

| 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

Pressure Ranges	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



Pressure Ranges

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

1. For more details see Ordering Options

Performance

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

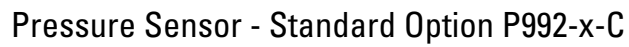
Output Signal	0.25 to 4 VDC Ratiometric
Power Consumption	≤ 20 mW
Operating Supply Signal	5 VDC ± 5%
Overvoltage Protection	min. 16 VDC
Short-circuit Proofness	Yes ^{*2}
Reverse Polarity Protection	Yes ^{*3}
Output Impedance	100 Ω Max

2. for min. 3 intervals at 5 minutes each

3. for min. 10 seconds on assigned pins



Pressure Sensor





ORDERING OPTIONS

Example: P992-5B-A

P992 Pressure Sensor, $\pm 5"$ H₂O, with PCB Mounting Option.

Family	P992	5B	A
P992			
Pressure Ranges			
1B: $\pm 1"$ H ₂ O			
2: 0 - 2.0" H ₂ O			
2B: $\pm 2"$ H ₂ O			
5: 0 - 5.0" H ₂ O			
5B: $\pm 5"$ H ₂ O			
10: 0 - 10" H ₂ O			
Reference			
A: 4-leg PCB Mount			
B: 3-leg PCB Mount			
C: 2-leg PCB Mount with 12" lead wires			



AGENCY APPROVALS & CERTIFICATIONS



2002/95/EC ROHS Directive

Revised 3/8/18

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