

HIGH PERFORMANCE PRESSURE TRANSDUCER

ULTRA HIGH LONG TERM STABILITY



PX5000 Series

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

- ✓ High Shock and Vibration
- ✓ 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 Calibration Standard

Applications

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

OMEGA's PX5000 Series pressure transducer has earned a reputation for high performance, reliability and stability in tough, real-world applications. This outstanding transducer uses OMEGA's advanced sputtered thin-film sensor technology.

In the sputtering process, gage material is accelerated in a vacuum chamber toward a sensor substrate, molecule by molecule. They impact 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 weakened at higher temperatures.

The PX5000 transducer excels in tough 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. Rugged all-welded construction ensures a durable and reliable instrument.



Model PX5000L1-3KGV
Shown Actual Size

And, this transducer now provides Electrostatic Discharge (ESD) protection to 15kV.

You get state-of-the-art thin-film reliability and performance with the

To Order: (Specify Model Number)

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

RANGE (psi)	MODEL NUMBER	PRICE	COMPATIBLE METERS
Absolute Pressure: (Note: All Ranges Available in Absolute Pressure)			
0 to 15	PX5000L1-015AV	\$950	DP41-S, DP25-S
0 to 25	PX5000L1-025AV	950	DP41-S, DP25-S
0 to 50	PX5000L1-050AV	950	DP41-S, DP25-S
0 to 100	PX5000L1-100AV	950	DP41-S, DP25-S
Gage Pressure: (Note: All Ranges also Available in Sealed Gage Pressure)			
0 to 15	PX5000L1-015GV	950	DP41-S, DP25-S
0 to 25	PX5000L1-025GV	950	DP41-S, DP25-S
0 to 50	PX5000L1-050GV	950	DP41-S, DP25-S
0 to 100	PX5000L1-100GV	950	DP41-S, DP25-S
0 to 250	PX5000L1-250GV	950	DP41-S, DP25-S
0 to 500	PX5000L1-500GV	950	DP41-S, DP25-S
0 to 1,000	PX5000L1-1KGV	950	DP41-S, DP25-S
0 to 1,500	PX5000L1-1.5KGV	950	DP41-S, DP25-S
0 to 2,500	PX5000L1-2.5KGV	950	DP41-S, DP25-S
0 to 3,000	PX5000L1-3KGV	950	DP41-S, DP25-S
0 to 5,000	PX5000L1-5KGV	950	DP41-S, DP25-S
0 to 10,000	PX5000L1-10KGV	950	DP41-S, DP25-S

Metric Ranges Available - Consult Engineering

To order Absolute Pressure, change "G" in the part number to "A". No additional charge.
To order Sealed Gage Pressure, change "G" in the part number to "S". No additional charge.

Ordering Examples:

1.) PX5000L1-100AV is a 100 psi Absolute Pressure transducer, with a male pressure connection per MS33656-4 and an integral electrical connector, \$750. Mating Connector, PTS06A-10-6S, \$47.00.

2.) PX5000L1-5KSV is a 5,000 psi Sealed Gage Pressure transducer, with a male pressure connection per MS33656-4 and an integral electrical connector, \$750. Mating Connector, PTS06A-10-6S, \$47.00.



MILLIVOLT OUTPUT
PRESSURE TRANSDUCERS

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