



## | P992

### Low Range Differential Pressure Sensor

#### 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.



#### Features

- 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

#### Applications

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



#### MAIN FEATURES

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



## Pressure Ranges

<b>From 0 to ...</b>	Inch of H2O	2	5	10	±1	±2	±5
<b>Proof Pressure</b>	PSI	1	1	1	1	1	1
<b>Burst pressure</b>	PSI	1.5	1.5	1.5	1.5	1.5	1.5

## Physical

<b>Operating Life Cycle</b>	min. 10 million full pressure cycles over the full range
<b>Vibration Resistance</b>	1 G from 20 to 1200 Hz
<b>Shock Resistance</b>	10 G's at 6 ms duration
<b>Drop Test</b>	1m onto concrete surface
<b>Weight</b>	≤ 20 grams (without mating connector)
<b>Operating Temperature</b>	-10°C to + 60°C
<b>Storage Temperature</b>	- 40°C to + 95°C <sup>1</sup>
<b>Media</b>	Air

1. For more details see Ordering Options

## Performance

<b>Total Error Band</b>	±2% of span Max. (±3% for 0 - 1" range) (10°C ≤ T ≤ 40°C)
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## Electrical

<b>Output Signal</b>	0.25 to 4 VDC Ratiometric
<b>Power Consumption</b>	≤ 20 mW
<b>Operating Supply Signal</b>	5 VDC ± 5%
<b>Overvoltage Protection</b>	min. 16 VDC
<b>Short-circuit Proofness</b>	Yes <sup>*2</sup>
<b>Reverse Polarity Protection</b>	Yes <sup>*3</sup>
<b>Output Impedance</b>	100 Ω Max

2. for min. 3 intervals at 5 minutes each

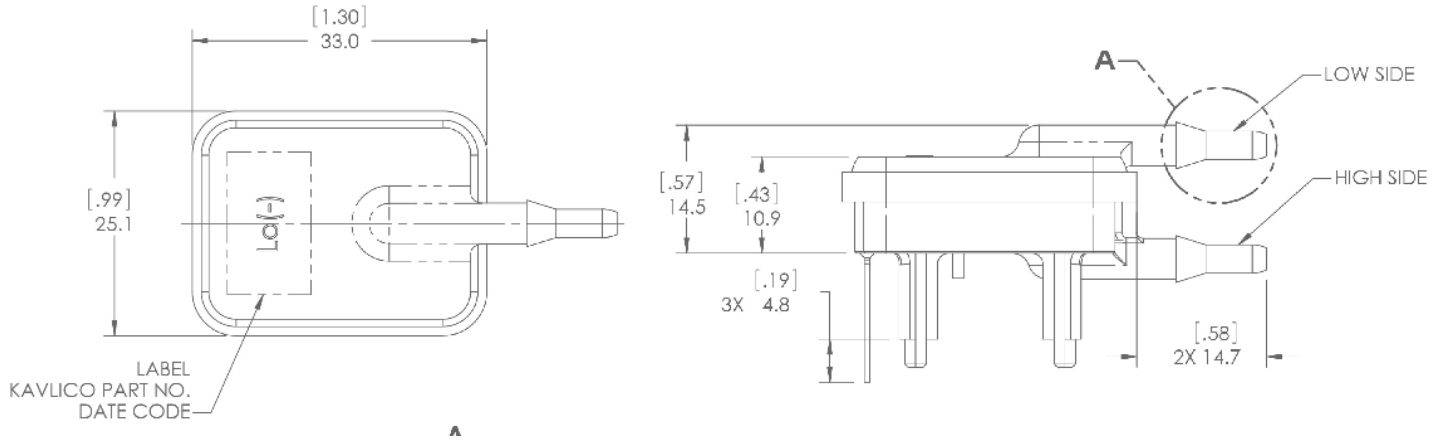
3. for min. 10 seconds on assigned pins



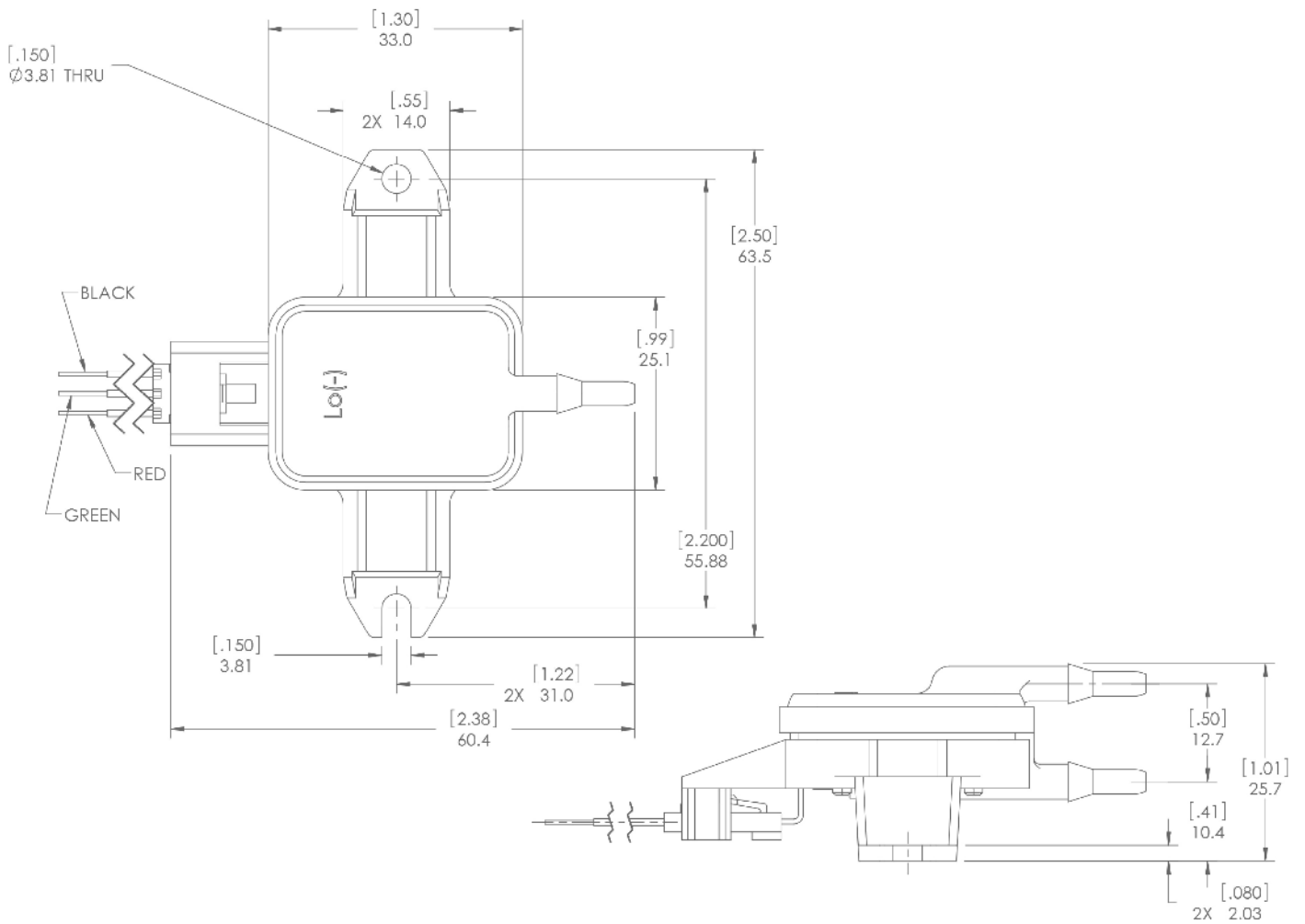
# DIMENSIONS

Dimensions in mm [Inch]

## Pressure Sensor



## Pressure Sensor - Standard Option P992-x-C





## ORDERING OPTIONS

Example: P992-5B-A

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

<b>Family</b>	<b>P992</b>	<b>5B</b>	<b>A</b>
<b>Pressure Ranges</b>	<ul style="list-style-type: none"> <li>1B: ± 1" H2O</li> <li>2: 0 - 2.0" H2O</li> <li>2B: ± 2" H2O</li> <li>5: 0 - 5.0" H2O</li> <li>5B: ± 5" H2O</li> <li>10: 0 - 10" H2O</li> </ul>		
<b>Reference</b>	<ul style="list-style-type: none"> <li>A: 4-leg PCB Mount</li> <li>B: 3-leg PCB Mount</li> <li>C: 2-leg PCB Mount with 12" lead wires</li> </ul>		



## AGENCY APPROVALS & CERTIFICATIONS



2002/95/EC ROHS Directive

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