

# P992

## Low Range Differential Pressure Sensor



### Typical 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

1, 2, 5, 10,  $\pm 1$ ,  $\pm 2$ ,  $\pm 5$  inches of H<sub>2</sub>O

### 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

### 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.

## Technical Specifications

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

### Differential Pressure Ranges

(inches of H <sub>2</sub> O):	1, 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 ± 0.25 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

### Total Error Band

(10° to 40°C):	±2% of span Max. (±3% for 0-1" range)
Output Impedance:	100 Ω Max.
Service Life:	10,000,000 cycles Min.
Shock:	10 g's at 6ms duration
Vibration:	1 g from 20 Hz to 1200 Hz
Operating Temperature:	0°C to 60°C
Storage Temperature:	-40°C to +95°C
Humidity:	95% RH, non-condensing
Weight:	20 grams 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:	25 kΩ 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



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.

© 2013 Kavlico. All rights reserved.

## How to Order

Use this diagram, working top to bottom and left to right to construct your model number. An example is shown below. Custom OEM options are also available.

### P992 Low Range Differential Pressure Sensor

#### Pressure Range

1	0 - 1.0" H <sub>2</sub> O
1B	±1" H <sub>2</sub> O
2	0 - 2.0" H <sub>2</sub> O
2B	±2" H <sub>2</sub> O
5	0 - 5.0" H <sub>2</sub> O
5B	±5" H <sub>2</sub> O
10	0 - 10" H <sub>2</sub> O

#### Electrical Termination

A	PCB Mount
B	3* Foot PCB (Compatible with Kavlico P892)
C	2 Foot PCB with lead wires (Compatible with Kavlico P592/P593/P792)

P992 - 5B - A

Example: P992 - 5B - A

Description: P992 Pressure Sensor, ±5" H<sub>2</sub>O,  
with PCB Mounting Option.

**Don't see what you want?**

Call us at +1 (619) 710-2068 to customize this product  
to meet your application-specific needs!