



SDX005IND4



Actual product appearance may vary.

Pressure Sensors: Measurement Type:
0 in H₂O to 5 in H₂O, Temperature
Compensated, "D4" Package - Straight
Port

Features

- Low Cost DIP
- Precision Temperature Compensation
- Calibrated Zero & Span
- Small Size
- Low Noise
- High Impedance for Low Power Applications
- Prime Grade Available (SDXxxxxy-A)

Potential Applications

- Medical Equipment
- Computer Peripherals
- Pneumatic Controls
- HVAC

Description

The SDX series sensors provide a very cost effective solution for pressure applications that require small size plus performance. These calibrated and temperature compensated sensors give an accurate and stable output over a 0 °C to 50 °C [32 °F to 122 °F] temperature range. This series is intended for use with non-corrosive, non-ionic working fluids such as air, dry gases and the like. The SDX...IND4 products are specifically designed to measure low pressures with a range of 0 inches H₂O to 5 inches H₂O and 0 inches H₂O to 10 inches H₂O full scale range.

The output of the bridge is ratiometric to the supply voltage and operation from any Vdc supply voltage up to 20 Vdc is acceptable.

The SDX devices feature an integrated circuit (IC) sensor element and laser trimmed thick film ceramic housed in a compact solvent resistant case. The package is a double-wide (i.e. 0.600 inches lead spacing) dual-inline package (DIP). This is the same familiar package used by IC manufacturers except it is only 11,94 mm [0.470 in] long and has a pressure port(s). The pc board area used by each DIP is approximately 0.26 square inches. This extremely small size enables the use of multiple sensors in limited available space. The DIP provides excellent corrosion resistance and isolation to external package stress.

The DIP mounts on a printed circuit board like a standard IC with through-hole pins. The pins anchor the pressure sensor to the printed circuit board and provide a more secure and stable unit than other types of packages. The output of the bridge is ratiometric to the supply voltage and operation from any Vdc supply voltage up to 20 Vdc is acceptable.

Product Specifications	
Measurement Type	Differential, Gage
Signal Conditioning	Unamplified
Pressure Range	0 in H ₂ O to 5 in H ₂ O
Maximum Overpressure	193 in H ₂ O [7 psi]
Supply Voltage	20 Vdc max.
Compensated	Yes
Output Calibration	Yes
Response Time	100 •s
Termination	PCB
Port Style	Straight
Package Style	A4/D4 DIP
Full Scale Span	19.50 mV min, 20.00 mV typ., 20.50 mV max.
Null Shift over Temperature	± 0.2 % FS span typ., ± 0.6 % FS span max.; 0 °C to 50 °C [32 °F to 122 °F]
Span Shift Over Temperature	± 0.4% FS span typ., ± 2.0% FS span max.; 0 °C to 50 °C [32 °F to 122 °F]
Zero Pressure Offset	-1.0 mV min., 0.0 mV typ., 1.0 mV max.
Linearity, Hysteresis Error	± 0.2 typ. ± 1.0 max. %FS
Repeatability	± 0.5% span
Input Resistance	4.0 kOhm typ.
Output Resistance	4.0 kOhm typ.
Operating Temperature Range	-40 °C to 85 °C [-40 °F to 185 °F]
Compensated Temperature Range	0 °C to 50 °C [32 °F to 122 °F]
Storage Temperature Range	-55 °C to 125 °C [-67 °F to 257 °F]
Media Compatibility	Clean, dry gases only.
UNSPSC Code	411121
UNSPSC Commodity	411121 Transducers
Comment	Lead Temperature Soldering 10 s at 250 °C [482 °F]
Availability	Global
Series Name	SDX