



PRODUCT TRAINING MODULE

May 18, 2017

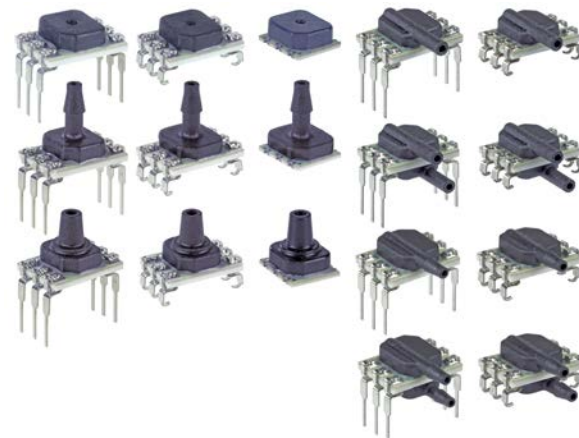
Basic Board Mount Pressure Sensors, Wet-Wet, ABP Series

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Introduction

- Honeywell is pleased to announce its ABP Series Basic Board Mount Pressure Sensors are now dual ported, liquid media capable (wet-wet), allowing for potential use with liquids on both sides of the sensor die
- Liquid media option includes an additional silicone-based gel coating to protect the electronics under port P1
 - Enables use with non-corrosive liquids (e.g. water and saline)
 - Enables use in applications where condensation can occur
- Since port P2 is designed for use with non-corrosive liquids, this option is often suitable for wet-wet differential sensing



Value to Customers of Wet-Wet Capability

- Board mount pressure sensors generally cannot survive exposure to liquid media
- If the liquid does not immediately cause an electrical failure, over time it can cause the failure of components and wire bonds
- Honeywell's 20PC Series family of unamplified board mount pressure sensors have been possibly the only options for liquid media
- Now the ABP Series provides enhanced and amplified pressure measurements in a small board mounted package
- This provides a lower cost and smaller alternative to fully media isolated sensors for some liquid pressure applications

Key Features of ABP Series Portfolio

- Total Error Band: ± 1.5 %FSS
- Industry-leading long-term stability: ± 0.25 %FSS
- Industry-leading accuracy: ± 0.25 %FSS BFSL
- Pressure range: 60 mbar to 10 bar | 6 kPa to 1 MPa | 1 psi to 150 psi
- As small as 8 mm x 7 mm
- High burst pressures
- Output: ratiometric analog; I²C- or SPI-compatible 12-bit digital output (min. 12-bit sensor resolution)
- Meet IPC/JEDEC J-STD-020D.1 Moisture Sensitivity Level 1 requirements
- REACH and RoHS compliant
- Media compatibility: continuous exposure to non-corrosive liquids (e.g. water and saline) and applications where condensation can occur
- Options:
 - Internal diagnostic function
 - Wet-wet capable when liquid media option is selected
 - Sleep mode and temperature output

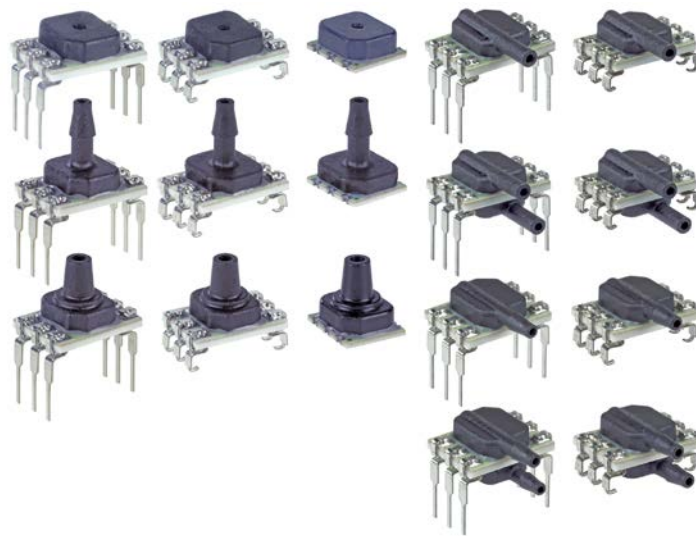
Potential Applications



- Medical: CPAP, blood analysis, blood pressure monitoring, breast pumps, drug dosing equipment, hospital beds, massage machines, oxygen concentrators, patient monitoring, sleep apnea, urine analyzers, ventilators and portable ventilators, wound therapy
- Industrial: Air brakes, HVAC/transmitters, life sciences equipment, material handling, pneumatic control, pneumatic regulator, process gas monitoring and valve positioning/positioners
- Commercial: Air beds, coffee makers, washing machines

Key Messages

- ✓ Allows for potential use with liquids on both sides of the sensor die
- ✓ Provides enhanced and amplified pressure measurements in a small board mounted package
- ✓ Lower cost and smaller alternative to fully media isolated sensors for some liquid pressure applications



About Honeywell's Products

- For more information about all of Honeywell Sensing and Internet of Things' sensor and switch products, visit sensing.honeywell.com

