

LOW-COST SILICON PRESSURE SENSOR WITH AMPLIFIED VOLTAGE OUTPUT GAGE, DIFFERENTIAL, ABSOLUTE PRESSURE

± 0.3 to ± 30 psi
 ± 0.02 to ± 2 bar

PX138 Series

- ✓ Available for Differential, Gage, or Absolute Measurement
- ✓ Precision 5V Output Span
- ✓ Precise Temperature Compensation
- ✓ Constant Voltage Excitation
- ✓ For Clean, Dry Gas

The PX138 Series pressure transducer uses state-of-the-art micro-machined silicon sensors with stress-free packaging techniques to provide highly accurate, temperature-compensated pressure measurements for the most demanding applications. When operating from an 8 Vdc regulated power source, the PX138 transducer provides a 1 to 6 Vdc output. Other regulated voltages from 7 to 16V can be used but the output will change in proportion to the excitation.

SPECIFICATIONS

Excitation Voltage:

8 Vdc (7 to 16 Vdc limits)

Output: 1 to 6 Vdc (@ 8 Vdc exc.)

Linearity and Hysteresis:

$\pm 0.1\%$ FS typical, 0.5% max (0.5% typ. 1% max for ± 0.3 psi range)

Repeatability: $\pm 0.1\%$ FS typical, 0.3% max

Zero Balance: 3.5 \pm 0.05 Vdc diff.; 1 \pm 0.1 Vdc abs.

Storage Temperature:

-40 to 125°C (-40 to 257°F)

Compensated Temp Range:

0 to 50°C (32 to 122°F)

Zero Temp Effects:

$\pm 0.5\%$ FS ($\pm 1\%$ FS for 0.3 psi)

Span Temp Effects:

$\pm 0.5\%$ FS ($\pm 1\%$ FS for 0.3 psi)

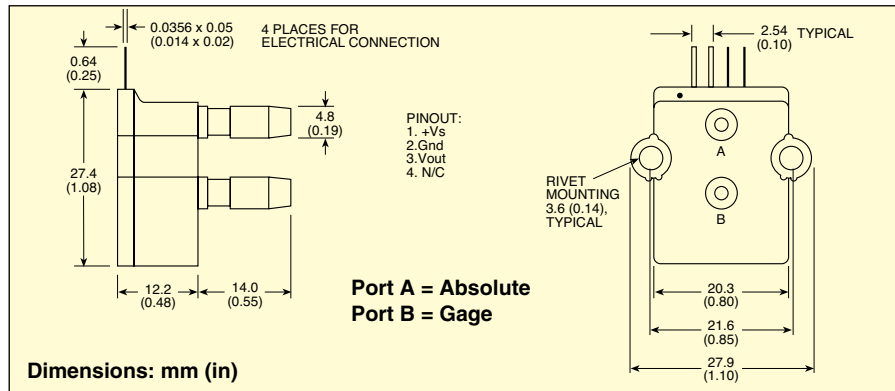
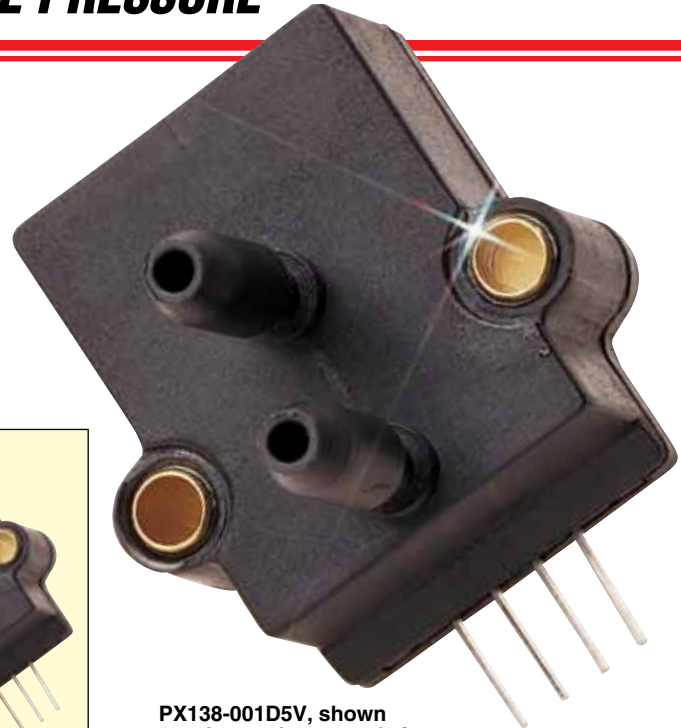
Proof Pressure: >3x FS pressure

Burst Pressure: >5x FS pressure

Common Mode Press: 50 psi

Media Compatibility: For use with gases compatible with silicon, glass-filled nylon and alumina ceramic

Mating Connector: CX136-4 (sold separately)



To Order Visit omega.com/px138 for Pricing and Details

GAGE/DIFF PRESSURE		MODEL NO.	COMPATIBLE METERS
± 0.3 psi	0.02 bar	PX138-0.3D5V	DP24-E, DP25B-E, DP41-E
± 1 psi	0.069 bar	PX138-001D5V	DP24-E, DP25B-E, DP41-E
± 5 psi	0.34 bar	PX138-005D5V	DP24-E, DP25B-E, DP41-E
± 15 psi	1.0 bar	PX138-015D5V	DP24-E, DP25B-E, DP41-E
ABSOLUTE PRESSURE RANGES			
0 to 15 psia	0 to 1.0 bar	PX138-015A5V	DP24-E, DP25B-E, DP41-E
0 to 30 psia	0 to 2.1 bar	PX138-030A5V	DP24-E, DP25B-E, DP41-E

Comes complete with operator's manual.

Ordering Example: PX138-001D5V, voltage output silicon pressure sensor with a gage/differential range of ± 1 psi.

ACCESSORIES

MODEL NO.	DESCRIPTION
PST-8	8 Vdc power supply
CX136-4	4-contact connector