Board Mount Pressure Sensors Feature Self-Calibration

Honeywell introduced the TruStability NCS Series, Uncompensated/Unamplified Board Mount Pressure Sensors. The series offers self-calibration, combined with desirable stability, accuracy and repeatability, making these sensors appropriate for precise and efficient performance in a variety of potential industrial and medical applications.

The TruStability NSC Series offers a ratiometric analog output for reading pressure over the specified full scale pressure span and temperature range. Because they are uncompensated and unamplified, they offer infinite resolution on the pressure signal. The frequency response is limited only by the end user's system. Ranging from 1 psi to 150 psi (60 mbar to 10 bar), these sensors will operate as specified from -40°C to 85°C [-40°F to 185°F]. They are available in absolute, differential, and gage types.

The NSC Series' industry-leading stability performs substantially better than any other pressure sensor available in the industry today, even after long-term use and thermal extremes. This quality helps to minimize system calibration needs, maximizes system performance, and supports system uptime by eliminating the need to service or replace the sensor during its application life.

The NSC Series also offers industry-leading accuracy of an extremely tight ±0.25 %FSS BFSL (Best Fit Straight Line), which reduces software required to correct system inaccuracies, minimizing system design time, supporting system accuracy and warranty requirements, and helping to optimize system uptime. Repeatability and reliability under many demanding application conditions are excellent.

The modular, flexible design has many package styles (all with the same industry-leading stability), pressure ports, and options that simplify integration into the device manufacturer's application. These products are intended for use with non-corrosive, non-ionic gases, such as air and other dry gases, as well as with non-corrosive, non-ionic liquids.

The miniature 10 mm x 10 mm [0.39 in x 0.39 in] package is very small when compared to most board mount pressure sensors. It occupies less area on the PCB

and typically allows for easy placement on crowded PCBs or in small devices. The sensor is virtually insensitive to mounting orientation, allowing the customer to position the sensor in the most optimal point in the system, eliminating the concern for positional effects. The extremely low power consumption (operating supply voltage as low as 1.8 Vdc) reduces power consumption, provides extended battery life, and promotes energy efficiency.

Honeywell Sensing and Control
800-537-6945, www.honeywell.com/sensing [1]

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