



## Miniature SMT Low Pressure Sensors with Wet/Wet Differential

**24PC Series, Uncompensated/Unamplified**  
1 psi to 15 psi



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The 24PC Series Miniature Surface Mount Technology (SMT) Low Pressure Sensors are small, cost effective devices intended for use with wet/wet differential sensing. Based on the long established reliability and accuracy of the 24PC Miniature Pressure Sensor single in-line package, the SMT version's smaller configuration reduces the footprint area on the printed circuit board (PCB), thereby reducing overall PCB size and cost. The sensor is capable of being board mounted with other common SMT devices, helping to eliminate secondary board mounting operations and improving manufacturing productivity.

These sensors feature proven sensing technology that uses a specialized piezoresistive micromachined sensing element to offer high performance, reliability, and accuracy. Each sensor contains four active piezoresistors that form a Wheatstone bridge. When pressure is applied, the resistance changes and the sensor provide a millivolt output signal that is proportional to the input pressure.

The low power 24PC sensors are designed to measure pressures from  $\pm 1$  psi to  $\pm 15$  psi and have an operating temperature range of  $-40$  °C to  $85$  °C [ $-40$  °F to  $185$  °F]. The 24PC sensors have the flexibility to be excited with constant current or constant voltage. When driven by constant current, the pressure sensor's terminal voltage will rise with increasing temperature. The rise in voltage not only temperature compensates the span but also provides an indication of the sensor's temperature.

These sensors can accommodate a variety of wet and dry media that are compatible with polyphthalamide (PPA) plastics and media seals specified in the Nomenclature and Order Guide (see Figure 2). The 24PC sensors are RoHS compliant. They are designed and manufactured according to ISO 9001 standards.

## What makes our sensors better?

- Wet/Wet capability (i.e., liquids on both ports)
- Media compatible with many liquids and gases
- Variety of port configurations gives the customer flexibility in making pneumatic connections
- Small size reduces PCB layout



WET/WET CAPABILITY • MEDIA COMPABILITY • MANY PORTING OPTIONS