P321Wet Wet Differential Pressure Sensors

Typical Applications

- Exhaust Gas Recirculation (EGR)
- Diesel Particulate Filter (DPF)
- Chillers
- Differential Pressure for Natural Gas Power Generation
- Oil Differential Sensing on Compressors

Standard Full Scale Pressure Ranges

0-5 through 0-50 PSI Differential 0-0.35 through 0-3.50 Bar Differential

Features

- Linear Amplified Output
- High Common Mode Capability
- Temperature Compensated
- Low Power Consumption
- Rugged Design
- Soot Resistant
- High Temperature Performance
- Compatible with Harsh Environments & Exhaust Media



Description

The P321 series of Wet Wet Differential Pressure Sensors use a 5 Vdc input to measure the differential pressure between two pressure ports, providing a 0.5 to 4.5 Vdc output proportional to pressure. Incorporating an oil-filled capacitive sense element, these sensors are able to withstand vacuum (negative) pressures as well as high common mode pressures. The large diaphragm protects these sensors from the accumulation of soot and other harsh materials.

Packaged in Ultem 2000 Series Plastic and using a carbon steel metal bracket as its mounting feature, the P321 is rugged and durable by design. It is temperature compensated to meet the accuracy requirements of the customer, and is rated to perform continuously at temperatures up to 125°C.

Specifically intended to withstand high common mode pressures, high vibration environments, and with its resistance to soot and other acidic media, the P321 pressure sensor delivers the optimal solution without compromising performance or reliability.



Technical Specifications

Pressure Ranges: 5 PSI Differential range to 50 PSI

Differential range

Proof Pressure: 45 PSI Differential (High Side) 30 PSI Differential (Low Side)

Burst Pressure: 100 PSI Differential (High Side)

100 PSI Differential (Low Side)

Electrical Specs

Supply Voltage: $5.0 \, \text{Vdc} \, \pm \, 0.25 \, \text{Vdc}$

Supply Current: <5mA

Nominal Output Voltage:

Zero/Null Pressure: 0.5 Vdc
Full Pressure: 4.5 Vdc
Span: 4.0V

Sensing Technology: Oil-Filled Capacitive

Main Seal: Fluorosilicone or Fluorocarbon

Media Compatibility: Exhaust

Operating Temperature: -40C to 125C

Typical Accuracy: 2%

Response/Start up Time: 100ms to 140ms at 63% Level

Output Impedance: <100 ohms

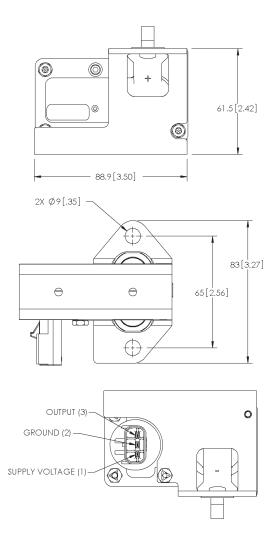
Mechanical Specs

Housing Material: Ultem 2000 Series Plastic

Operating Temperature Range: -40C to +125C

Typical Electrical Connector

Connector: Framatone FCI Connector



Dimensions in: mm [inches]



Before installation and operation, ensure that the appropriate pressure sensor has been selected in terms of pressure range, design and specific measuring conditions.

Non-compliance can result in serious injury and/or damage to the equipment.

Don't see what you want?

Call us at +1 (619) 710-2068 to customize this product to meet your application-specific needs!

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