



## Basic Board Mount Pressure Sensors: NBP Series

### Uncompensated/Unamplified

Honeywell's Basic Board Mount Pressure Sensors are designed for customers who require a simple, cost-effective, basic performance, mV output, unamplified, uncompensated, high quality, high resolution solution for medical and industrial applications. The NBP Series is ideal for those customers who want to do their own compensation, calibration, and amplification in order to make use of the maximum resolution

of the bare sensor output, leveraging a custom algorithm required for the application. These sensors measure absolute and gage pressures. They are intended for use with non-corrosive, non-ionic gases, such as air and other dry gases and for non-corrosive, non-ionic liquids. All products are designed and manufactured according to ISO 9001.

#### VALUE TO CUSTOMERS

- **Cost-effective:** These devices provide a cost-effective pressure sensing solution with a variety of options that allow customers to meet their specific application needs
- **Honeywell brand:**
  - **Manufacturing excellence:** Honeywell has more than 100 years of manufacturing and engineering excellence
  - **Fast Request for Quotes (RFQs):** Responding quickly to your RFQs and product sample needs is a hallmark of Honeywell. Our experienced engineers understand the importance of timely quotes. And because Honeywell is a manufacturer, you can depend on a quick response to your prototype needs.
  - **Fast response for samples:** Dedicated teams and manufacturing processes ensure that product samples are shipped quickly and delivered in time to support your demanding product development cycle
- **Wiring harness protection in:**
  - Riding toys
  - Automobiles and heavy trucks
  - Farm equipment
  - Marine equipment
  - Recreational vehicles
  - DC motors and battery packs
- **Reliable supply chain:** Honeywell's effective inventory management and dependable supply chain is there throughout your development cycle
- **Designed to Six Sigma standards:** Six Sigma standards provide the highest level of product quality, performance, and consistency. Six Sigma provides confidence that the sensor will perform to specification. Many competitive products are produced to lower Sigma tolerances, which may result in some products not performing to the specification to which they were designed.
- **Supporting documentation:** Honeywell's website provides numerous technical materials to assist you in your application needs

#### FEATURES AND BENEFITS

- **Small Size:** Package size (as small as 7 mm x 7 mm [0.276 in x 0.276 in]) is very small when compared to most board mount pressure sensors, occupying less space on the PCB and typically allowing for easy placement on crowded PCBs or in small devices
- **Durable:** Many features allow for use in tough environments, including:
  - Wide operating temperature range from -40 °C to 125 °C [-40 °F to 257 °F]
  - Media compatibility options:
    - Non-gel coating: The input port is limited to non-corrosive, non-ionic media such as dry air and gases and should not be exposed to condensation; the gases are limited to media that are compatible with high temperature polyamide, silicone, alumina ceramic, silicon, gold, and glass

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- Gel coating: Uses the same materials in the wetted media path but is protected from condensation by a silicone-based gel coating; allows use in applications where condensation can occur
  - ISO 9001 compliance
- **Flexible:** Numerous package styles, pressure ranges, housings, gel coating, and porting options simplify integration into the device manufacturer's application
- **Robust:** Reflow mounting J-STD-020D, MSL 1 and rapid stabilization after reflow soldering allow calibration immediately after mounting

## POTENTIAL APPLICATIONS

### Medical:

- Hospital beds
- Oxygen concentrators
- Wound therapy
- Blood pressure monitoring

### Industrial:

- HVAC Transmitters
- Air movement control
- Environmental control
- Level indicators
- Leak detection
- Industrial controls
- Pneumatic controls
- Other commercial applications

### Find out more

Honeywell serves its customers through a worldwide network of sales offices, representatives and distributors. For application assistance, current specifications, pricing or name of the nearest Authorized Distributor, contact your local sales office.

To learn more about Honeywell's sensing and control products, call +1-815-235-6847/1-800-537-6945, visit [www.honeywell.com/sensing](http://www.honeywell.com/sensing), or e-mail inquiries to [info.sc@honeywell.com](mailto:info.sc@honeywell.com)

## WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

### **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 is for reference only. Do not use this document as a product installation guide.
- 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.**