

Rugged Solid State Transducers with Amplified Outputs

Imperial and Metric Models



0-15 to 0-300 psi-Standard Units
0-1 to 0-20 bar-Metric Units
Gage, Absolute, and Compound Ranges



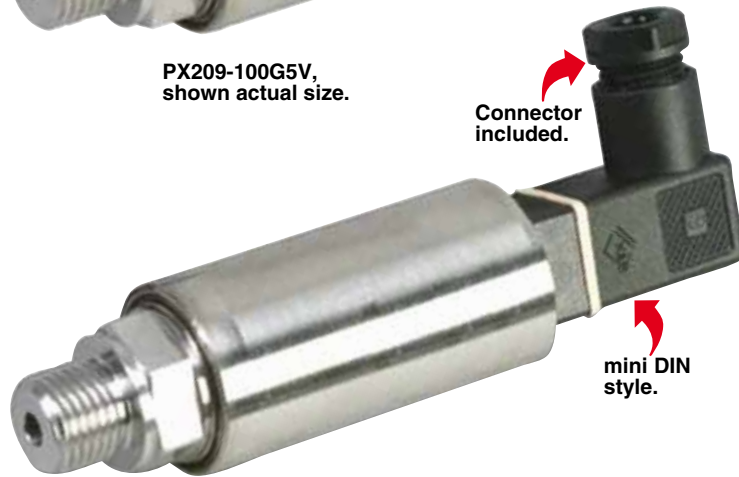
Cable style.

PX209/PXM209 Series



PX209-100G5V, shown actual size.

Connector included.



mini DIN style.

PX219-100G5V, shown actual size.

- ✓ **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**

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

END OF LIFE NOTICE:

The PX209 and PXM209 Series transducers are scheduled to go out of production in June 2017. The replacements are the PX309 and PXM309 Series transducers. Please direct any Questions to Pressure Application Engineering.

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% full scale (including linearity, hysteresis and repeatability)
Operating Temperature:
 -40 to 85°C (-40 to 185°F)

Compensated Temperature:
 -20 to 80°C (-4 to 176°F)

Thermal Effects:
 0.04% full scale/°C (0.02% full scale/°F)

Proof Pressure: 150%

Burst Pressure: 300% range maximum

Response Time: 2 ms typical

Gage Type: Diffused silicon strain gages

Wetted Parts: 316 stainless steel, borosilicate glass, silicon nitride, epoxy

Pressure Port: See dimensional drawing on last page

Electrical Connections:

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

PX219/PXM219: DIN 40050 plug connector supplied

Weight: 128 g (4.5 oz)

Imperial Models, 5V

To Order				
psi	bar	Cable Style	Conn. Style	Compatible Meters*
Gage Pressure Ranges (psig) with 0 to 5 Vdc Output				
0 to 15	0 to 1.0	PX209-015G5V	PX219-015G5V	DPi8, DP41-E, DP25B-E
0 to 30	0 to 2.1	PX209-030G5V	PX219-030G5V	DPi8, DP41-E, DP25B-E
0 to 60	0 to 4.1	PX209-060G5V	PX219-060G5V	DPi8, DP41-E, DP25B-E
0 to 100	0 to 6.9	PX209-100G5V	PX219-100G5V	DPi8, DP41-E, DP25B-E
0 to 200	0 to 13.8	PX209-200G5V	PX219-200G5V	DPi8, DP41-E, DP25B-E
0 to 300	0 to 20.7	PX209-300G5V	PX219-300G5V	DPi8, DP41-E, DP25B-E
Absolute Pressure Ranges (psia) with 0 to 5 Vdc Output				
0 to 15	0 to 1.0	PX209-015A5V	PX219-015A5V	DPi8, DP41-E, DP25B-E
0 to 30	0 to 2.1	PX209-030A5V	PX219-030A5V	DPi8, DP41-E, DP25B-E
0 to 60	0 to 4.1	PX209-060A5V	PX219-060A5V	DPi8, DP41-E, DP25B-E
0 to 100	0 to 6.9	PX209-100A5V	PX219-100A5V	DPi8, DP41-E, DP25B-E
0 to 200	0 to 13.8	PX209-200A5V	PX219-200A5V	DPi8, DP41-E, DP25B-E
0 to 300	0 to 20.7	PX209-300A5V	PX219-300A5V	DPi8, DP41-E, DP25B-E
Vacuum And Compound Ranges with 0 to 5 Vdc Output				
-14.7 to 0	-1 to 0	PX209-30VAC5V	PX219-30VAC5V	DPi8, DP41-E, DP25B-E
-14.7 to 15	-1 to 1.0	PX209-30V15G5V	PX219-30V15G5V	DPi8, DP41-E, DP25B-E
-14.7 to 45	-1 to 3.1	PX209-30V45G5V	PX219-30V45G5V	DPi8, DP41-E, DP25B-E
-14.7 to 85	-1 to 5.9	PX209-30V85G5V	PX219-30V85G5V	DPi8, DP41-E, DP25B-E
-14.7 to 135	-1 to 9.3	PX209-30V135G5V	PX219-30V135G5V	DPi8, DP41-E, DP25B-E

Comes complete with 5-point NIST calibration certificate.

* Visit us online for compatible meters.

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

Ordering Example: PX219-015G5V, 0 to 5 Vdc output transducer for gage pressure with a 0 to 15 psia range, PS-4G snubber for gasses and TX4-100 shielded wire.

Imperial Accessories

Model	Description
PS-4G	¼ NPT pressure snubber for gaseous media
PS-4E	¼ NPT pressure snubber for water and light oils
PS-4D	¼ NPT pressure snubber for dense liquids (motor oil)
TX4-100	30 m (100') of 4-conductor shielded wire

Metric Accessories

Model	Description
PS-4G-MG	G¼ pressure snubber for gaseous media
PS-4E-MG	G¼ pressure snubber for water and light oils
PS-4D-MG	G¼ pressure snubber for dense liquids (motor oil)
TX4-100	30 m (100') of 4-conductor shielded wire

Order a snubber to protect your pressure transducer!



PS-4G, shown actual size.

Metric Models, 10V

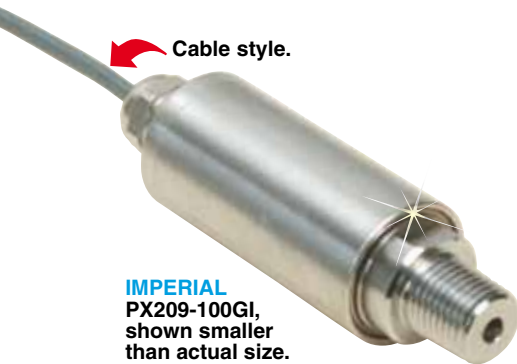
To Order (Specify PXM209 for Cable or PXM219 for DIN Connector)				
bar	psi	Cable Style	Conn. Style	Compatible Meters*
Gage Pressure Ranges (bar) with 0 to 10 Vdc Output				
0 to 1.0	0 to 15	PXM209-001G10V	PXM219-001G10V	DPi8, DP41-E, DP25B-E
0 to 1.6	0 to 23	PXM209-1.60G10V	PXM219-1.60G10V	DPi8, DP41-E, DP25B-E
0 to 2.5	0 to 36	PXM209-2.50G10V	PXM219-2.50G10V	DPi8, DP41-E, DP25B-E
0 to 4.0	0 to 58	PXM209-004G10V	PXM219-004G10V	DPi8, DP41-E, DP25B-E
0 to 6.0	0 to 87	PXM209-006G10V	PXM219-006G10V	DPi8, DP41-E, DP25B-E
0 to 10.0	0 to 145	PXM209-010G10V	PXM219-010G10V	DPi8, DP41-E, DP25B-E
0 to 16.0	0 to 232	PXM209-016G10V	PXM219-016G10V	DPi8, DP41-E, DP25B-E
0 to 20.0	0 to 290	PXM209-020G10V	PXM219-020G10V	DPi8, DP41-E, DP25B-E
Absolute Pressure Ranges (bar) with 0 to 10 Vdc Output				
0 to 1.0	0 to 15	PXM209-001A10V	PXM219-001A10V	DPi8, DP41-E, DP25B-E
0 to 1.6	0 to 23	PXM209-1.60A10V	PXM219-1.60A10V	DPi8, DP41-E, DP25B-E
0 to 2.5	0 to 36	PXM209-2.50A10V	PXM219-2.50A10V	DPi8, DP41-E, DP25B-E
0 to 4.0	0 to 58	PXM209-004A10V	PXM219-004A10V	DPi8, DP41-E, DP25B-E
0 to 6.0	0 to 87	PXM209-006A10V	PXM219-006A10V	DPi8, DP41-E, DP25B-E
0 to 10.0	0 to 145	PXM209-010A10V	PXM219-010A10V	DPi8, DP41-E, DP25B-E
0 to 16.0	0 to 232	PXM209-016A10V	PXM219-016A10V	DPi8, DP41-E, DP25B-E
0 to 20.0	0 to 290	PXM209-020A10V	PXM219-020A10V	DPi8, DP41-E, DP25B-E
Vacuum and Compound Ranges (bar) with 0 to 10 Vdc Output				
VAC to 0	VAC to 0	PXM209-VAC000G10V	PXM219-VAC000G10V	DPi8, DP41-E, DP25B-E
VAC to 1	VAC to 15	PXM209-VAC001G10V	PXM219-VAC001G10V	DPi8, DP41-E, DP25B-E
VAC to 3	VAC to 45	PXM209-VAC003G10V	PXM219-VAC003G10V	DPi8, DP41-E, DP25B-E
VAC to 6	VAC to 87	PXM209-VAC006G10V	PXM219-VAC006G10V	DPi8, DP41-E, DP25B-E
VAC to 9	VAC to 131	PXM209-VAC009G10V	PXM219-VAC009G10V	DPi8, DP41-E, DP25B-E

Comes complete with 5-point calibration.

* Visit us online for compatible meters.

Note: The voltage output versions of the vacuum and compound sensors generate 0 Vdc at vacuum and 5 Vdc or 10 Vdc at full scale.

Ordering Example: PXM219-001G10V, 0 to 10 Vdc output transducer for gage pressure with a 0 to 1 bar range, PS-4G-MG snubber and TX4-100 shielded wire.



IMPERIAL
PX209-100GI,
shown smaller
than actual size.

Imperial Accessories

Model	Description
PS-4G	¼ NPT pressure snubber for gaseous media
PS-4E	¼ NPT pressure snubber for water and light oils
PS-4D	¼ NPT pressure snubber for dense liquids (motor oil)
TX4-100	30 m (100') of 4-conductor shielded wire

Metric Accessories

Model	Description
PS-4G-MG	G¼ pressure snubber for gaseous media
PS-4E-MG	G¼ pressure snubber for water and light oils
PS-4D-MG	G¼ pressure snubber for dense liquids (motor oil)
TX4-100	30 m (100') of 4-conductor shielded wire

Order a snubber to protect your pressure transducer!



PS-4G, shown actual size.

Imperial Models, 4 to 20 mA

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

psi	bar	Cable Style	Conn. Style	Compatible Meters*
Gage Pressure Ranges (bar) with 0 to 10 Vdc Output				
0 to 15	0 to 1.0	PX209-015GI	PX219-015GI	DPI8, DP41-E, DP25B-E
0 to 30	0 to 2.1	PX209-030GI	PX219-030GI	DPI8, DP41-E, DP25B-E
0 to 60	0 to 4.1	PX209-060GI	PX219-060GI	DPI8, DP41-E, DP25B-E
0 to 100	0 to 6.9	PX209-100GI	PX219-100GI	DPI8, DP41-E, DP25B-E
0 to 200	0 to 13.8	PX209-200GI	PX219-200GI	DPI8, DP41-E, DP25B-E
0 to 300	0 to 20.7	PX209-300GI	PX219-300GI	DPI8, DP41-E, DP25B-E
Absolute Pressure Ranges (bar) with 0 to 10 Vdc Output				
0 to 15	0 to 1.0	PX209-015AI	PX219-015AI	DPI8, DP41-E, DP25B-E
0 to 30	0 to 2.1	PX209-030AI	PX219-030AI	DPI8, DP41-E, DP25B-E
0 to 60	0 to 4.1	PX209-060AI	PX219-060AI	DPI8, DP41-E, DP25B-E
0 to 100	0 to 6.9	PX209-100AI	PX219-100AI	DPI8, DP41-E, DP25B-E
0 to 200	0 to 13.8	PX209-200AI	PX219-200AI	DPI8, DP41-E, DP25B-E
0 to 300	0 to 20.7	PX209-300AI	PX219-300AI	DPI8, DP41-E, DP25B-E
Vacuum and Compound Ranges (bar) with 0 to 10 Vdc Output				
-14.7 to 0	-1 to 0	PX209-30VACI	PX219-30VACI	DPI8, DP41-E, DP25B-E
-14.7 to 15	-1 to 1.0	PX209-30V15GI	PX219-30V15GI	DPI8, DP41-E, DP25B-E
-14.7 to 45	-1 to 3.1	PX209-30V45GI	PX219-30V45GI	DPI8, DP41-E, DP25B-E
-14.7 to 85	-1 to 5.9	PX209-30V85GI	PX219-30V85GI	DPI8, DP41-E, DP25B-E
-14.7 to 135	-1 to 9.3	PX209-30V135GI	PX219-30V135GI	DPI8, DP41-E, DP25B-E

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

Ordering Example: PX219-015AI, 4 to 20 mA output transducer for absolute pressure with a 0 to 15 psia range, PS-4G snubber and TX4-100 shielded wire.

Metric Models, 4 to 20 mA

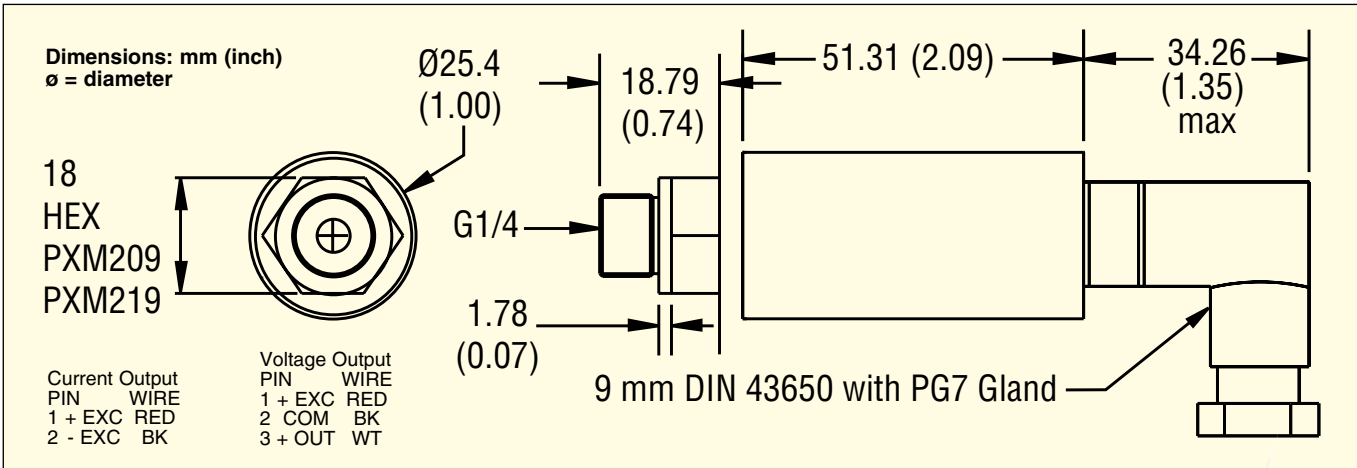
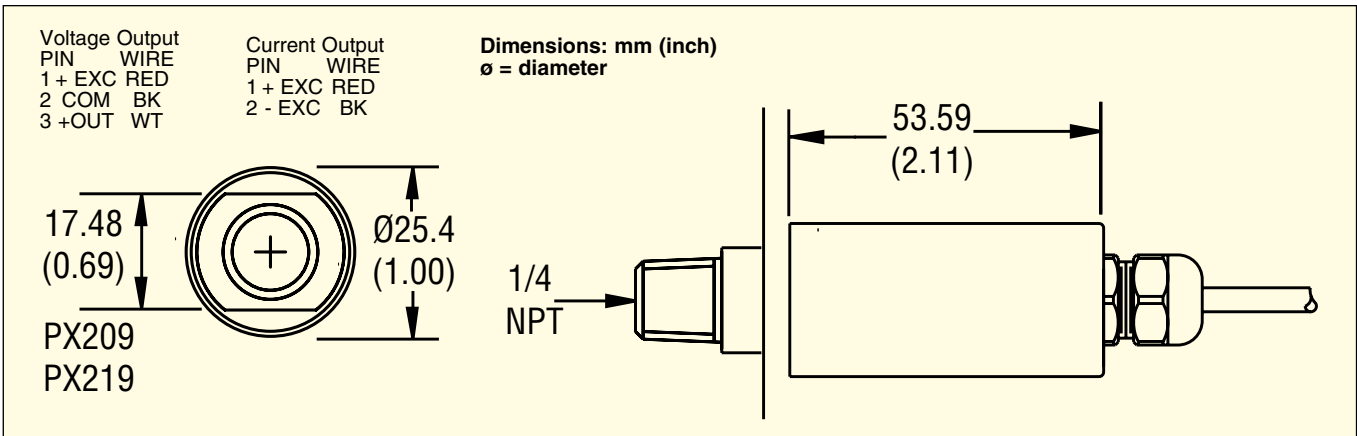
To Order (Specify PXM209 for Cable or PXM219 for DIN Connector)

bar	Cable Style	Conn. Style	Compatible Meters*
Gage Pressure Ranges (bar) with 0 to 10 Vdc Output			
0 to 1.0	PXM209-001GI	PXM219-001GI	DPI8, DP41-E, DP25B-E
0 to 1.6	PXM209-1.60GI	PXM219-1.60GI	DPI8, DP41-E, DP25B-E
0 to 2.5	PXM209-2.50GI	PXM219-2.50GI	DPI8, DP41-E, DP25B-E
0 to 4.0	PXM209-004GI	PXM219-004GI	DPI8, DP41-E, DP25B-E
0 to 6.0	PXM209-006GI	PXM219-006GI	DPI8, DP41-E, DP25B-E
0 to 10.0	PXM209-010GI	PXM219-010GI	DPI8, DP41-E, DP25B-E
0 to 16.0	PXM209-016GI	PXM219-016GI	DPI8, DP41-E, DP25B-E
0 to 20.0	PXM209-020GI	PXM219-020GI	DPI8, DP41-E, DP25B-E
Absolute Pressure Ranges (bar) with 0 to 10 Vdc Output			
0 to 1.0	PXM209-001AI	PXM219-001AI	DPI8, DP41-E, DP25B-E
0 to 1.6	PXM209-1.60AI	PXM219-1.60AI	DPI8, DP41-E, DP25B-E
0 to 2.5	PXM209-2.50AI	PXM219-2.50AI	DPI8, DP41-E, DP25B-E
0 to 4.0	PXM209-004AI	PXM219-004AI	DPI8, DP41-E, DP25B-E
0 to 6.0	PXM209-006AI	PXM219-006AI	DPI8, DP41-E, DP25B-E
0 to 10.0	PXM209-010AI	PXM219-010AI	DPI8, DP41-E, DP25B-E
0 to 16.0	PXM209-016AI	PXM219-016AI	DPI8, DP41-E, DP25B-E
0 to 20.0	PXM209-020AI	PXM219-020AI	DPI8, DP41-E, DP25B-E
Vacuum and Compound Ranges (bar) with 0 to 10 Vdc Output			
VAC to 0	PXM209-VAC000GI	PXM219-VAC000GI	DPI8, DP41-E, DP25B-E
VAC to 1	PXM209-VAC001GI	PXM219-VAC001GI	DPI8, DP41-E, DP25B-E
VAC to 3	PXM209-VAC003GI	PXM219-VAC003GI	DPI8, DP41-E, DP25B-E
VAC to 6	PXM209-VAC006GI	PXM219-VAC006GI	DPI8, DP41-E, DP25B-E
VAC to 9	PXM209-VAC009GI	PXM219-VAC009GI	DPI8, DP41-E, DP25B-E

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

Note: The current output versions of the vacuum and compound sensors generate 4 mA at vacuum and 20 mA at full scale.

Ordering Example: PXM219-001AI, 4 to 20 mA output transducer for absolute pressure with a 0 to 1 bar range, PS-4G-MG snubber and TX4-100 shielded wire.



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 Online



WRS232-USB wireless transmitter, 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')

