

RUGGED SOLID STATE TRANSDUCERS

WITH AMPLIFIED OUTPUTS

STANDARD AND METRIC MODELS

EXCLUSIVE!

PX209/PXM209 Series

0-15 to 0-300 psi-Standard Units

0-1 to 0-20 bar-Metric Units

Gage, Absolute, and
Compound Ranges

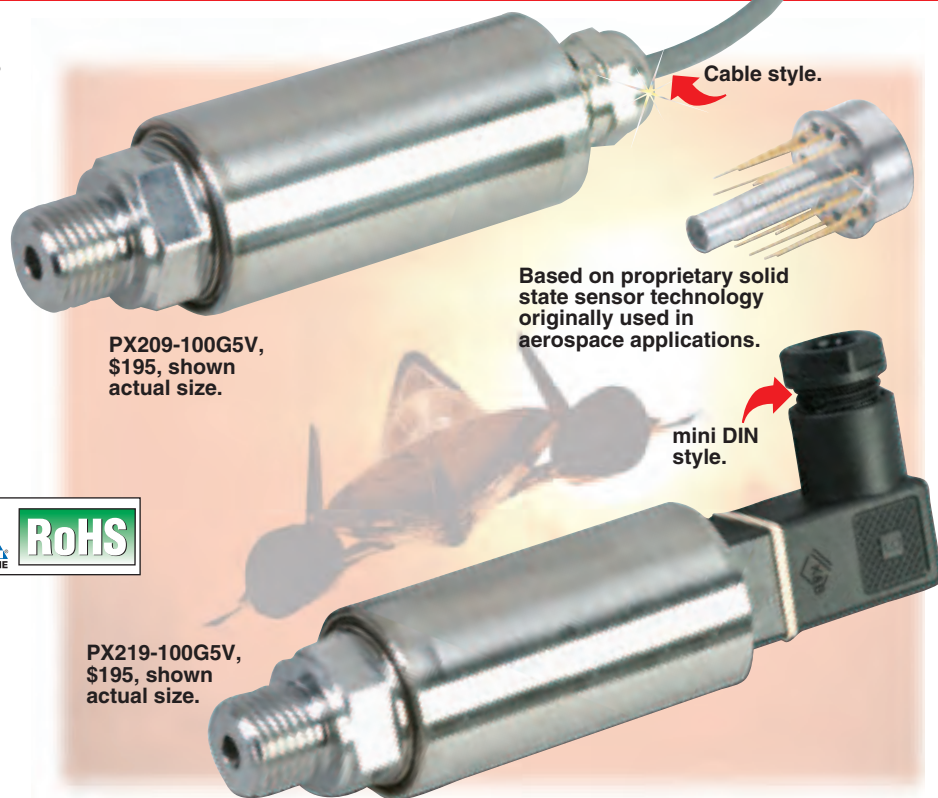
Starts at
\$195



Standard

- ✓ **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/PXM209 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



PX209-100G5V,
\$195, shown
actual size.

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

Cable style.

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

mini DIN style.

with a micro-machined diffused silicon diaphragm and proprietary thin-film media, plus dielectric isolation barriers.

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

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: See dimensional drawing on page B-91

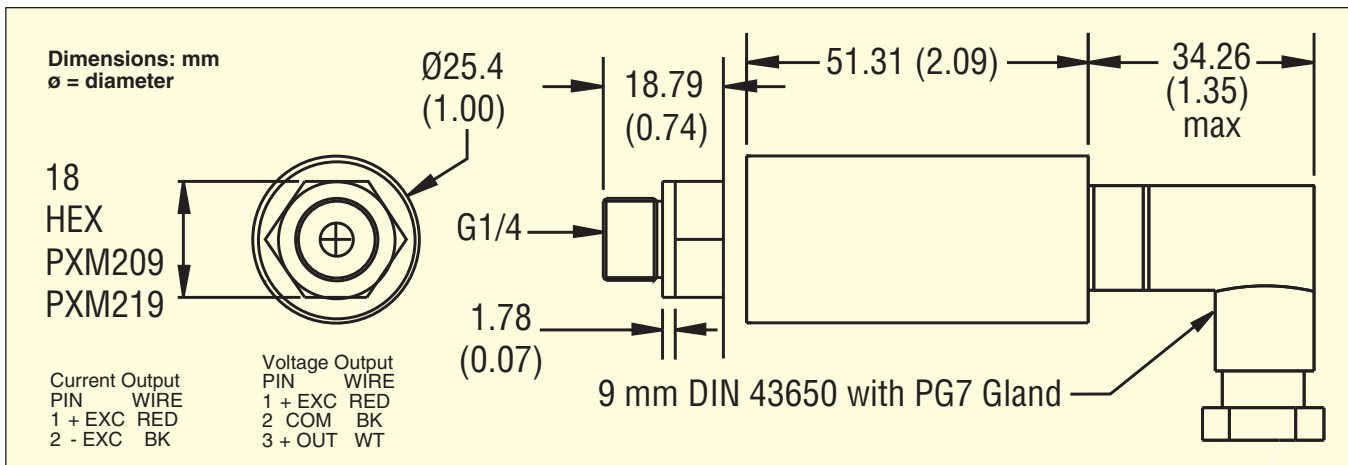
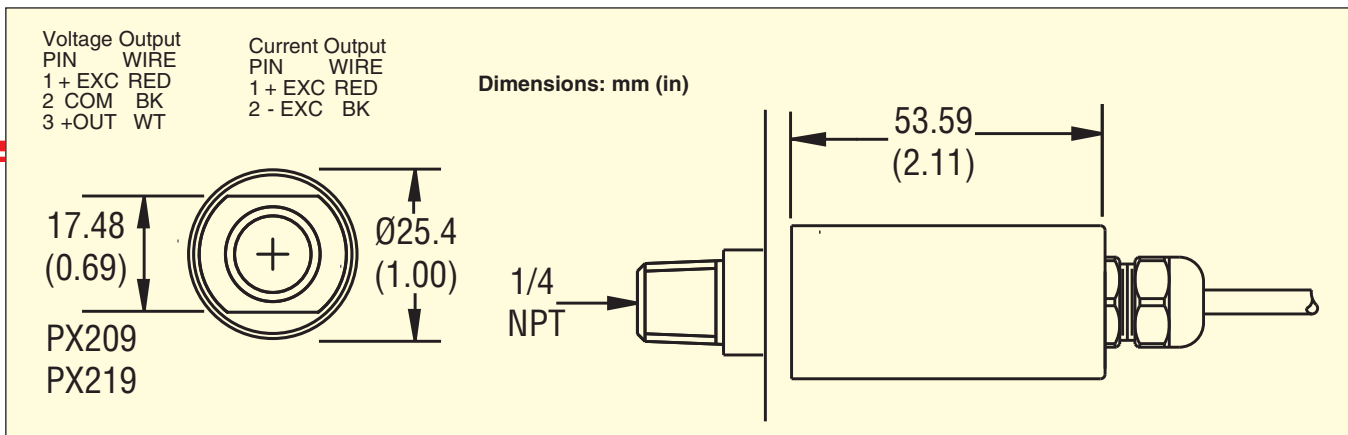
Electrical Connections:

PX209/PXM209: 1 m (36") shielded 4-conductor cable

PX219/PXM219: DIN 40050 plug connector supplied

Weight: 128 g (4.5 oz)

VOLTAGE OUTPUT
PRESSURE TRANSDUCERS
B



MAKE IT WIRELESS! ADD WIRELESS CAPABILITY TO YOUR PROCESS MEASUREMENT SYSTEM!

Wireless Connections From
Your Sensor to Your
Instrumentation:

- ✓ Thermocouple, RTD, Infrared Temperature, Humidity, pH, as well as Process Voltage/Current
- ✓ Easy to Install and Use
- ✓ Capable of Distances up to 120 m (400')



For Complete
Details See
Wireless
Section W



WRS232-USB wireless transmitter, \$159, shown close to actual size.

Wireless Communications
From Your Instrument to
a PC:

- ✓ Convert the RS232 Signal on Your Meter, Controller or PLC
- ✓ Works with any PC with a USB Port
- ✓ Easy to Install with Seamless Operation
- ✓ Capable of Distances up to 120 m (400')



UWTC-1, \$125.

Both models
shown smaller
than actual
size.

UWTC-REC2, \$235, available with 4 to 20 mA, 0 to 5 Vdc, 0 to 10 Vdc and Type K thermocouple output.



Laptop not included.

To Order (Specify Model Number)

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
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
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

Comes complete with 5-point NIST calibration certificate.

* See section D for compatible meters.

See pages B-149 and B-150 for PX209 units with 4 to 20 mA output.

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 for gasses and TX4-100 shielded wire, \$195 + 12.75 + 35.00 = \$242.75.

STANDARD ACCESSORIES

MODEL	PRICE	DESCRIPTION
PS-4G	\$12.75	¼ NPT pressure snubber for gaseous media
PS-4E	12.75	¼ NPT pressure snubber for water and light oils
PS-4D	12.75	¼ NPT pressure snubber for dense liquids (motor oil)
TX4-100	35.00	30 m (100') of 4-conductor shielded wire

METRIC ACCESSORIES

MODEL	PRICE	DESCRIPTION
PS-4G-MG	\$12.75	G¼ pressure snubber for gaseous media
PS-4E-MG	12.75	G¼ pressure snubber for water and light oils
PS-4D-MG	12.75	G¼ pressure snubber for dense liquids (motor oil)
TX4-100	35.00	30 m (100') of 4-conductor shielded wire

Order a snubber to protect your pressure transducer!

PS-4G, \$12.75, shown smaller than actual size.

METRIC MODELS

AVAILABLE FOR FAST DELIVERY!

To Order (Specify PXM209 for Cable or PXM219 for DIN Connector)

bar	psi	CABLE STYLE	PRICE	CONN. STYLE	PRICE	COMPATIBLE METERS*
GAGE PRESSURE RANGES (bar) WITH 0 TO 10 Vdc OUTPUT						
0 to 1.0	0 to 15	PXM209-001G10V	\$195	PXM219-001G10V	\$195	DPi8, DP41-E, DP25B-E
0 to 1.6	0 to 23	PXM209-1.60G10V	195	PXM219-1.60G10V	195	DPi8, DP41-E, DP25B-E
0 to 2.5	0 to 36	PXM209-2.50G10V	195	PXM219-2.50G10V	195	DPi8, DP41-E, DP25B-E
0 to 4.0	0 to 58	PXM209-004G10V	195	PXM219-004G10V	195	DPi8, DP41-E, DP25B-E
0 to 6.0	0 to 87	PXM209-006G10V	195	PXM219-006G10V	195	DPi8, DP41-E, DP25B-E
0 to 10.0	0 to 145	PXM209-010G10V	195	PXM219-010G10V	195	DPi8, DP41-E, DP25B-E
0 to 16.0	0 to 232	PXM209-016G10V	195	PXM219-016G10V	195	DPi8, DP41-E, DP25B-E
0 to 20.0	0 to 290	PXM209-020G10V	195	PXM219-020G10V	195	DPi8, DP41-E, DP25B-E
ABSOLUTE PRESSURE RANGES (bar) WITH 0 TO 10 Vdc OUTPUT						
0 to 1.0	0 to 15	PXM209-001A10V	\$195	PXM219-001A10V	\$195	DPi8, DP41-E, DP25B-E
0 to 1.6	0 to 23	PXM209-1.60A10V	195	PXM219-1.60A10V	195	DPi8, DP41-E, DP25B-E
0 to 2.5	0 to 36	PXM209-2.50A10V	195	PXM219-2.50A10V	195	DPi8, DP41-E, DP25B-E
0 to 4.0	0 to 58	PXM209-004A10V	195	PXM219-004A10V	195	DPi8, DP41-E, DP25B-E
0 to 6.0	0 to 87	PXM209-006A10V	195	PXM219-006A10V	195	DPi8, DP41-E, DP25B-E
0 to 10.0	0 to 145	PXM209-010A10V	195	PXM219-010A10V	195	DPi8, DP41-E, DP25B-E
0 to 16.0	0 to 232	PXM209-016A10V	195	PXM219-016A10V	195	DPi8, DP41-E, DP25B-E
0 to 20.0	0 to 290	PXM209-020A10V	195	PXM219-020A10V	195	DPi8, DP41-E, DP25B-E
VACUUM AND COMPOUND RANGES (bar) WITH 0 TO 10 Vdc OUTPUT						
VAC to 0	VAC to 0	PXM209-VAC000G10V	\$195	PXM219-VAC000G10V	\$195	DPi8, DP41-E, DP25B-E
VAC to 1	VAC to 15	PXM209-VAC001G10V	195	PXM219-VAC001G10V	195	DPi8, DP41-E, DP25B-E
VAC to 3	VAC to 45	PXM209-VAC003G10V	195	PXM219-VAC003G10V	195	DPi8, DP41-E, DP25B-E
VAC to 6	VAC to 87	PXM209-VAC006G10V	195	PXM219-VAC006G10V	195	DPi8, DP41-E, DP25B-E
VAC to 9	VAC to 131	PXM209-VAC009G10V	195	PXM219-VAC009G10V	195	DPi8, DP41-E, DP25B-E

Comes complete with 5-point calibration.

* See section D for compatible meters.

Note: The voltage output versions of the vacuum and compound sensors generate 0 Vdc at vacuum and 10 Vdc at full scale.**Ordering Example:** PXM219-001A10V, 0 to 10 Vdc output transducer for absolute pressure with a 0 to 1 bar range, PS-4G-MG snubber and TX4-100 shielded wire, \$195 + 12.75 + 35 = \$242.75.