

40PC001B2A



Actual product appearance may vary.

Pressure Sensors: Measurement Type: Bi-Directional Gage, Differential; Signal Conditioning: Amplified; Pressure Range: \pm 50.0 mm Hg; Port Style: Straight for O-ring interface

Features

Smallest amplified sensor package
Minimal PCB space
Fully signal conditioned
Operating temperature range from -45 °C to 125 °C [-49 °F to 257 °F]
Silicon piezoresistive technology
Monolithic design
6 Pin DIP package
Port designed for O-ring interface

Potential Applications

Medical

Oxygen and nitrogen gas distribution in hospitals
Dental chairs
CPAP (Continuous Positive Airway Pressure) equipment
Respirators and ventilators
Blood glucose monitors
Oxygen conservers
Oxygen concentrators
Nebulizers
Kidney dialysis machines
Blood cell separators
Hospital beds

Environmental

Water control valves
Instrumentation
Irrigation equipment
Filter monitoring equipment

Industrial Instrumentation

Robotics
Pressure valves
Leak detection
Air compressors

Analytical Instrumentation

Gas chromatography
Chemical Analyzers

Transportation

Electronic brake systems
Engine oil level
Transmission fluid level
Air conditioning system

Fuel injection systems

Description

The cost-effective 40PC Series miniature pressure sensor is the smallest amplified pressure sensor manufactured by Honeywell. The fully calibrated and temperature-compensated sensor is very robust, covering a wide range of temperature extremes. Additionally, the 40PC Series is compatible with a broad array of media, from dry air and water to refrigerant coolants and engine fuel. The 0.5 Vdc to 4.5 Vdc analog output voltage signal is linearly proportional to input pressure. These devices operate on a single end supply voltage of 5.0 Vdc.

Product Specifications	
Measurement Type	Bidirectional Gage,Differential
Signal Conditioning	Amplified
Pressure Range	± 50.0 mm Hg
Maximum Overpressure	± 170 mm Hg
Supply Voltage	5.0 Vdc ± 0.25 Vdc
Compensated	Yes
Output Calibration	Yes
Response Time	1 ms max.
Termination	PCB; Leads formed away from port
Port Style	Straight for O-ring interface
Package Style	Honeywell - Monolithic
Linearity	0.80 % span max.
Typical Sensitivity	40 mV/mm Hg
Full Scale Span	4.0 Vdc typ.
Null Offset	2.50 Vdc typ.
Repeatability & Hysteresis Error	± 0.15 % span typ.
Shock	Qualification tested to 150 g
Vibration	MIL-STD-202 Method 213 (150 g half sine 11 ms)
Operating Temperature Range	-45 °C to 125 °C [-49 °F to 257 °F]
Compensated Temperature Range	-45 °C to 125 °C [-49 °F to 257 °F]
Storage Temperature Range	-55 °C to 125 °C [-67 °F to 257 °F]
Media Compatibility	P1 port: Dry gases only. Media must be compatible with epoxy based adhesive. P2 port: Media must be compatible with glass, silicon, stainless steel, invar, Sn/Ni plating or Sn/Ag solder.
UNSPSC Code	411121
UNSPSC Commodity	411121 Transducers
Availability	Global
Series Name	40PC