OMEGA’s PX6000/PXM6000 Series pressure transducers fit easily into your application. These low-cost transducers are small and light, and mounting requires no bulky structures. You select from 3 electrical terminations and 6 pressure fittings. The sensor is a small, 2.54 cm (0.1") square silicon chip with 4 diffused strain gages, mounted in the stainless steel case. Laser-trimmed resistors provide temperature compensation and adjust zero balance and span. The 30 mV full range output is compatible with most amplifiers and data acquisition systems.

The PX6000/PXM6000 uses solid state media isolation for improved reliability. Thin films of chemically inert materials are deposited or grown on the chip surface to provide electrical isolation between the sensor and pressure medium. The sensor is less sensitive to vibration and more dependable in high-shock environments. Corrosion resistance is outstanding, and the isolation will remain effective because there is no gel or oil column to deteriorate.

**Applications**
- Automotive Testing
- Research and Development
- Engineering Testing and Evaluation
- Production Testing
- Flight Recorders
- Engine Monitoring
- Ground Support Equipment
- Built-In Temperature Sensor

**Specifications**

**Electrical**
- **Excitation:** 10 Vdc
- **Output:** 3 mV/V ± 10%
- **Input Resistance:** 2000 Ω minimum
- **Output Resistance:** 1000 Ω minimum, 1500 Ω maximum
- **Zero Balance:** 0 mV ±5%
- **Dielectric Isolation Resistance:** 100 MΩ minimum at 50 Vdc applied between the case or a conductive medium and the bridge circuit

**Sensing Element:** 4-active-arm bridge using a micro-machined diffused silicon diaphragm sensor, thin-film media and dielectric isolation barriers

**Temperature Sensor:**
- **Output resistance @ 24°C (75°F)** 900 to 1500 Ω
- **Temperature Coefficient:** 8% minimum, 10% maximum per 55.5°C (100°F)

**Performance**
- **Accuracy:** ±0.25% FS combined linearity, hysteresis and repeatability for all ranges

**Environmental**
- **Operating Temp Range:** -54 to 150°C (-65 to 300°F)
- **Compensated Temp Range:** -54 to 121°C (-65 to 250°F)
- **Thermal Effects:**
  - **Span:** ±0.02% of FS/F
  - **Zero:** ±0.02% of FS/F
- **Vibration Sensitivity:** At 35g peak sinusoidal vibration from 10 Hz to 2000 Hz (1/8" D.A.), the output shall not exceed 0.04% FS/g for 15 psi range to 0.005% FS/g for 100 psi and above
- **Natural Frequency:** Greater than 35 kHz for 100 psi and above
- **Shock:** 100 g, 11 ms half sine wave without damage

**Pressure**
- **Proof Pressure:** 2 times rated pressure
- **Burst Pressure:** 3 times rated pressure for pressure ranges below 200 psi, or 2.5 times rated pressure for pressure ranges above 200 psi will not cause rupture of the pressure sensor

**Mechanical**
- **Wetted Parts:** 316 stainless steel, silicon nitride, Pyrex® glass, epoxy, Kovar®

**Electrical Connection:**
- PT1H-10-6P or 0.6 m (2') cable, 4-pin solder terminal header, or mini-DIN connector

**Pressure Port:** See custom configurations

**Weight:** 4 oz max, excluding pressure fitting and electrical connection

**Mating Connector:**
- PTS06A-10-6S-R (sold separately)

**Dimensions:** mm (inch)
**STANDARD CUSTOM CONFIGURATIONS**

<table>
<thead>
<tr>
<th>PX6000 SERIES</th>
<th>PRESSURE PORT</th>
<th>ELECTRICAL CONNECTION</th>
<th>RANGE (psi)</th>
<th>UNITS</th>
<th>OUTPUT</th>
<th>CALIBRATION OPTION</th>
</tr>
</thead>
<tbody>
<tr>
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<td>[6]</td>
</tr>
<tr>
<td>A</td>
<td>½-27 NPT Male</td>
<td></td>
<td>30</td>
<td>VAC</td>
<td>mV/V output</td>
<td>CA11 = 11-point NIST calibration additional cost</td>
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<tr>
<td>B</td>
<td>½-27 NPT Female</td>
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<td>015</td>
<td>G,A</td>
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<tr>
<td>C</td>
<td>¼-18 NPT Male</td>
<td></td>
<td>020</td>
<td>G,A</td>
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<tr>
<td>D</td>
<td>¼-18 NPT Female</td>
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<td>050</td>
<td>G,A</td>
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<td></td>
</tr>
<tr>
<td>L</td>
<td>MS33656-4 Male</td>
<td></td>
<td>100</td>
<td>G,A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>MS33649-4 Female</td>
<td></td>
<td>200</td>
<td>G,A</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>300</td>
<td>G,A</td>
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</tr>
</tbody>
</table>

0 = 0.6 m (2') cable (std)

1 = PTIH-10-6P connector or equal (no charge).
2 = PTIH-10-6S-R connector (not included), order PTS06A-10-6S-R.
3 = 4-pin eyelet header (no charge).
6 = mini DIN connector (no charge).

* Referenced to atmospheric pressure, 30 Vac range is 30 to 0 inHg vacuum, all other ranges are psi

To order a custom configuration:
1. Select a pressure port
2. Select pressure range
3. Select pressure units
4. Select output
5. Select extra length cable
6. Select options and agency approvals

**METRIC CUSTOM CONFIGURATIONS**

<table>
<thead>
<tr>
<th>PXM6000 SERIES</th>
<th>PRESSURE PORT</th>
<th>ELECTRICAL CONNECTION</th>
<th>RANGE (BAR)</th>
<th>UNITS</th>
<th>OUTPUT</th>
<th>CALIBRATION OPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td>[6]</td>
</tr>
<tr>
<td>MA</td>
<td>G¼B Male</td>
<td>additional cost</td>
<td>1.0</td>
<td>A,G</td>
<td>V = mV/V</td>
<td>CAL11 = 11-point NIST calibration additional cost</td>
</tr>
<tr>
<td>MB</td>
<td>G¼B Female no charge</td>
<td></td>
<td>1.6</td>
<td>A,G</td>
<td></td>
<td></td>
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<tr>
<td>MC</td>
<td>G¾ Male</td>
<td>additional cost</td>
<td>4.0</td>
<td>A,G</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td>A,G</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 0 = 0.6 m (2') cable (std)
1 = PTIH-10-6P connector (or equal, no charge)
3 = 4-pin eyelet* (no shunt cal (no charge)
6 = mini DIN connector* (no shunt cal (no charge)

**Note:** All mV/V models meet CE requirements.

**Ordering Examples:**
PX6000M1-100Gi, 100 psi vented gage pressure transducer with MS33649-4 female pressure connection, PTIH-10-6P electrical connector and 4 to 20 mA output. PTS06A-10-6S-R, mating connector (sold separately).
PX6000A0-30VACV-25FT, 30 to 0 inHg vacuum transducer with a ½-27 NPT male pressure connection, a reverse-acting (30 inHg vacuum = full scale output) mV/V output, and a 7.6 m (25') cable.
PX6000L1-015A5T, 15 psi absolute pressure transducer with MS33656-4 male pressure connection, PTIH-10-6P electrical connector and 0 to 5 Vdc output. PTS06A-10-6S-R, mating connector (sold separately).

**G¼ Pressure Snubbers:**
PS-4G = Gas
PS-4E = Lt Oil
PS-4D = Dense Lq

**¾ NPT Pressure Snubbers:**
PS-4G-MG = Gas
PS-4E-MG = Lt Oil
PS-4D-MG = Dense Liquid
MODELS

To Order

Models with MS33656-4 Pressure Connection, Integral Connector & mV/V Output

<table>
<thead>
<tr>
<th>RANGE</th>
<th>MODEL NO.</th>
<th>COMPATIBLE METERS*</th>
</tr>
</thead>
<tbody>
<tr>
<td>VACUUM</td>
<td>PX6000L1-30VACV</td>
<td>DP41-S, DP25B-S</td>
</tr>
<tr>
<td>ABSOLUTE PRESSURE</td>
<td>PX6000L1-015AV</td>
<td>DP41-S, DP25B-S</td>
</tr>
<tr>
<td>0 to 15</td>
<td>PX6000L1-020AV</td>
<td>DP41-S, DP25B-S</td>
</tr>
<tr>
<td>0 to 20</td>
<td>PX6000L1-050AV</td>
<td>DP41-S, DP25B-S</td>
</tr>
<tr>
<td>0 to 100</td>
<td>PX6000L1-100AV</td>
<td>DP41-S, DP25B-S</td>
</tr>
<tr>
<td>0 to 200</td>
<td>PX6000L1-200AV</td>
<td>DP41-S, DP25B-S</td>
</tr>
<tr>
<td>0 to 300</td>
<td>PX6000L1-300AV</td>
<td>DP41-S, DP25B-S</td>
</tr>
</tbody>
</table>

Accessory

Comes complete with 5-point NIST traceable calibration. * Visit us online for compatible meters.

Ordering Example: PX6000L1-050AV, 50 psi gage pressure transducer with PTIH-10-6P electrical connection and MS33656-4 male pressure port. PTS06A-10-6S-R, mating connector (sold separately).

METRIC MODELS

To Order

Models with G ¼ Male Pressure Connection, Cable or mini DIN and mV/V Output

<table>
<thead>
<tr>
<th>RANGE</th>
<th>MODEL NO.</th>
<th>COMPATIBLE METERS*</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSOLUTE PRESSURE</td>
<td>PXM6000MC[-]001BARAV</td>
<td>DP41-S, DP25B-S</td>
</tr>
<tr>
<td>0 to 1 bar</td>
<td>PXM6000MC[-]1.60BARAV</td>
<td>DP41-S, DP25B-S</td>
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<tr>
<td>0 to 4 bar</td>
<td>PXM6000MC[-]004BARAV</td>
<td>DP41-S, DP25B-S</td>
</tr>
<tr>
<td>0 to 6 bar</td>
<td>PXM6000MC[-]006BARAV</td>
<td>DP41-S, DP25B-S</td>
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<tr>
<td>0 to 10 bar</td>
<td>PXM6000MC[-]010BARAV</td>
<td>DP41-S, DP25B-S</td>
</tr>
<tr>
<td>0 to 16 bar</td>
<td>PXM6000MC[-]016BARAV</td>
<td>DP41-S, DP25B-S</td>
</tr>
</tbody>
</table>

GAGE PRESSURE

Comes complete with 5-point calibration. * Visit us online for compatible meters. [*] = Insert “0” for 0.6 m (2’) cable or “6” for mini DIN connector.

Ordering Example: PXM6000MC0-004BARGV, 4 bar gage pressure transducer with 0.6 m (2’) cable and G ¼ male pressure port.