

Pressure Sensors: Measurement Type: Absolute; Signal Conditioning: Unamplified; Pressure Range: 2.0 psia to 15.0 psia; Port

Style: Barbed: High Grade

Actual product appearance may vary.

## **Features**

Low Cost, Small Size Temperature Compensated Zero and Span Calibrated MilliVolt Output

Differential, Gage and Absolute

Pressure

Constant Voltage Excitation
High Impedance - Low Current

## **Potential Applications**

Medical Applications
Applications Requiring Small

Size

Applications Requiring Vacuum

Reference

## Description

The CPC and CPX Series sensors integrate silicon micromachined sensing technology, temperature compensation, and calibration in a complete family of low cost packages. This series offers the most cost-effective solution for design requirements. These piezoresistive pressure sensors use micromachined silicon chips mounted on a ceramic and protected with a plastic cap. Several tube arrangements with nylon housings are available for various pressure applications. On devices of 5 psi and above, the topside of the chip is protected against humidity by a Silgel coating. While the sensors are designed for use with noncorrosive, nonionic pressure media, they accommodate many gases that are used in medical applications. The CPC Series is designed for the lowest cost and smallest profile. The standard packages have only a plastic cap for OEM applications. The CPC...F accommodates pressure measurements in tube applications.

Product Specifications	
Measurement Type	Absolute
Signal Conditioning	Unamplified
Pressure Range	2.0 psia to 15.0 psia
Maximum Overpressure	45.0 psia
Supply Voltage	3.0 Vdc min., 12.0 Vdc typ., 16.0 Vdc max.
Compensated	Yes
Output Calibration	Yes
Termination	PCB
Port Style	No Port
Package Style	Honeywell DI-CPC
Typical Sensitivity	6 mV/psi
Full Scale Span	90 mV typ.
Null Offset	0 mV typ.
Null Shift over Temperature	± 0.5 mV typ.

Span Shift Over Temperature	± 1.0 % span
Linearity, Hysteresis Error	± 0.25 % typ. ± 0.5 % max. Span
Input Resistance	5.0 kOhms min.
Output Resistance	3.0 kOhms typ.
Operating Temperature Range	-25 °C to 85 °C [-13 °F to 185 °F]
Compensated Temperature Range	0 °C to 70 °C [32 °F to 158 °F]
Storage Temperature Range	-40 °C to 125 °C [-40 °F to 257 °F]
Media Compatibility	P1 port: DRY GASES ONLY: Media must be compatible with epoxy based adhesive. P2 port: Wetted materials; Media must be compatible with nylon housing, epoxy adhesive and silicon.
UNSPSC Code	411121
UNSPSC Commodity	411121 Transducers
Availability	Global
Series Name	CPC