

**SPEC SHEET
PX4600**

*Interchangeable with
CEC Model 4-600*

\$242
Model Shown

SOLID STATE PRESSURE TRANSDUCER

FOR OEM and PC BOARD MOUNTING

PX4600 Series
mV/V Output
0-15 to 0-300 psi
0-1 to 0-20 bar

1 bar = 14.5 psi
1 kg/cm² = 14.22 psi
1 Atmosphere = 14.7 psi = 29.93 in-Hg = 760.2 mm-Hg = 1.014 bar

- ☑ Small, Light Weight, OEM Package
- ☑ Solid State Media Isolation Suitable for use with Most Industrial Fluids and Oils
- ☑ Temperature Compensated From -65 to 250°F Yields High Stability with Changing Temperatures
- ☑ Electrical Isolation to 100 megohms Assures Long Term Reliability
- ☑ Rugged - High Shock and Vibration Design for Tough OEM Applications
- ☑ Typical MTBF to 800,000 hrs
- ☑ Constant Voltage Operation - Easy to Use
- ☑ Built-In Temperature Sensor Standard



Model PX4600-020GV \$242
Shown Larger Than Actual Size

**For Sales and Service
In U.S.A. and Canada**

1-800-872-3963SM
1-800-USA-DYNE

**International Customers Dial
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Document # 3600

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Formerly
THI T-HYDRONICS, INC.

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► **Most Popular Models Highlighted** ◀

Prices Shown in U.S. Dollars

To Order: (Specify Model Number)			
Range (psi)	Model Number	Price	Compatible Meters
Absolute Pressure			
0-15	PX4600-015AV	\$242	INFS, INFCS
0-20	PX4600-020AV	242	INFS, INFCS
0-50	PX4600-050AV	242	INFS, INFCS
0-100	PX4600-100AV	242	INFS, INFCS
0-200	PX4600-200AV	242	INFS, INFCS
0-300	PX4600-300AV	242	INFS, INFCS
Gage Pressure			
0-15	PX4600-015GV	242	INFS, INFCS
0-20	PX4600-020GV	242	INFS, INFCS
0-50	PX4600-050GV	242	INFS, INFCS
0-100	PX4600-100GV	242	INFS, INFCS
0-200	PX4600-200GV	242	INFS, INFCS
0-300	PX4600-300GV	242	INFS, INFCS

Interchangeable with CEC Model 4-600 Metric Ranges Available - Consult Engineering Note: Higher performance units are available. Consult our custom design group for details.

Ordering Examples: 1.) PX4600-100GV is a 100 psi Gage Pressure transducer, \$242. 2.) PX4600-050AV is a 50 psi Absolute Pressure pressure transducer, \$242.

Printed On Recycled Paper





Model PX4600-100GV
Shown Actual Size

The OMEGADYNE™ PX4600 Series are accurate, highly reliable pressure transducers suitable for printed circuit board mounting. The small size and light weight of the PX4600 series make them ideal for tough vibration and shock environments. The sensor is a small silicon chip with four diffused silicon strain gages. Laser trimmed resistors provide excellent temperature compensation from -65 to 250° F, and adjust zero balance and span to tight tolerances. The unusual high performance of this transducer comes from the 4-active-arm-bridge sensor using a micro-machined diffused silicon diaphragm and proprietary thin film media and dielectric isolation barriers.

SPECIFICATIONS:

Electrical:

Excitation: 10 Vdc (15V Max)

Output: 3 mV/V ±10% Standard (Custom up to 5 mV/V)

Zero Balance: 0mV ± 5% FSO

Input Resistance: 2500 Ohms minimum

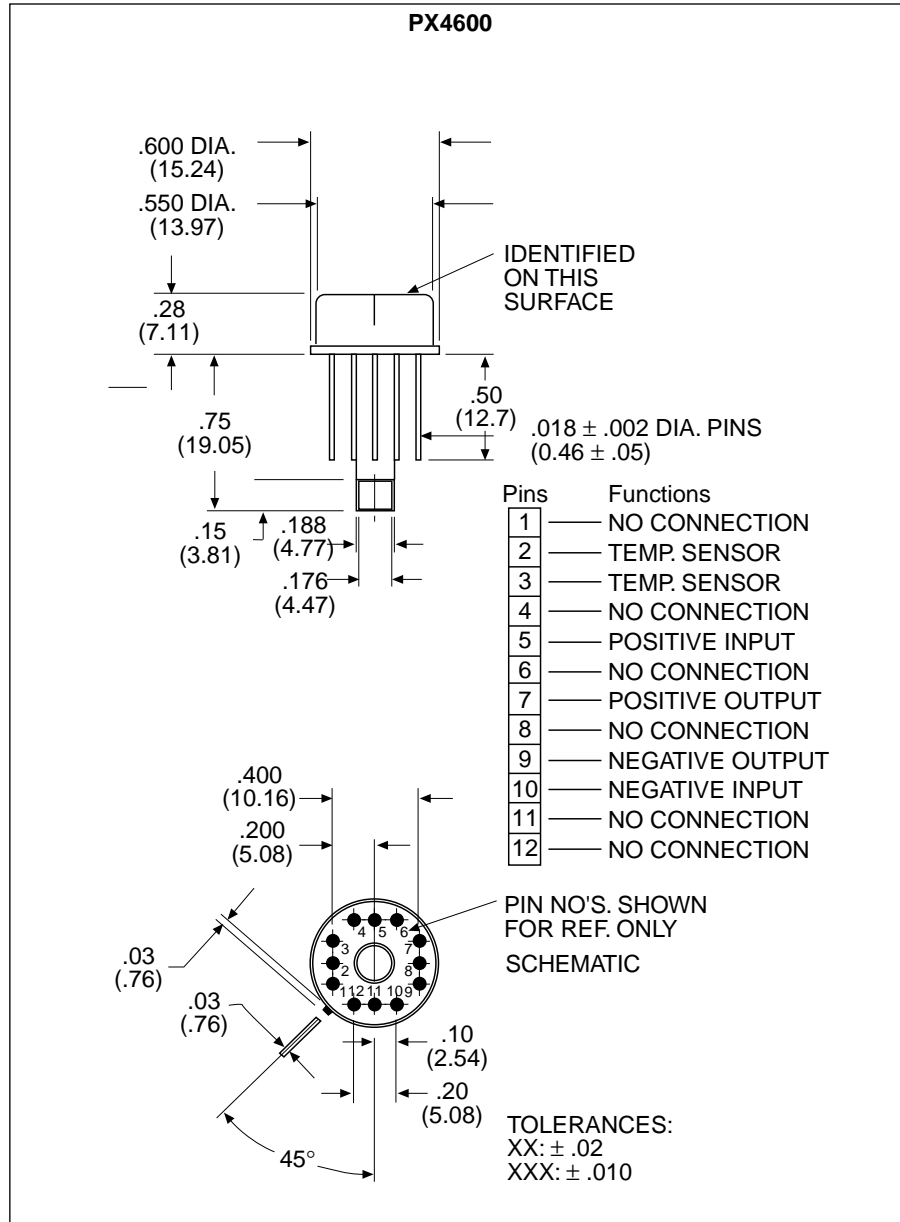
Output Resistance: 1000 to 1500 ohms

Dielectric Isolation Resistance: 100 Mohms min @ 50Vdc applied between the case or conductive media and the bridge circuit.

Performance:

Accuracy: ±0.25% FSO Combined Linearity, Hysteresis, and Repeatability

Sensing Element: 4 active arm bridge using a micro-machined diffused silicon diaphragm sensor and thin film media and dielectric isolation barriers.



Temperature Sensor: Output resistance @ 24°C (75°F) 900 to 1500 ohms

Temperature Coefficient: 8% min, 10% max per 55.5°C (100°F)

Environmental:

Operating Temperature: -54 to +149°C (-65 to 300°F)

Compensated Temperature: -54 to 121°C (-65 to 250°F)

Thermal Effects: Zero: ±0.02% FSO/°F
 Span: ±0.02% FSO/°F

Vibration Sensitivity: At 35g peak sinusoidal vibration from 10 Hz to 2000 Hz (1/2" D.A.), the output shall not exceed 0.04% FSO/g for 15 psi range, decreasing to 0.005% FSO/g for 100 psi and above.

Natural Frequency: >35 KHz for 100 PSI range

Shock: 100 g, 11 mSec half sine wave without damage

MTBF: ≥800,000 hrs (55°C, fixed wing aircraft service)

Pressure:

Standard Ranges: 0-15,20,50,100,200, 300 psi Gage and Absolute Pressure

Proof Pressure: 250% rated pressure will not cause changes in performance beyond specified tolerance

Burst Pressure: 300% rated pressure for ranges 200 psi and below. 250% rated pressure FS for pressure ranges above 200 psi

Mechanical:

Wetted Parts: Nitride, Pyrex glass, epoxy and Kovar

Weight: 5 g maximum

Look for OMEGADYNE Products on the World Wide Web!

<http://www.omegadyne.com>

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