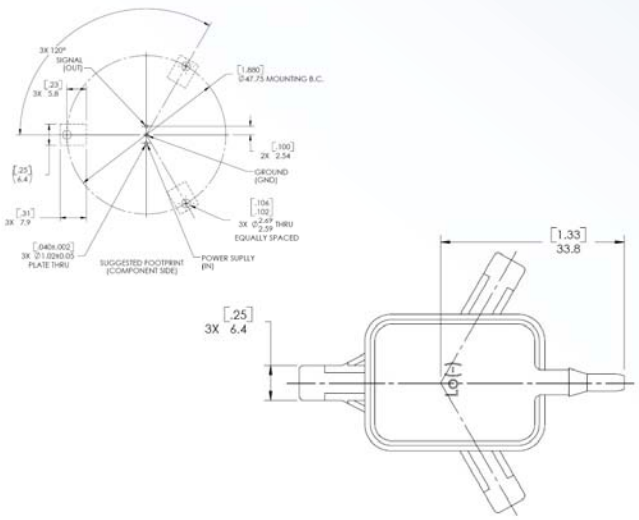
KAVLICO®

P992
Low Range Differential Pressure Sensor

Outline Drawings







How to Order

A typical order number has three codes, separated by two hyphens. Standard seal material is silicone. Standard pressure connection is flared tube fitting. OEM options are available.

P992 Pressure Transducer

Pressure Range

1B	±1″ H_2O
2	0-2.0″ H_2O
2B	±2″ H_2O
5	0-5.0″ H_2O
5B	±5″ H_2O
10	0-10″ H_2O

Electrical Termination

A	PCB Mount
B	*3 Foot PCB
C	2 Foot PCB with lead wires

Example: P992-5B-A for ±5″ H_20 with PCB mounting option

* Contact factory for drawing

Contact Kavlico for frequency output availability, alternative pressure ranges, pressure connections or voltage range options

NOTE: Device should be mounted in a position to prevent moisture intrusion

14501 Princeton Avenue | Moorpark, CA 93021
Tel (805) 523-2000 | Fax (805) 523-7125
Web: www.kavlico.com | E-Mail: sales@kavlico.com