

SILICON/BRASS PRESSURE TRANSDUCERS WITH 5 Vdc OUTPUT

PX181B Series

- ✓ Digitally Compensated for Excellent Total Accuracy and Interchangeability
- ✓ Gage Pressure, Vacuum, and Compound Ranges Available
- ✓ 1 to 5 Vdc 3-Wire Output
- ✓ Rugged, Compact Design
- ✓ RFI/EMI Protection
- ✓ Reverse Polarity Protection

OMEGA's PX181B Series transducers, designed for general industrial and commercial requirements, offer excellent performance in a wide range of applications. They are based on proven micro-machined silicon technology, providing high reliability, long-term stability, and low cost.

The PX181B is fully digitally compensated for the effects of pressure and temperature change. It is extremely accurate, with less than 0.3% FS reference accuracy and less than 1% FS over its compensated temperature range.

SPECIFICATIONS

Excitation: 9 to 30 Vdc

Output: 1 to 5 Vdc (3 wire)

Load Resistance: 50,000 Ω minimum

Accuracy: Includes linearity, hysteresis and repeatability

Range: ≥15 psi, 0.3% BFSL max

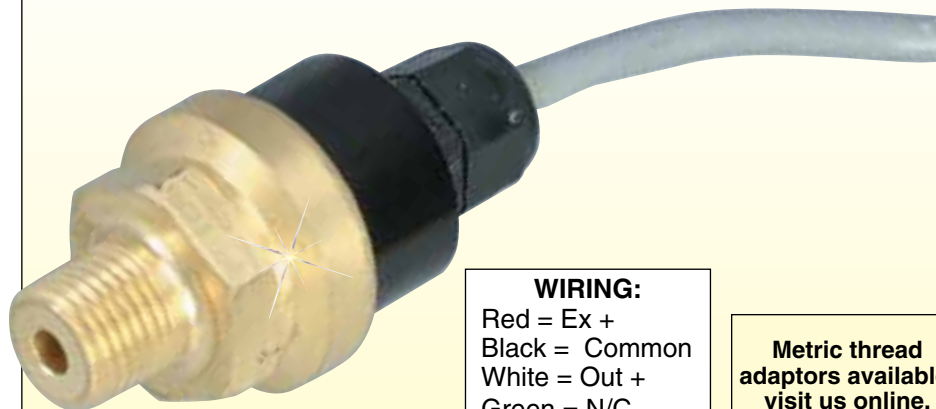
Range: 6 psi, 0.5%

Range: 1 psi, 1%

Total Error Band: 1% FS (includes temperature effects within compensated temperature range)

Operating Temperature: -40 to 80°C (-40 to 176°F)

PX181B-015G5V,
shown actual size.



WIRING:

Red = Ex +
Black = Common
White = Out +
Green = N/C

Metric thread
adaptors available,
visit us online.

Compensated Temperature:
-25 to 75°C (-13 to 167°F)

Process Temperature:
-40 to 100°C (-40 to 212°F)

1-Year Stability: <0.25% FS

Proof Pressure: 2x FS
(750 psig for 500 psig range)

Burst Pressure: 3x FS or 750 psig,
whichever is less

Wetted Parts: Brass, borosilicate,
silicon, RTV and epoxy

Vibration: 10 g, 55 to 2000 Hz

Shock: 30 g

Process Connection: 1/8 NPT male

Electrical Connection: 0.4 m (18")
24-gage cable

Dimensions: 1 1/8 hex; 72 H x 29.7 mm D
(2.84 x 1.17")

Weight: 142 g (5 oz.)

To Order

GAGE PRESSURE RANGES

psi	bar	MODEL NO.	COMPATIBLE METERS*
0 to -14.7	0 to -1.0	PX181B-015VAC5V	DP24-E, DP25B-E, DP41-E, DPi Series
0 to 1	0 to 0.0689	PX181B-001G5V	DP24-E, DP25B-E, DP41-E, DPi Series
0 to 6	0 to 0.414	PX181B-006G5V	DP24-E, DP25B-E, DP41-E, DPi Series
0 to 15	0 to 1.0	PX181B-015G5V	DP24-E, DP25B-E, DP41-E, DPi Series
0 to 30	0 to 2.1	PX181B-030G5V	DP24-E, DP25B-E, DP41-E, DPi Series
0 to 60	0 to 4.1	PX181B-060G5V	DP24-E, DP25B-E, DP41-E, DPi Series
0 to 100	0 to 6.9	PX181B-100G5V	DP24-E, DP25B-E, DP41-E, DPi Series
0 to 200	0 to 13.8	PX181B-200G5V	DP24-E, DP25B-E, DP41-E, DPi Series
0 to 300	0 to 20.7	PX181B-300G5V	DP24-E, DP25B-E, DP41-E, DPi Series
0 to 500	0 to 34.5	PX181B-500G5V	DP24-E, DP25B-E, DP41-E, DPi Series
-14.7 to 15	-1.0 to 1.0	PX181B-015C5V	DP24-E, DP25B-E, DP41-E, DPi Series
-14.7 to 30	-1.0 to 2.1	PX181B-030C5V	DP24-E, DP25B-E, DP41-E, DPi Series
-14.7 to 60	-1.0 to 4.1	PX181B-060C5V	DP24-E, DP25B-E, DP41-E, DPi Series

ACCESSORIES

MODEL NO.	DESCRIPTION
PS-8E	Pressure snubber for water or light oils
PS-8D	Pressure snubber for dense liquids or oils
PS-8G	Pressure snubber for gases and steam

* Visit us online for compatible meters.

Comes complete with operator's manual.

Ordering Example: PX181B-100G5V, 0 to 100 psig transducer with 1 to 5 Vdc output.