

HIGH-PERFORMANCE PRESSURE TRANSDUCER ULTRA-HIGH LONG-TERM STABILITY

mV/V Output
0-15 to 0-10,000 psi
0-1 to 0-700 bar

1 bar = 14.5 psi
 1 kg/cm² = 14.22 psi
 1 atmosphere = 14.7 psi = 29.93 inHg = 760.2 mmHg = 1.014 bar

PX5000 Series



- ✓ High Shock and Vibration Resistance
- ✓ 100,000-Hour MTBF
- ✓ 0.1% Stability for 18 Months
- ✓ High Operating Temperature: -54 to 150°C (-65 to 300°F)
- ✓ Solid State Reliability
- ✓ 5-Point NIST Calibration Standard

Applications

- ✓ Automotive Testing
- ✓ Gas Turbine Engines
- ✓ Flight Testing
- ✓ Aircraft
- ✓ Space Launch Vehicles and Satellites
- ✓ Weapon Systems

OMEGA's PX5000 Series pressure transducers have earned a reputation for high performance, reliability, and stability in tough, real-world applications. These outstanding transducers use OMEGA's advanced sputtered thin-film sensor technology.



PX5000L1-3KGV,
shown actual size.

In the sputtering process, gage material is accelerated in a vacuum chamber toward a sensor substrate, molecule by molecule. Each molecule interacts with an energy of several thousand electron volts—sufficient to penetrate a few atomic layers and produce the most stable and reliable bond possible. This unique molecular gage bonding provides superior

long-term calibration stability and reliability, since the sensors have no cement bonds to degrade with time or weaken at higher temperatures. The PX5000 transducer excels in adverse operating environments. The photo-etched gage pattern makes the sensing element components very small, with short interconnecting leads. This micro-geometry reduces vibration mass, making this transducer much less susceptible to vibration and shock failures and errors.

To Order

Models with mV/V Output, MS33656-4 Fitting and Integral Connector

RANGE	MODEL NO.	COMPATIBLE METERS*
ABSOLUTE PRESSURE (Note: All Ranges Available in Absolute Pressure)		
0 to 15 psi	0 to 1.0 bar	PX5000L1-015AV DP41-S, DP25B-S
0 to 25 psi	0 to 1.7 bar	PX5000L1-025AV DP41-S, DP25B-S
0 to 50 psi	0 to 3.4 bar	PX5000L1-050AV DP41-S, DP25B-S
0 to 100 psi	0 to 6.9 bar	PX5000L1-100AV DP41-S, DP25B-S
GAGE PRESSURE (Note: All Ranges Also Available in Sealed Gage Pressure)		
0 to 15 psi	0 to 1.0 bar	PX5000L1-015GV DP41-S, DP25B-S
0 to 25 psi	0 to 1.7 bar	PX5000L1-025GV DP41-S, DP25B-S
0 to 50 psi	0 to 3.4 bar	PX5000L1-050GV DP41-S, DP25B-S
0 to 100 psi	0 to 6.9 bar	PX5000L1-100GV DP41-S, DP25B-S
0 to 250 psi	0 to 17.2 bar	PX5000L1-250GV DP41-S, DP25B-S
0 to 500 psi	0 to 34.5 bar	PX5000L1-500GV DP41-S, DP25B-S
0 to 1000 psi	0 to 68.9 bar	PX5000L1-1KGV DP41-S, DP25B-S
0 to 1500 psi	0 to 103 bar	PX5000L1-1.5KGV DP41-S, DP25B-S
0 to 2500 psi	0 to 172 bar	PX5000L1-2.5KGV DP41-S, DP25B-S
0 to 3000 psi	0 to 207 bar	PX5000L1-3KGV DP41-S, DP25B-S
0 to 5000 psi	0 to 345 bar	PX5000L1-5KGV DP41-S, DP25B-S
0 to 10,000 psi	0 to 689 bar	PX5000L1-10KGV DP41-S, DP25B-S

Comes complete with 5-point calibration.

* Visit us online for compatible meters.

Metric ranges available – Consult Engineering.

To order absolute pressure, replace "G" in model number with "A" (no extra charge).

To order sealed gage pressure, replace "G" in model number with "S" (no extra charge).

Ordering Examples: **PX5000L1-100AV**, 100 psi absolute pressure transducer, with MS33656-4 male pressure connection and integral electrical connector.
PTS06A-10-6S-R, mating connector.

PX5000L1-5KGV, 5000 psi gage pressure transducer, with MS33656-4 male pressure connection and integral electrical connector. **PTS06A-10-6S-R**, mating connector.

MODEL NO.	DESCRIPTION
PTS06A-10-6S-R	Mating connector for PX5000 units w/PTIH-10-6P electrical connection

