



142PC01D



Actual product appearance may vary.

Pressure Sensors: Measurement Type: Differential, Gage; Signal Conditioning: Amplified; Pressure Range: 0 psi to 1.0 psi; Port Style: Straight

Features

- Robust package
- PCB termination
- Fully signal conditioned
- Amplified

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

Environmental

- Water control valves
- Instrumentation
- Irrigation equipment
- Filter monitoring equipment
- Leak detection systems in underground telecommunications cables

Radiometers

Industrial Instrumentation

- Robotics
- Pressure valves
- Leak detection
- Air compressors

Analytical Instrumentation

- Gas chromatography
- Chemical analyzers

Description

140PC Series pressure sensors provide an output voltage that is proportional to the pressure applied. They operate in ranges from 0 psi to 1.0 psi to 0 psi to 30.0 psi using a single, positive supply voltage ranging from 7.0 Vdc to 16.0 Vdc.

| Product Specifications | |
|----------------------------------|---|
| Measurement Type | Differential, Gage |
| Signal Conditioning | Amplified |
| Pressure Range | 0 psi to 1.0 psi |
| Maximum Overpressure | 20.0 psi |
| Supply Voltage | 7.0 Vdc min., 8.0 Vdc typ., 16.0 Vdc max. |
| Compensated | Yes |
| Output Calibration | Yes |
| Response Time | 1 ms max. |
| Termination | PCB |
| Port Style | Straight |
| Package Style | Honeywell - 100PC |
| Linearity | $\pm 0.75\%$ span max. ($P2 > P1$), $\pm 0.40\%$ span max. ($P2 < P1$) |
| Typical Sensitivity | 5 V/psi |
| Full Scale Span | 5.0 Vdc typ. |
| Null Offset | 1.0 Vdc typ. |
| Repeatability & Hysteresis Error | $\pm 0.30\%$ span typ. |
| Shock | Qualification tested to 150 g |
| Vibration | MIL-STD-202 Method 213 (150 g half sine 11 ms) |
| Weight | 28 g [0.987 oz] |
| Operating Temperature Range | -40 °C to 85 °C [-40 °F to 185 °F] |
| Compensated Temperature Range | -18 °C to 63 °C [0 °F to 145 °F] |
| Storage Temperature Range | -55 °C to 125 °C [-67 °F to 257 °F] |
| Media Compatibility | Port 1: Dry gases only. Port 2: Wetted materials. Polyester housing, epoxy adhesive, silicon, borosilicate glass and silicon-to-glass bond. |
| UNSPSC Code | 411121 |
| UNSPSC Commodity | 411121 Transducers |
| Availability | Global |
| Series Name | 140PC |

