# SILICON/BRASS PRESSURE TRANSDUCERS WITH 5 Vdc OUTPUT



# PX181B Series

\$210



- Digitally Compensated for Excellent Total Accuracy and Interchangeability
- Gage Pressure, Vacuum, and Compound Ranges Available
- ✓ 1 to 5 Vdc 3-Wire Output Process Temperature:
- 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 V

**Accuracy:** 0.3% BFSL maximum (includes linearity, hysteresis and

repeatability)

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

Operating Temperature: -40 to 80°C

(-40 to 176°F)

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% hex; 72 H x 29.7 mm

Dia. (2.84 x 1.17")

Weight: 142 g (5 oz.)

#### ALL MODELS AVAILABLE FOR FAST DELIVERY!

To Order <i>(Specify Model Number)</i>						
GAGE PRESSURE RANGES						
psi	bar	MODEL NO.	PRICE	COMPATIBLE METERS*		
0 to -14.7	0 to -1.0	PX181B-015VAC5V	\$210	DP24-E, DP25B-E, DP41-E, DPi Series		
0 to 1	0 to 68.9 mbar	PX181B-001G5V	230	DP24-E, DP25B-E, DP41-E, DPi Series		
0 to 6	0 to 414 mbar	PX181B-006G5V	210	DP24-E, DP25B-E, DP41-E, DPi Series		
0 to 15	0 to 1.0	PX181B-015G5V	210	DP24-E, DP25B-E, DP41-E, DPi Series		
0 to 30	0 to 2.1	PX181B-030G5V	210	DP24-E, DP25B-E, DP41-E, DPi Series		
0 to 60	0 to 4.1	PX181B-060G5V	210	DP24-E, DP25B-E, DP41-E, DPi Series		
0 to 100	0 to 6.9	PX181B-100G5V	210	DP24-E, DP25B-E, DP41-E, DPi Series		
0 to 200	0 to 13.8	PX181B-200G5V	210	DP24-E, DP25B-E, DP41-E, DPi Series		
0 to 300	0 to 20.7	PX181B-300G5V	210	DP24-E, DP25B-E, DP41-E, DPi Series		
0 to 500	0 to 34.5	PX181B-500G5V	210	DP24-E, DP25B-E, DP41-E, DPi Series		
-14.7 to 15	-1.0 to 1.0	PX181B-015C5V	210	DP24-E, DP25B-E, DP41-E, DPi Series		
-14.7 to 30	-1.0 to 2.1	PX181B-030C5V	210	DP24-E, DP25B-E, DP41-E, DPi Series		
-14.7 to 60	-1.0 to 4.1	PX181B-060C5V	210	DP24-E, DP25B-E, DP41-E, DPi Series		

#### **ACCESSORIES**

MODEL NO.	PRICE	DESCRIPTION
PS-8E	\$10	Pressure snubber for water or light oils
PS-8D	10	Pressure snubber for dense liquids or oils
PS-8G	10 Pressure snubber for gases and steam	
MS-1785	53	Reference Book: Industrial Control Systems

\* See section D for compatible meters. Comes with complete operator's manual.

Ordering Example: PX181B-100G5V, 0 to 100 psig transducer with 1 to 5 Vdc output, \$210.

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#### 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

Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485, Ehernet 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, Pressure Transmitters, Strain Gauges, 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