

PT420 Series Pressure Sensors

*HIGH ACCURACY, SIMPLE INSTALLATION,
REPEATABILITY AND RELIABILITY*



Description

The Dynisco PT420 Series transducer is a $\pm 0.25\%$ sensor ideal for melt pressure applications requiring high accuracy, simple installation, repeatability and reliability. The PT420 transducers provide the industry standard 3.33 mV/V signal designed to work with most pressure indicators. The MPT420 comes equipped with an eight pin Bendix connector. Optional thermocouple or RTD configurations are available to provide melt temperature. The PT420 features a 1/2-20 UNF thread for installation in standard transducer mounting holes and can be supplied with a variety of other electrical connections if desired.

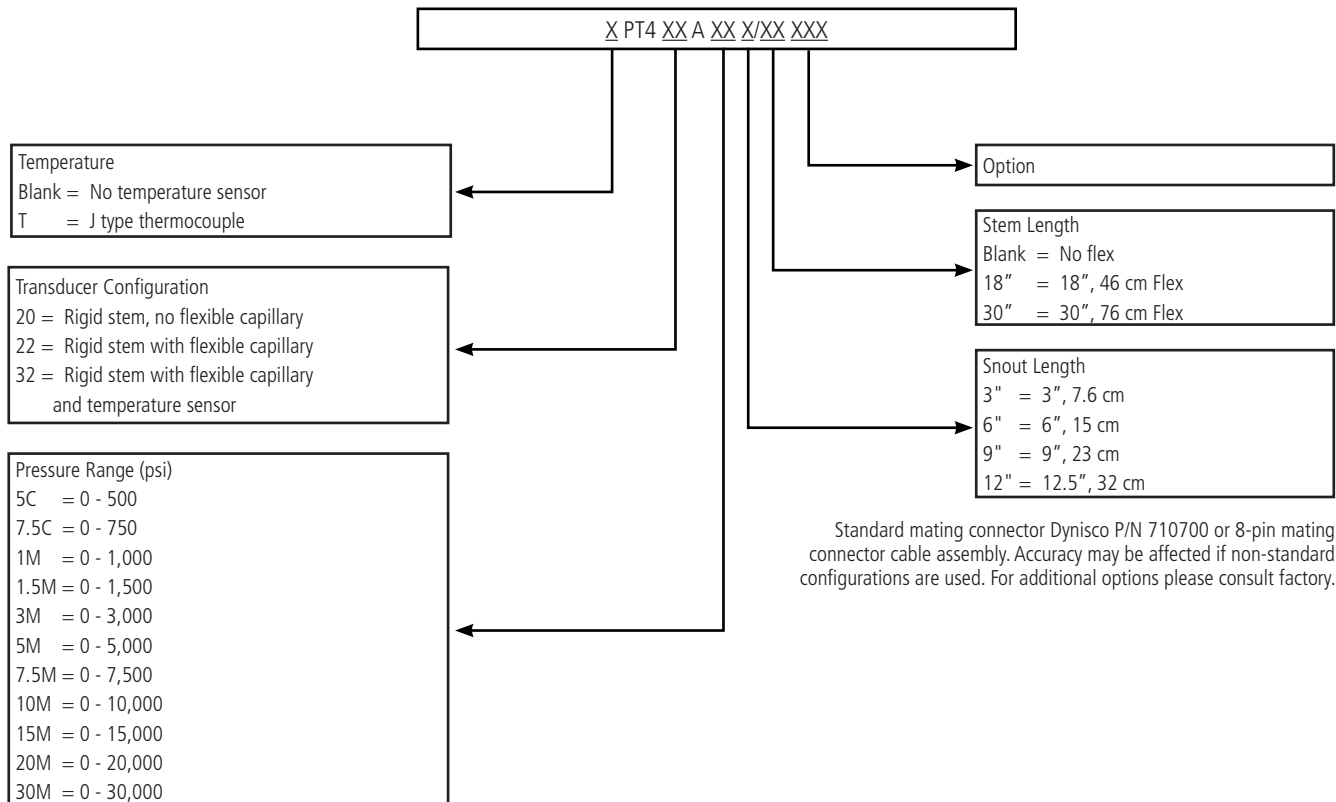
Features

- Accuracy better than $\pm 0.25\%$
- DyMax® coated stainless steel wetted parts
- Proven sensor design
- Excellent thermal stability and repeatability
- 0 - 500 to 0 -30,000 psi
- Internal 80% shunt calibration

Performance Characteristics	
Outputs:	3.33 mV/V \pm 2.0%
Input Voltage:	10 Vdc recommended, 12 Vdc maximum
Combined Error:	\pm 0.25% FSO, (Including Linearity, Repeatability & Hysteresis) \pm 0.5% FSO for 500, 750, 1,000 psi ranges
Repeatability:	\pm 0.1% FSO, \pm 0.2% FSO for 500, 750, 1,000 psi ranges
Configuration:	Four-arm bonded foil Wheatstone bridge strain gage
Bridge Resistance:	Input: 345 Ohms minimum Output: 350 Ohms \pm 10%
Over Pressure:	2X FSO or 35,000 psi, (whichever is less)
Zero Balance Adjustment Range:	\pm 5% FSO
Insulation Resistance:	1000 megohms @ 50 Vdc
Internal Shunt Calibration (R-Cal):	80% FSO \pm 0.5%

Temperature & Mechanical Characteristics	
Max Diaphragm Temperature:	750°F (400°C)
Zero Shift (due to temperature change):	15 psi/100°F Typical (27 psi/100°C)
Electronics Operating Temperature:	250°F (121°C)
Zero Shift (due to temperature change):	\pm 0.01% FS/°F max (\pm 0.02% FS/°C max)
Span Shift (due to temperature change):	\pm 0.005% FS/°F max (\pm 0.01% FS/°C max)
Mounting Torque:	500 inch/lbs. max
Standard Wetted Parts:	Dymax® coated 15-5 PH SST

Ordering Guide for PT420 Series



Dimensions

CONNECTOR WIRING	
PIN	FUNCTION
A	EXCITATION +
B	SIGNAL +
C	EXCITATION -
D	SIGNAL -
E	INTERNAL CALIBRATION RESISTOR
F	
G	
H	NO CONNECTION

NOTES
1. DIMENSIONS ARE IN INCHES (MILLIMETERS)

