# PT46oXL Pressure Sensors

IDEAL FOR ABRASIVE AND CORROSIVE MELT PRESSURE APPLICATIONS



## **Description**

The PT460XL Series transducer is a  $\pm 1.0\%$  sensor ideal for abrasive and/or corrosive melt pressure applications requiring simple installation, repeatability and reliability. The PT460XL transducers provide the industry standard 3.33 mV/V signal designed to work with most pressure indicators. Optional thermocouple or RTD configurations are available to provide melt temperature. The PT460XL features a 1/2-20 UNF thread for installation in standard transducer mounting holes and can be supplied with a variety of electrical connections.

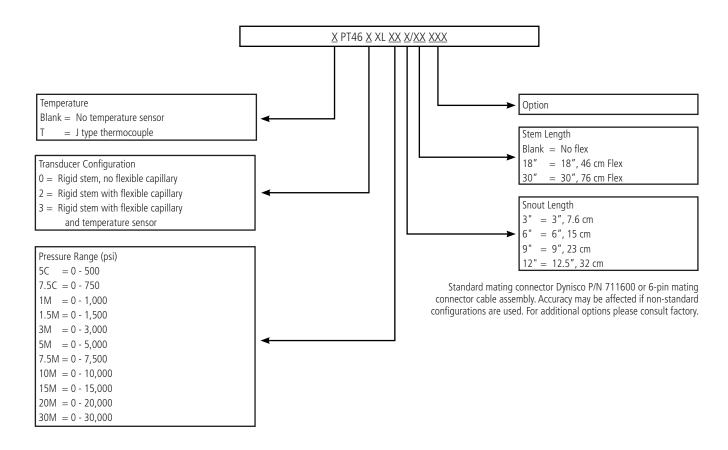
#### **Features**

- Accuracy better than ±1.0%
- Inconel diaphragm
- Superior temperature stability
- Patented sensing element
- 0 3,000 to 0 -30,000 psi
- Internal 80% shunt calibration

Performance Characteristics	
Combined Error:	±1.0% FSO, (Including Linearity, Repeatability & Hysteresis)
Repeatability:	±0.2% FS0
Maximum Pressure:	2 x full range or 35,000 psi (whichever is less)
Configuration:	Four active arm bonded Wheatstone bridge strain gage
Bridge Resistance:	Input: 345 Ohms minimum; Output: 350 Ohms ±10%
Output:	3.33 mV/V ±2.0%
Zero Balance:	±10% full scale
Input Voltage:	10 Vdc recommended, 12 Vdc maximum
Internal Shunt Calibration (R-Cal):	80% FSO ±1.0%
Insulation Resistance:	1,000 megohms at 50 Vdc

Temperature & Mechanical Characteristics		
Transducer Diaphragm:		
Maximum Diaphragm Temperature:	750°F (400°C)	
Zero Shift (due to	<20 psi/100°F maximum	
temperature change):	(<36 psi/100°C)	
Electronics Housing:		
Maximum Temperature:	250°F (121°C)	
Zero Shift (due to	±0.05% full scale/°F maximum	
temperature change):	(±0.10% full scale/°C)	
Sensitivity Shift (due to	±0.02% full scale/°F maximum	
temperature change):	(±0.04% full scale/°C)	
Mounting Torque:	500 inch/lbs. maximum	
Standard Wetted Parts:	Inconel 718	

# **Ordering Guide for PT460XL Series**



## **Dimensions**

CON	NECTOR WIRING
PIN	FUNCTION
Α	SIGNAL +
В	SIGNAL -
С	EXCITATION +
D	EXCITATION -
E	INTERNAL
F	CAL RESISTOR

NOTES
1. DIMENSIONS ARE IN (MILLIMETERS)

