### VERY-HIGH-ACCURACY MILLIVOLT OUTPUT PRESSURE TRANSDUCER %-20 OR ¼ NPT CONNECTIONS

**PX01 Series** mV/V Output 0-10 to 0-30,000 psi 0-700 mbar to 0-2000 bar

1 bar = 14.5 psi 1 kg/cm<sup>2</sup> = 14.22 psi 1 atmosphere = 14.7 psi = 29.93 inHg = 760.2 mmHg = 1.014 bar





- 0.05% Linearity
- High Operating Temperature: 163°C (325°F)
- FM Approved Intrinsically Safe
- ✓ 3 mV/V Output
- All Stainless Steel Construction
- Shunt Calibration for Fast System Setup
- Hermetically Sealed Design for Harsh Environments (Not Gage Units)
- Internal Shunt for Easy System Checks

OMEGA's PX01 is a very-highaccuracy, 30-millivolt output industrial pressure transducer. The all stainless steel construction and hermetically sealed case make it suitable for harsh environments. An FM Approved Intrinsically Safe rating is standard. The PX01 has a high operating range, a broad compensated range, and excellent temperature compensation that gives stable readings in harsh applications. It is available in gage, sealed, or absolute models as well as psi or metric ranges. NPT or 7/6-20 O-ring pressure fittings are available, as are connector or cable electrical terminations.



PX01K1-100GV, %-20 female connection, \$680, shown smaller than actual size.

#### SPECIFICATIONS

mV/V Output

Excitation: 10 Vdc (15 Vdc max) Output: 3 mV/V  $\pm 0.25\%$ Input Resistance: 350  $\pm 10 \Omega$ 

Output Resistance:  $350 \pm 10 \Omega$ Zero Balance: 1.0% FS

Linearity: ±0.05% FS Hysteresis: ±0.05% FS

Repeatability: ±0.05% FS

Agency Approvals: Standard FM Intrinsically Safe IS/I.II.III/1/CDEFG Shunt Calibration: Value specified on calibration sheet

**Sensing Element:** 4-active-arm bridge, using thick-film strain gages in a hermetically sealed chamber

Operating Temp Range: -73 to 163°C (-100 to 325°F) Compensated Temp Range: 16 to 71°C (60 to 160°F)

Thermal Effects: Span: 0.0015% rdg/°F Zero: 0.0015% FS/°F

**Proof Pressure:** 150% of rated pressure **Burst Pressure:** 300% of rated pressure **Wetted Parts:** 17-4 PH SS Pressure Port: Ranges <10,000 psi: style "K" ‰-20 UNF female; style "C" ¼ NPT male; ranges ≥10,000 psi: style "S" ‰-18, ¼" HP tube

PX01C1-100GV ¼ NPT male connection, \$700, shown

smaller than actual size.

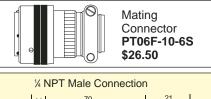
Also Available:  $\frac{1}{10}$ -18 NPT female or  $\frac{1}{10}$ -20 UNF male

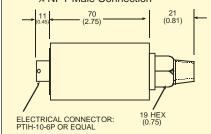
Electrical Connection: Style "1": PT1H-10-6P or equal Style "0": 3 m (10') cable Mating Connector:

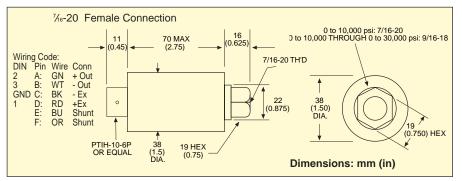
Weight: 255 g (9 oz)

Connector

Style







## omega.co.uk®

Your One-Stop Source for Process Measurement and Control!

Freephone 0800 488 488 | International +44(0) 161 777 6622 | Fax +44(0) 161 777 6622 | Sales@omega.co.uk

#### www.omega.co.uk



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 +44-(0)161-777-6611

> FRANCE www.omega.fr 0800-466-342

BENELUX www.omega.nl 0800-099-33-44



# More than 100,000 Products Available!

#### Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders, Relative Humidity Measurement Instruments, PT100 Probes, PT100 Elements, 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, Thermocouple Wire, RTD Probes

#### 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