



RUGGED SOLID STATE TRANSDUCERS WITH AMPLIFIED OUTPUTS GAGE, ABSOLUTE, AND COMPOUND PRESSURES

PX209/PX219 Series

0-15 to 0-300 psi

0-1 to 0-20 bar

Starts at
\$195

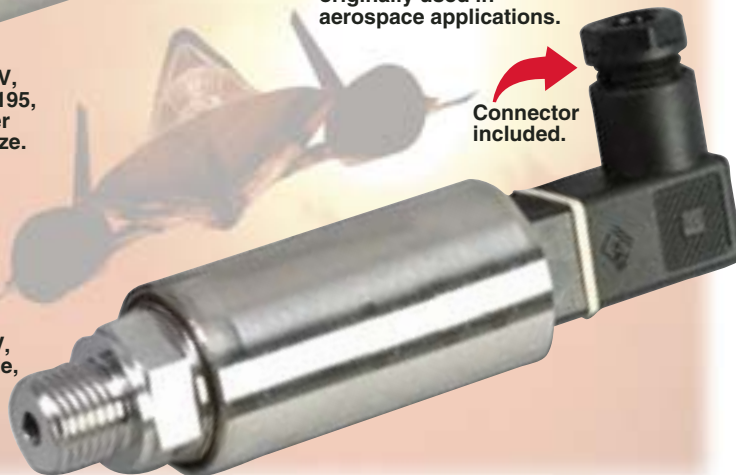


- ✓ **Stainless Steel Fitting and Body**
- ✓ **5-Point NIST-Traceable Calibration Included**
- ✓ **Solid State Media Isolation (Suitable for Use with Many Industrial Liquids and Gases)**
- ✓ **Broad Temperature-Compensated Range of -20 to 80°C (-4 to 176°F) Yields High Stability with Changing Temperatures**
- ✓ **Electrical Isolation to 100 MΩ Ensures Long-Term Reliability**
- ✓ **Rugged High Shock and Vibration Design for Tough OEM Applications**
- ✓ **100,000 Hr MTBF Typical**

Based on proprietary sensor technology developed by OMEGA to meet the high reliability and accuracy demanded by aerospace applications, the PX209/219 Series voltage and current output pressure transducer offers superior performance in non-corrosive applications, including: engine/powertrain testing, well monitoring, and ground and race water monitoring. The transducer uses a 4-active-arm bridge sensor with a micro-machined diffused silicon diaphragm and proprietary thin-film media, plus dielectric isolation barriers.



PX209-100G5V, cable style, \$195, shown smaller than actual size.



PX219-100G5V, connector style, \$195, shown actual size.

Connector included.

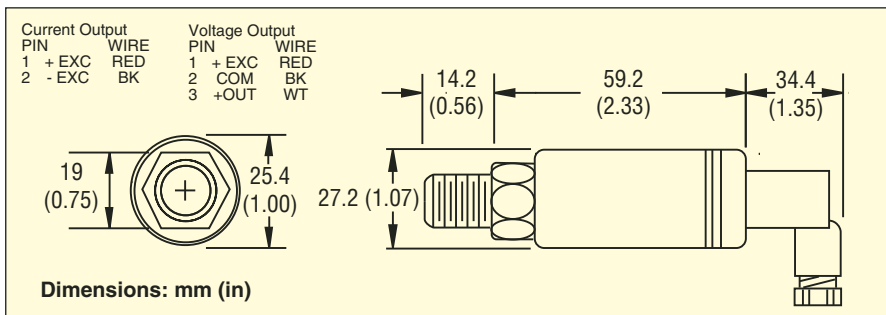
Based on proprietary solid state sensor technology originally used in aerospace applications.

EXCLUSIVE!



VOLTAGE OUTPUT
PRESSURE TRANSDUCERS

B



This same core sensing element technology, which includes multiple types of signal conditioning and the ability to survive extremes of shock and vibration, provides a modular building block for OMEGA's revolutionary family of pressure-sensing instruments.

SPECIFICATIONS

Voltage Output

Excitation: 24 Vdc @ 15 mA

5 Vdc Output: 7 to 35 Vdc

10 Vdc Output: 12 to 35 Vdc

Output: 0 to 5 Vdc or 0 to 10 Vdc, ±1.5% FSO, 3-wire

Zero Balance: 0 Vdc ±2% FSO

4 to 20 mA Output

Excitation: 24 Vdc (7 to 35 Vdc) reverse polarity protected

Output: 4 to 20 mA (2-wire) ±1% FSO

Zero Balance: 4 mA ±2% FSO

Max Loop Resistance:

50 x (supply voltage - 10) Ω

Common Specifications

Accuracy: 0.25% FS (including linearity, hysteresis and repeatability)

Operating Temperature:

-54 to 121°C (-65 to 250°F)

Compensated Temperature:

-20 to 80°C (-4 to 176°F)

Thermal Effects:

0.04% FS/°C (0.02% FS/°F)

Proof Pressure:

150%

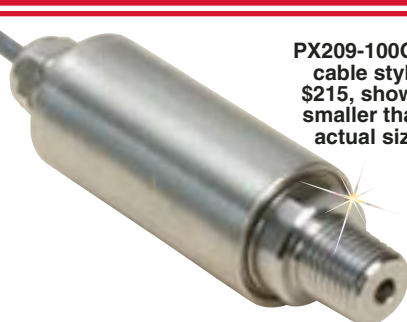
Burst Pressure:

300% range max

Response Time:

2 ms typical

RUGGED SOLID STATE TRANSDUCERS



PX209-100GI, cable style, \$215, shown smaller than actual size.

Vibration Sensitivity: At 20 g peak sinusoidal vibration from 10 Hz to 2000 Hz (½" 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: >35 kHz for 100 psi range

Gage Type: Diffused silicon strain gages

Wetted Parts: 316 SS, borosilicate glass, silicon nitride, epoxy

Pressure Port: ¼-18 NPT

Electrical Connections:

PX209: 1 m (36") shielded 4-conductor cable

PX219: DIN 43650 plug connector supplied

Weight: 128 g (4.5 oz)

Order a snubber to protect your pressure transducer!



PS-4G, \$10, shown actual size.

ACCESSORIES

MODEL	PRICE	DESCRIPTION
PS-4G	\$10	Pressure snubber for gaseous media
PS-4E	10	Pressure snubber for water and light oils
PS-4D	10	Pressure snubber for dense liquids (motor oil)
TX4-100	28.50	30 m (100') of 4-conductor shielded wire
VT-1005-VHS	99	Reference Video: Pressure, Industrial Measurement Series

To Order (Specify PX209 for Cable or PX219 for DIN Connector)

psi	bar	CABLE STYLE	PRICE	CONN. STYLE	PRICE	COMPATIBLE METERS*
GAGE PRESSURE RANGES (psig) WITH 0 TO 5 Vdc OUTPUT						
0 to 15	0 to 1.0	PX209-015G5V	\$195	PX219-015G5V	\$195	DPi8, DP41-E, DP25B-E
0 to 30	0 to 2.1	PX209-030G5V	195	PX219-030G5V	195	DPi8, DP41-E, DP25B-E
0 to 60	0 to 4.1	PX209-060G5V	195	PX219-060G5V	195	DPi8, DP41-E, DP25B-E
0 to 100	0 to 6.9	PX209-100G5V	195	PX219-100G5V	195	DPi8, DP41-E, DP25B-E
0 to 200	0 to 13.8	PX209-200G5V	195	PX219-200G5V	195	DPi8, DP41-E, DP25B-E
0 to 300	0 to 20.7	PX209-300G5V	195	PX219-300G5V	195	DPi8, DP41-E, DP25B-E
GAGE PRESSURE RANGES (psig) WITH 4 TO 20 mA OUTPUT						
0 to 15	0 to 1.0	PX209-015GI	\$215	PX219-015GI	\$215	DPi8, DP41-E, DP25B-E
0 to 30	0 to 2.1	PX209-030GI	215	PX219-030GI	215	DPi8, DP41-E, DP25B-E
0 to 60	0 to 4.1	PX209-060GI	215	PX219-060GI	215	DPi8, DP41-E, DP25B-E
0 to 100	0 to 6.9	PX209-100GI	215	PX219-100GI	215	DPi8, DP41-E, DP25B-E
0 to 200	0 to 13.8	PX209-200GI	215	PX219-200GI	215	DPi8, DP41-E, DP25B-E
0 to 300	0 to 20.7	PX209-300GI	215	PX219-300GI	215	DPi8, DP41-E, DP25B-E
ABSOLUTE PRESSURE RANGES (psia) WITH 0 TO 5 Vdc OUTPUT						
0 to 15	0 to 1.0	PX209-015A5V	\$195	PX219-015A5V	\$195	DPi8, DP41-E, DP25B-E
0 to 30	0 to 2.1	PX209-030A5V	195	PX219-030A5V	195	DPi8, DP41-E, DP25B-E
0 to 60	0 to 4.1	PX209-060A5V	195	PX219-060A5V	195	DPi8, DP41-E, DP25B-E
0 to 100	0 to 6.9	PX209-100A5V	195	PX219-100A5V	195	DPi8, DP41-E, DP25B-E
0 to 200	0 to 13.8	PX209-200A5V	195	PX219-200A5V	195	DPi8, DP41-E, DP25B-E
0 to 300	0 to 20.7	PX209-300A5V	195	PX219-300A5V	195	DPi8, DP41-E, DP25B-E
ABSOLUTE PRESSURE RANGES (psia) WITH 4 TO 20 mA OUTPUT						
0 to 15	0 to 1.0	PX209-015AI	\$215	PX219-015AI	\$215	DPi8, DP41-E, DP25B-E
0 to 30	0 to 2.1	PX209-030AI	215	PX219-030AI	215	DPi8, DP41-E, DP25B-E
0 to 60	0 to 4.1	PX209-060AI	215	PX219-060AI	215	DPi8, DP41-E, DP25B-E
0 to 100	0 to 6.9	PX209-100AI	215	PX219-100AI	215	DPi8, DP41-E, DP25B-E
0 to 200	0 to 13.8	PX209-200AI	215	PX219-200AI	215	DPi8, DP41-E, DP25B-E
0 to 300	0 to 20.7	PX209-300AI	215	PX219-300AI	215	DPi8, DP41-E, DP25B-E
VACUUM AND COMPOUND RANGES WITH 0 TO 5 Vdc OUTPUT						
-14.7 to 0	-1 to 0	PX209-30VAC5V	\$195	PX219-30VAC5V	\$195	DPi8, DP41-E, DP25B-E
-14.7 to 15	-1 to 1.0	PX209-30V15G5V	195	PX219-30V15G5V	195	DPi8, DP41-E, DP25B-E
-14.7 to 45	-1 to 3.1	PX209-30V45G5V	195	PX219-30V45G5V	195	DPi8, DP41-E, DP25B-E
-14.7 to 85	-1 to 5.9	PX209-30V85G5V	195	PX219-30V85G5V	195	DPi8, DP41-E, DP25B-E
-14.7 to 135	-1 to 9.3	PX209-30V135G5V	195	PX219-30V135G5V	195	DPi8, DP41-E, DP25B-E
VACUUM AND COMPOUND RANGES WITH 4 TO 20 mA OUTPUT						
-14.7 to 0	-1 to 0	PX209-30VACI	\$215	PX219-30VACI	\$215	DPi8, DP41-E, DP25B-E
-14.7 to 15	-1 to 1.0	PX209-30V15GI	215	PX219-30V15GI	215	DPi8, DP41-E, DP25B-E
-14.7 to 45	-1 to 3.1	PX209-30V45GI	215	PX219-30V45GI	215	DPi8, DP41-E, DP25B-E
-14.7 to 85	-1 to 5.9	PX209-30V85GI	215	PX219-30V85GI	215	DPi8, DP41-E, DP25B-E
-14.7 to 135	-1 to 9.3	PX209-30V135GI	215	PX219-30V135GI	215	DPi8, DP41-E, DP25B-E

Comes with 5-point calibration.

* See section D for compatible meters.

Note: To order 0 to 10 Vdc output, replace "5V" suffix with "10V" (no extra charge).

Ordering Example: PX219-015A5V, 0 to 5 Vdc output transducer for absolute pressure with a 0 to 15 psia range, PS-4G snubber and TX4-100 shielded wire, \$195 + 10 + 28.50 = \$233.50.



UNITED STATES

www.omega.com

1-800-TC-OMEGA
Stamford, CT.

CANADA

www.omega.ca

Laval(Quebec)
1-800-TC-OMEGA

GERMANY

www.omega.de

Deckenpfronn, Germany
0800-8266342

UNITED KINGDOM

www.omega.co.uk

Manchester, England
0800-488-488

FRANCE

www.omega.fr

Guyancourt, France
088-466-342

CZECH REPUBLIC

www.omegaeng.cz

Karviná, Czech Republic
596-311-899

BENELUX

www.omega.nl

Amstelveen, NL
0800-099-33-44



More than 100,000 Products Available!

• Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Glass Bulb Thermometers, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders Relative Humidity Measurement Instruments, RTD Probes, Elements and Assemblies, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples Thermowells and Head and Well Assemblies, Transmitters, Wire

• Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters