

SOLID STATE PRESSURE SENSORS TEMPERATURE COMPENSATED



Absolute or Differential Pressure
4 inH₂O to 150 psi
10 mbar to 10 bar

PXSCX Series

- ✓ Low Cost, Small Size, PC Board Mountable
- ✓ Laser Trimmed Solid State Technology
- ✓ High Impedance, Low Current Draw
- ✓ Chemical Resistant Package
- ✓ Compensated Over 0 to 70°C (32 to 158°F)
- ✓ For Use with Clean Dry Gases
- ✓ HVAC and Room Pressure Applications



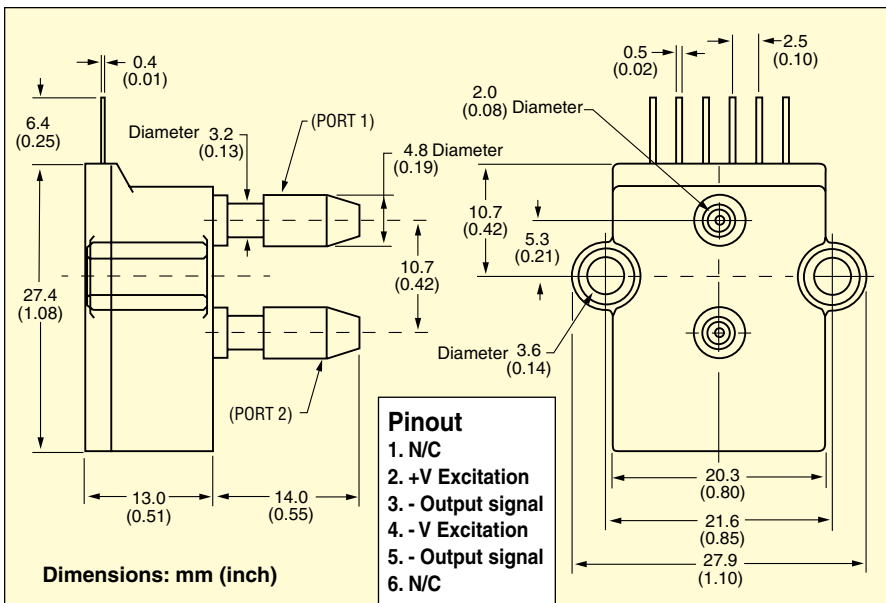
The PXSCX Series features an integrated circuit sensor element and laser trimmed circuitry in a small PC board mountable package. The PXSCX sensors are internally calibrated and temperature compensated to provide a stable and accurate output over a broad temperature range of 0 to 70°C (32 to 158°F). They are designed to work with dry, non-corrosive, non-ionic gases such as air and many common industrial and laboratory gases. Their fast 100 µsec response time makes them ideal for pneumatic control applications.

SPECIFICATIONS

@ 12 Vdc, 25°C (77°F)
Excitation: 12 Vdc typical (20 Vdc maximum) (18 Vdc maximum in inH₂O ranges)
Output mV (@ 12 Vdc): (Ratiometric)
4 inH₂O: 40.0 ±2 mV
10 inH₂O: 20.0 ±0.5 mV
1 psi: 18 ±0.18 mV
5 psi: 60 ±0.6 mV
15 to 60 psi: 90 ±0.9 mV
100 psi: 100 ±1 mV
150 psi: 90 ±1 mV

Linearity, Hysteresis Error:
 ±0.1% typical, ±0.5% maximum
 (inH₂O Ranges: ±0.5 typical, ±1.0 maximum)
Zero Offset: ±300 µV
 (inH₂O Ranges: ±1.5 mV)
Response Time (90%): 100 µsec;
 (inH₂O Ranges: 500 µsec)
Long Term Stability of Offset and Span (1-year): ±0.1 mV
 (inH₂O Ranges: ±0.5% full scale)
Operating Temperature: -40 to 85°C
 (-40 to 185°F)
Compensated Temperature: 0 to 70°C
 [(32 to 158°F) (inH₂O Ranges: 0 to 50°C
 (32 to 122°F)]

Thermal Effects
Zero Shift: ±100 µV typical ±500 µV maximum
 (inH₂O ranges: ±0.5 mV typical, ±2.0 mV maximum)
Span Shift: ±0.2% span typical, ±1% maximum
Input Impedance: 4 kΩ
Output Impedance: 4 kΩ
Common Mode Pressure:
psi and 10 inH₂O Ranges:
 50 psi maximum
4 inH₂O Range: 150 inH₂O maximum
Proof Pressure:
4 inH₂O: 10 inH₂O maximum
10 inH₂O: 10 psi maximum
1 to 5 psid: 20 psid maximum
15 and 30 psid and psia:
 2x full scale maximum
100 and 150 psid and psia:
 150 psi maximum
Lead Solder Temperature: 250°C
 (482°F) 4-sec maximum
Weight: 5 g (0.18 oz)



PRESSURE TRANSDUCERS
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To Order Visit omega.com/pxscx for Pricing and Details

RANGE		MODEL NO.	DESCRIPTION
psi	bar		
ABSOLUTE PRESSURE			
0 to 15	0 to 1 bar	PXSCX-015AV	15 psia solid state pressure sensor
0 to 30	0 to 2	PXSCX-030AV	30 psia solid state pressure sensor
0 to 60	0 to 4	PXSCX-060AV	60 psia solid state pressure sensor
0 to 100	0 to 7	PXSCX-100AV	100 psia solid state pressure sensor
0 to 150	0 to 10	PXSCX-150AV	150 psia solid state pressure sensor
DIFFERENTIAL PRESSURE			
0 to 4 inH ₂ O	0 to 10 mb	PXSCX-004WCDV	4 inH ₂ O solid state pressure sensor
0 to 10 inH ₂ O	0 to 25 mb	PXSCX-010WCDV	10 inH ₂ O solid state pressure sensor
0 to 1 psi	0 to 69 mb	PXSCX-001DV	1 psid solid state pressure sensor
0 to 5	0 to 345 mb	PXSCX-005DV	5 psid solid state pressure sensor
0 to 15	0 to 1 bar	PXSCX-015DV	15 psid solid state pressure sensor
0 to 30	0 to 2	PXSCX-030DV	30 psid solid state pressure sensor
0 to 60	0 to 4	PXSCX-060DV	60 psid solid state pressure sensor
0 to 100	0 to 7	PXSCX-100DV	100 psid solid state pressure sensor
0 to 150	0 to 10	PXSCX-150DV	150 psid solid state pressure sensor

Ordering Examples: **PXSCX-015AV**, 15 psia absolute pressure range solid state pressure sensor with 90 mV output @ 12 Vdc.
PXSCX-001DV, 1 psid differential pressure range solid state pressure sensor with 18 mV output @ 12 Vdc.

Economical Strain Indicators with Built-In Sensor Excitation

DP25B-S

- ✓ NEMA 4 (IP65) Front Panel
- ✓ 4-Digit Display, -1999 to 9999 Counts
- ✓ Excitation Supply, Front Panel Tare, and Peak Hold Standard
- ✓ Accepts Voltage, Current, or Millivolt Inputs
- ✓ Easily Scaled to Display Readings in Engineering Units
- ✓ Program to Display in Red, Amber, or Green



The DP25B-S is a low-cost digital panel meter for use with voltage, current, or bridge-type transducers. For bridge sensors, the DP25B-S has a ratiometric input to correct for variations in excitation voltage. Standard features include a front-panel tare button and a peak hold feature. Options include dual 5 A alarm relays and a scalable analog output configurable for 0 to 10V or 4 to 20 mA.

DP25B-S shown smaller than actual size. Visit omega.com/dp25b for details.