

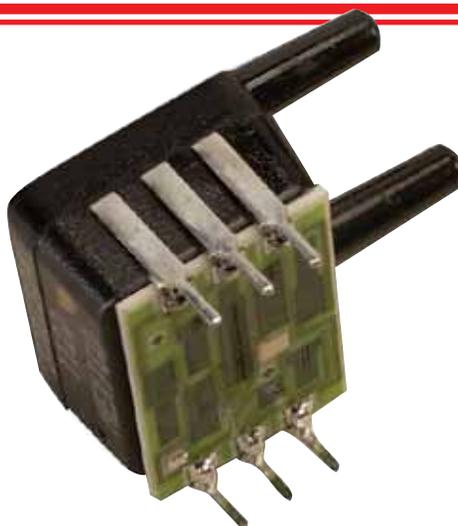
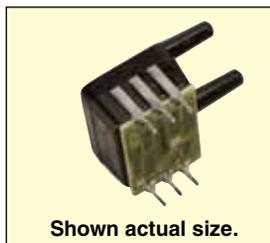
MINIATURE TEMPERATURE COMPENSATED PRESSURE SENSORS



Gage, Absolute or Differential Pressure
5 inH₂O to 100 psi
12 mb to 6.9 bar

PXSDX Series

- ✓ Low Cost, Small Size, PC Board Mountable
- ✓ Micromachined Silicon Technology
- ✓ High Impedance, Low Current Draw
- ✓ 6-Pin DIP Package
- ✓ High Impedance, Low Current Draw
- ✓ For Use with Clean Dry Gases



PXSDX-005DV

SPECIFICATIONS

@ 12 Vdc, 25°C (77°F)
Excitation: 12 Vdc typical (20 Vdc maximum)
Output mV (@ 12 Vdc) Ratiometric
 5 inH₂O: 20.0 ±0.5 mV
 10 inH₂O: 25.0 ±0.5 mV
 1 psi: 18.00 +0.80, -0.18 mV
 5 psi: 60 ±0.60 mV
 15 to 60 psi: 90.00 ±0.10 mV
 100 psi: 100.00 ±1.0 mV

Zero Offset: ±0.3 mV
 (inH₂O Ranges: ±1 mV)
Linearity, Hysteresis Error: ±0.1% typical, ±0.25% maximum (inH₂O Ranges: ±0.2% typical, ±1% maximum)

Response Time (90%): 100 µsec

Long Term Stability (1-Year): ±0.1% full scale

Operating Temperature: -40 to 85°C (-40 to 185°F)

Compensated Temperature: 0 to 50°C (32 to 122°F)

Thermal Effects

Zero Shift: ±0.2 mV typical
 ±0.5 mV maximum (inH₂O Ranges: ±0.2% typical, ±0.6% maximum)

Span Shift: ±0.4% full scale typical
 ±1.0% FS maximum (inH₂O Ranges: ±0.2% typical, ±1% maximum)

Input Impedance: 4 kΩ

Output Impedance: 4 kΩ

Proof Pressure:

inH₂O Ranges: 193 inH₂O (7 psi)

1 and 5 psi (g and d) Ranges: 30 psi

15 psi (g and d) Ranges: 30 psi

15 psia Range: 30 psia

30 psi (g and d) Ranges: 60 psi

30 psia Range: 60 psia

100 psi (g and d) Ranges: 150 psi

100 psia Range: 150 psia

Common Mode Pressure:

inH₂O Ranges:

50 psi maximum

150 psi maximum

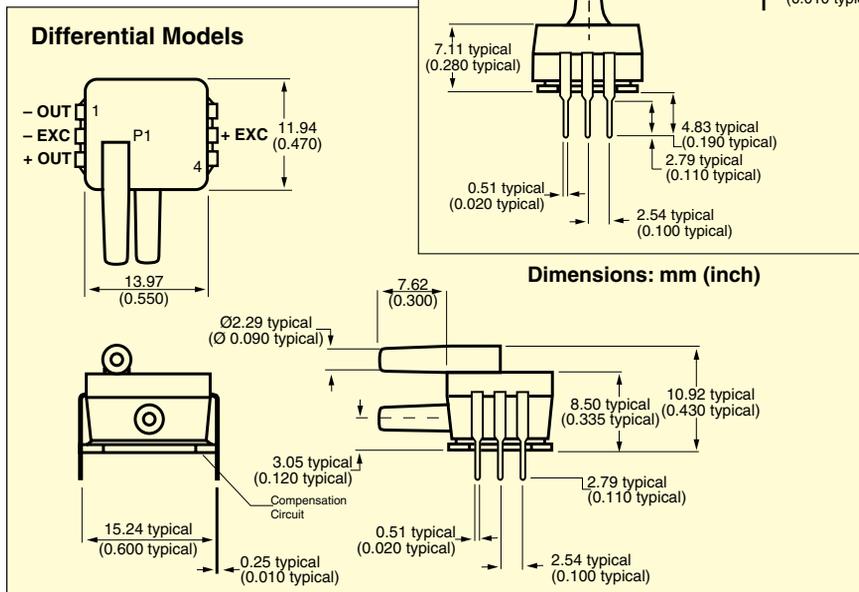
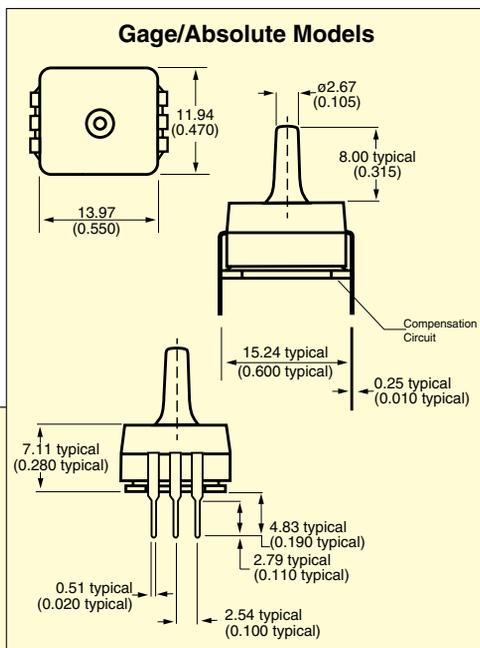
Lead Soldering Temperature:

250°C (482°F) maximum

Weight: 2 g (0.06 oz)

Notes: P1 is top port and absolute models have top port only of the differential package. D4 is differential and absolute A2 is gage pressure.

The PXSDX sensors are high performance silicon sensors with internally calibrated outputs to allow interchangeability within systems. These temperature compensated sensors give a stable, accurate reading over a range of 0 to 50°C (32 to 122°F). They are intended for applications with non-corrosive, non-ionic gases such as air and many common industrial and laboratory gases.



PRESSURE TRANSDUCERS B



To Order Visit omega.com/pxsdx for Pricing and Details

RANGE		MODEL NO.	DESCRIPTION
psi	bar		
GAGE PRESSURE			
0 to 1 psi	0 to 69 mb	PXSDX-001GV	1 psig miniature pressure sensor
0 to 5	0 to 345 mb	PXSDX-005GV	5 psig miniature pressure sensor
0 to 15	0 to 1 bar	PXSDX-015GV	15 psig miniature pressure sensor
0 to 30	0 to 2	PXSDX-030GV	30 psig miniature pressure sensor
0 to 100	0 to 7	PXSDX-100GV	100 psig miniature pressure sensor
ABSOLUTE PRESSURE			
0 to 15	0 to 1 bar	PXSDX-015AV	15 psia miniature pressure sensor
0 to 30	0 to 2	PXSDX-030AV	30 psia miniature pressure sensor
0 to 100	0 to 7	PXSDX-100AV	100 psia miniature pressure sensor
DIFFERENTIAL PRESSURE			
0 to 5 inH ₂ O	0 to 12 mb	PXSDX-005WCDV	5 inH ₂ O miniature pressure sensor
0 to 10 inH ₂ O	0 to 25 mb	PXSDX-010WCDV	10 inH ₂ O miniature pressure sensor
0 to 1 psi	0 to 69 mb	PXSDX-001DV	1 psid miniature pressure sensor
0 to 5	0 to 345 mb	PXSDX-005DV	5 psid miniature pressure sensor
0 to 15	0 to 1 bar	PXSDX-015DV	15 psid miniature pressure sensor
0 to 30	0 to 2	PXSDX-030DV	30 psid miniature pressure sensor
0 to 100	0 to 7	PXSDX-100DV	100 psid miniature pressure sensor

Ordering Examples: *PXSDX-030GV*, 30 psig gage pressure range miniature pressure sensor with 90 mV output @ 12 Vdc.
PXSDX-015AV, 15 psia absolute pressure range miniature pressure sensor with 90 mV output @ 12 Vdc.
PXSDX-001DV, 1 psid differential pressure range miniature pressure sensor with 18 mV output @ 12 Vdc.

BRIDGE/STRAIN GAGE SIGNAL CONDITIONER

Field Rangeable Isolated Voltage or Current Outputs

DMD4059 Series



- ✓ Standard DIN Rail Mounting
- ✓ Drives up to Four 350 Ω Bridges
- ✓ Non-Interactive Zero and Span
- ✓ Fast Setup—Over 100 I/O Ranges
- ✓ Removable Connectors
- ✓ Full 3-Way Isolation
- ✓ Output Test Button
- ✓ Adjustable Excitation, 1 to 10 Vdc

The DMD4059 accepts an input from 1 to 4 full Wheatstone strain bridge sensors, pressure transducers or load cells. It provides filtering, amplifies, and converts the millivolt input signal into the selected dc voltage or current output that is linear to the input.



DMD4059 bridge/strain gage signal conditioner. Visit omega.com/dmd4059 for details.