

Pressure Sensors: Measurement Type: Gage; Signal Conditioning: Amplified; Pressure Range: 0 psi to 15.0 psi; Port Style: Straight for O-ring interface

Actual product appearance may vary.

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

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	Gage
Signal Conditioning	Amplified
Pressure Range	0 psi to 15.0 psi
Maximum Overpressure	45.0 psi
Supply Voltage	5.0 Vdc ± 0.25 Vdc
Compensated	Yes
Output Calibration	Yes
Response Time	1 ms max.
Termination	PCB; Unformed
Port Style	Straight for O-ring interface
Package Style	Honeywell - Monolithic
Linearity	0.20 % span max.
Typical Sensitivity	266.6 mV/psi
Full Scale Span	4.0 Vdc typ.
Null Offset	0.50 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 gas 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