Honeywell

Honeywell Sensing and Control



ASDX001D44R



ASDX Series pressure sensor, amplified, differential/gage, 0 psi to 1 psi operating pressure, "D4" DIP package, straight port

Actual product appearance may vary.

Features

- ASIC-enhanced output
- Wide compensated temperature range 0 °C to 85 °C [32 °F to 185 °F]
- Available in absolute, differential and gage types
- Pressure ranges from 0 psi to 1 psi through 0 psi to 30 psi
- Accuracy +/-2.0% max. V full scale
- Quantization step of 3 mV
- Response time of 8 ms

Potential Applications

- Flow calibrators
- Ventilation and air flow monitors
- Gas flow instrumentation
- Sleep apnea monitoring and therapy
- equipment
- Barometry
- HVAC controls
- Pneumatic controls

Description

The ASDX Series is an amplified version of Honeywell's proven performer and industry leading SDX Series sensor. The ASDX sensor's footprint is slightly larger than the SDX; however, it offers a high level output (4.0 Vdc span) on a very cost-effective basis. This series is fully calibrated and temperature compensated with on-board Application Specific Integrated Circuitry (ASIC). These DIP (Dual In-line Package) sensors are designed for use with non-corrosive, non-ionic working fluids; such as air and dry gases. Sensors are available to measure absolute, differential and gage pressures. The absolute sensors have an internal vacuum reference and an output voltage proportional to absolute pressure. The differential sensors allow application of pressure to either side of the sensing diaphragm and may used for differential or gage measurements. Bidirectional versions are also available. All ASDX Series sensors are accurate to within +/-2.0% full scale and are designed for operation from a single 5.0 Vdc supply.

| Product Specifications | |
|-------------------------------|---|
| Measurement Type | Differential/gage |
| Signal Conditioning | Amplified |
| Pressure Range | 0 psi to 1 psi |
| Maximum Overpressure | 5 psi |
| Supply Voltage | 4.75 Vdc min., 5.25 Vdc typ., 6.50 Vdc max. |
| Compensated | Yes |
| Output Calibration | Yes |
| Response Time | 8.0 ms typ., 11.0 ms max. |
| Termination | РСВ |
| Port Style | Straight |
| Package Style | D4 DIP |
| Full Scale Span | 4.0 Vdc |
| Zero Pressure Offset | 0.420 min., 0.500 typ., 0.580 max. |
| Total Error (% Full Scale) | ± 2.0% span |
| Shock | 100 g for 11 ms |

| 10 g at 20 Hz to 2000 Hz |
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| -20 °C to 105 °C [-4 °F to 221 °F] |
| 0 °C to 85 °C [32 °F to 185 °F] |
| -40 °C to 125 °C [-40 °F to 257 °F] |
| Clean, dry gases only. |
| 411121 |
| 411121 Transducers |
| 1 Million cycles min. |
| Lead soldering temperature 2 s to 4 s at 250 °C [482 °F] |
| Global |
| ASDX |
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