

Data Sheet

P992

Low Range Differential Pressure Sensor



Main Features

Pressure Ranges	1, 2, 5, 10, ± 1 , ± 2 , ± 5 Inches of H ₂ O
Electrical Connection	Options A & B: 3 solderable pins, tin plated. Option C: Lead wires, 24 AWG, 12" long
Pressure Connection	1/8" diameter tube fitting with barb for 3/16 ID tubing
Housing Material	PET 30% glass reinforced, flame retardant
Output Signal	0.25 VDC – 4 VDC

Attributes

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

Typical Applications

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

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. With a 10-year minimum shelf life and a lifetime of millions of cycles, Kavlico's ruggedly designed modules are made to last.

Technical Specifications

Pressure Ranges

From 0 to ...	Inch of H2O	1	2	5	10	±1	±2	±5
Proof pressure	PSI	1	1	1	1	1	1	1
Burst pressure	PSI	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Physical

Operating Life Cycle	min. 10 million full pressure cycles over the full range
Vibration Resistance	1 G from 20 to 1200 Hz
Shock Resistance	10 G's at 6 ms duration
Drop Test	1m onto concrete surface
Weight	≤ 20 grams (without mating connector)
Operating Temperature	-10°C to + 60°C
Storage Temperature	- 40°C to + 95°C*1
Media	Dry or wet (non freezing) media compatible with PET & silicon

1. For more details see How to Order

Performance

Total error band	±2% of span Max. (±3% for 0 - 1" range) (10°C ≤ T ≤ 40°C)
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Electrical

Output Signal	0.25 to 4 VDC Ratiometric
Power Consumption	≤ 20 mW
Operating Supply Signal	5 VDC $\pm 5\%$
Overvoltage Protection	min. 16 VDC
Short-circuit Proofness	Yes ^{*2}
Reverse Polarity Protection	Yes ^{*3}
Output Impedance	100 Ω Max

2. for min. 3 intervals at 5 minutes each

3. for min. 10 seconds on assigned pins

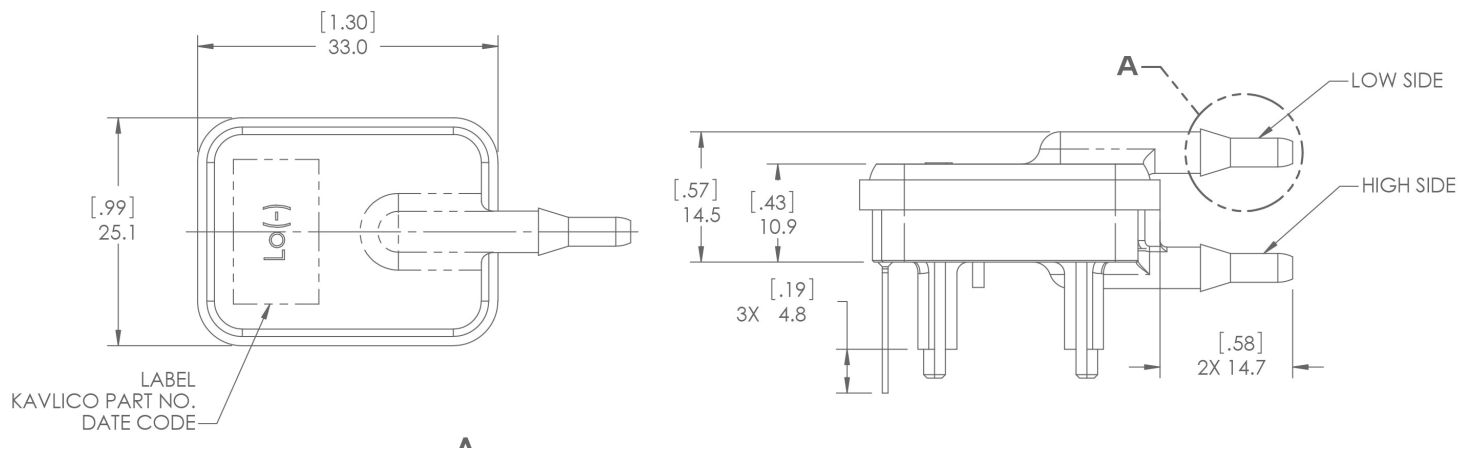
Approvals & Certificates

ROHS	2002/95/EC ROHS Directive
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Dimensions

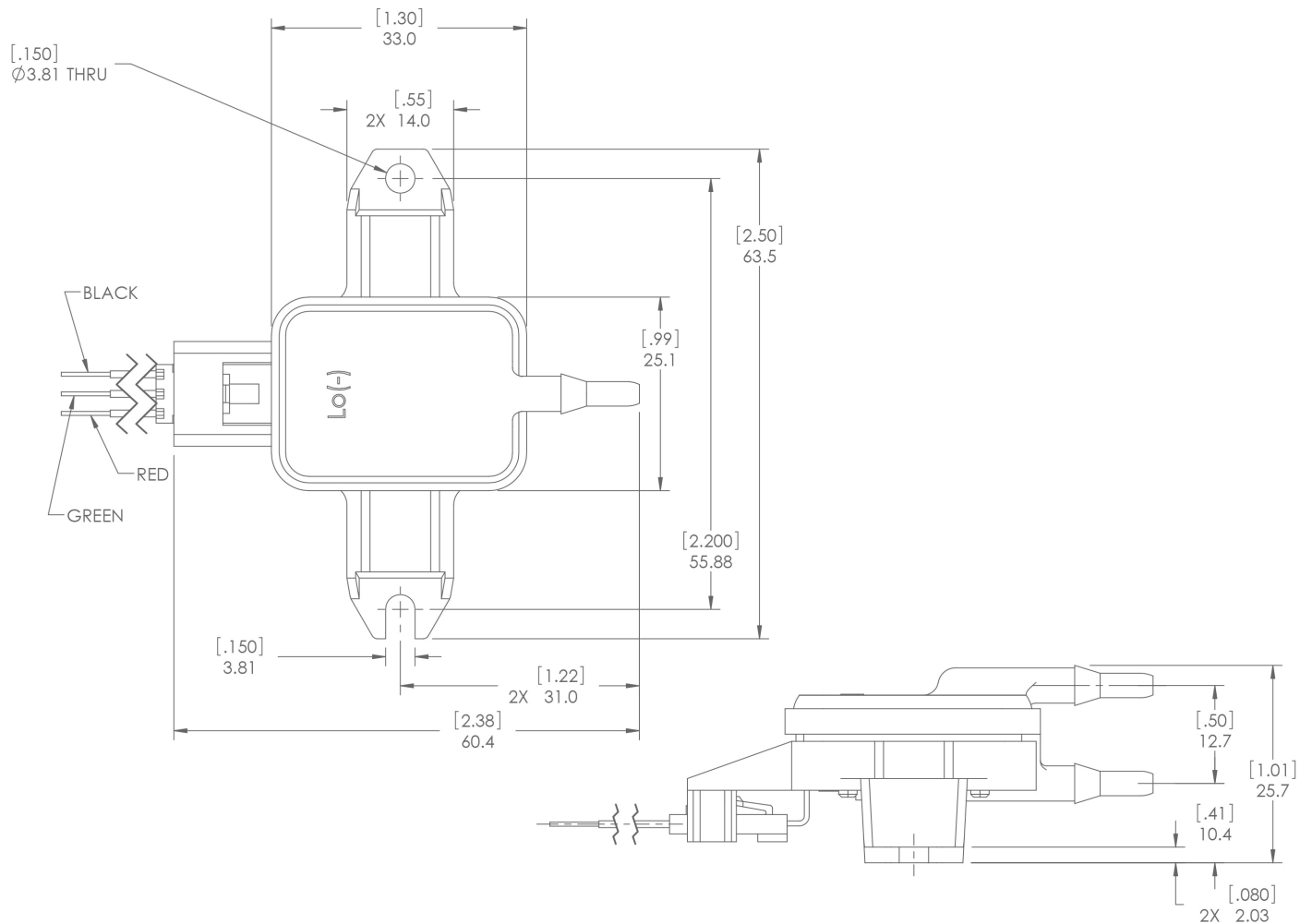
Pressure Sensor

Dimensions in mm [inch]

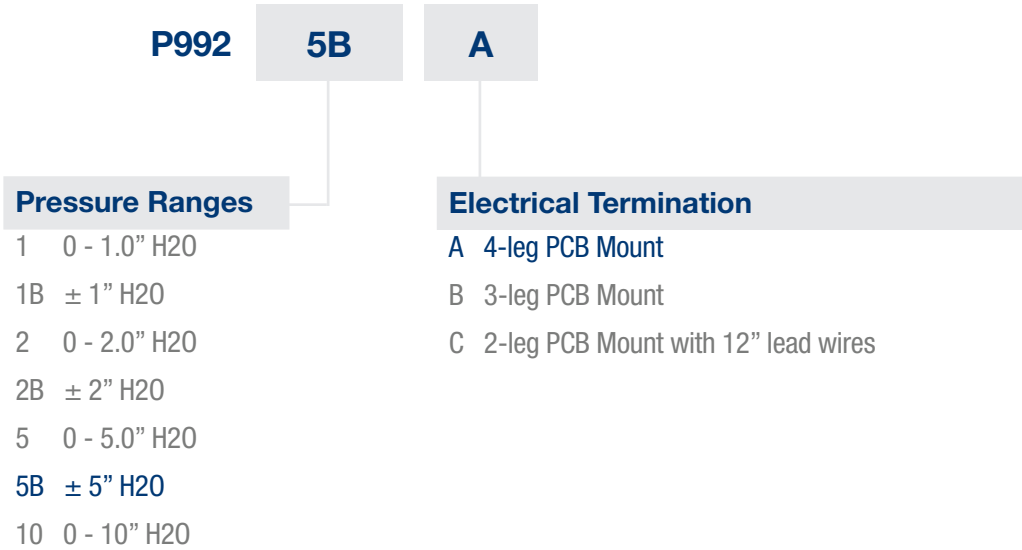


Pressure Sensor - Standard Option P992-x-B

Dimensions in mm [inch]



How to Order



Example:
P992-5B-A

Description:
P992 Pressure Sensor, ±5" H2O, with PCB Mounting Option.



Before installation and operation, ensure that the appropriate pressure sensor has been selected in terms of pressure range, design and specific measuring conditions. Non-compliance can result in serious injury and/or damage to the equipment.

Warning: The product information contained in this catalogue is given purely as information and does not constitute a representation, warranty or any form of contractual commitment. Kavlico reserve the right to modify their products without notice. It is imperative that we should be consulted over any particular use or application of our products and it is the responsibility of the buyer to establish, particularly through all the appropriate tests, that the product is suitable for the use or application. Under no circumstances will our warranty apply, nor shall we be held responsible for any application (such as any modification, addition, deletion, use in conjunction with other electrical or electronic components, circuits or assemblies, or any other unsuitable material or substance) which has not been expressly agreed by us prior to the sale of our products.



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