



Representative photograph, actual product appearance may vary.

Due to regional agency approval requirements, some products may not be available in your area. Please contact your regional Honeywell office regarding your product of choice.

176PC28HD2

Pressure Sensors: Measurement Type: Differential, Gage; Unamplified; Range: ± 28.0 in H₂O

Features

- Miniature package
- Low pressure measurement
- Calibrated null and span
- Temperature compensated for span over 0 °C to 50 °C [32 °F to 122 °F]

Typical Applications

Medical

- CPAP (Continuous Positive Airway Pressure) equipment
- Respirators and ventilators
- Blood glucose monitors
- Oxygen conservers
- Oxygen concentrators
- Nebulizers
- Blood cell separators

Environmental

- Filter monitoring equipment

Description

170PC Series pressure sensors provide a millivolt output that is proportional to the pressure applied. They operate from 0 inches to 7.0 inches of water to 0 inches to 27.68 inches of water using a single, positive supply voltage ranging from 10.0 Vdc to 16.0 Vdc. When pressure is applied, a differential output voltage, proportional to that pressure, is produced.



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Product Specifications	
Measurement Type	Gage, Differential
Signal Conditioning	Unamplified
Pressure Range	± 28.0 in H ₂ O
Maximum Overpressure	140.0 in H ₂ O
Supply Voltage	10.0 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	$\pm 3.0\%$ span max. (P2 > P1), $\pm 1.5\%$ span max. (P2 < P1)
Typical Sensitivity	1.5 mV/in H ₂ O
Full Scale Span	42 mVdc typ.
Null Offset	0 mV typ.
Null Shift over Temperature	$\pm 3.0\%$
Span Shift Over Temperature	$\pm 3.5\%$ at 10 Vdc
Repeatability & Hysteresis Error	$\pm 0.25\%$ span typ.
Operating Temperature Range	-40 °C to 85 °C [-40 °F to 185 °F]
Compensated Temperature Range	0 °C to 50 °C [32 °F to 122 °F]
Storage Temperature Range	-55 °C to 125 °C [-67 °F to 257 °F]
Media Compatibility	P1 port: Dry gas only. P2 port: Wetted materials; polyester housing, silicon and silicon based adhesives.
Input Resistance	6.3 kOhms
Shock	Qualification tested to 150 g
Vibration	MIL-STD-202 Method 204 (10 Hz to 2000 Hz at 10g)
Weight	57 g [2 oz]
UNSPSC Code	411121
UNSPSC Commodity	411121 Transducers
Availability	Global
Series Name	170PC Series



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 **WARNING**

PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

 **WARNING**

MISUSE OF DOCUMENTATION

- The information presented in this product sheet (or catalog) is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

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