

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.

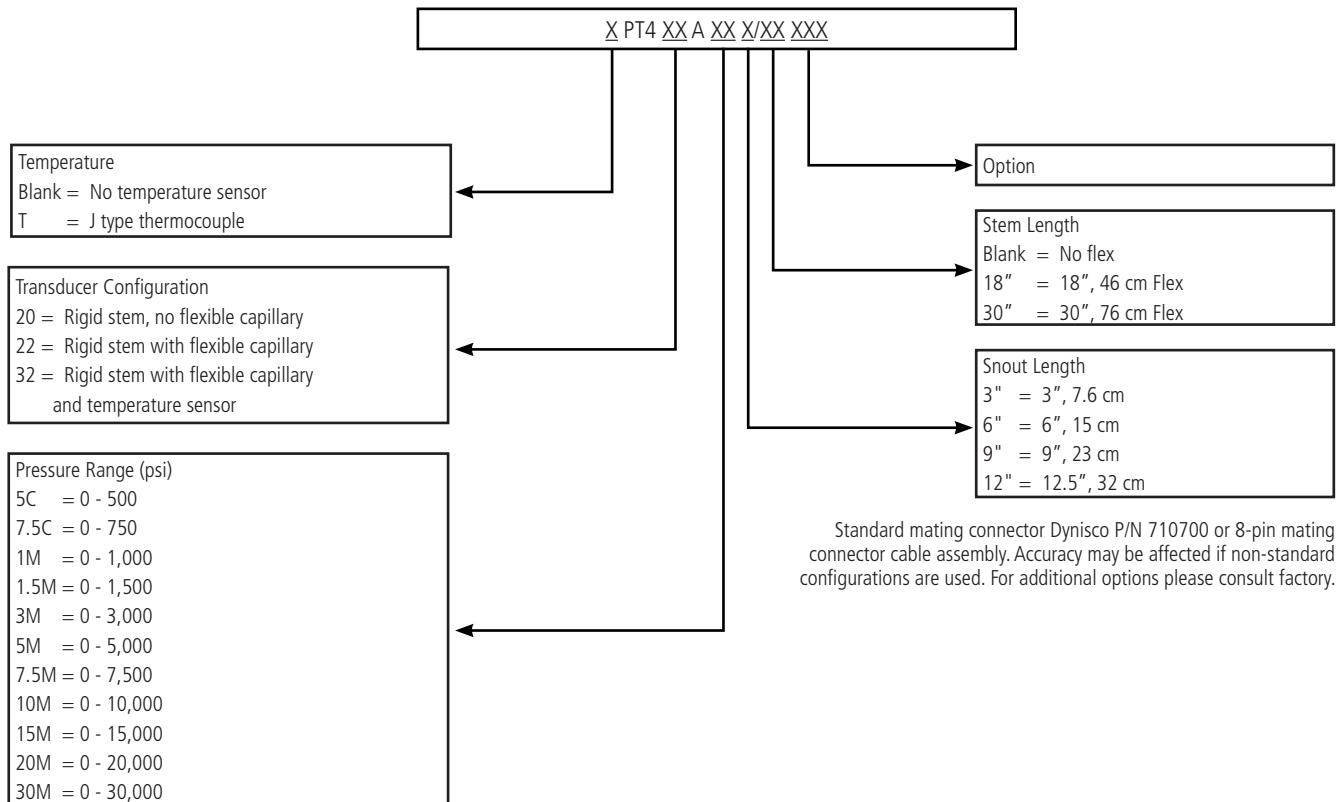
Features

- 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 |

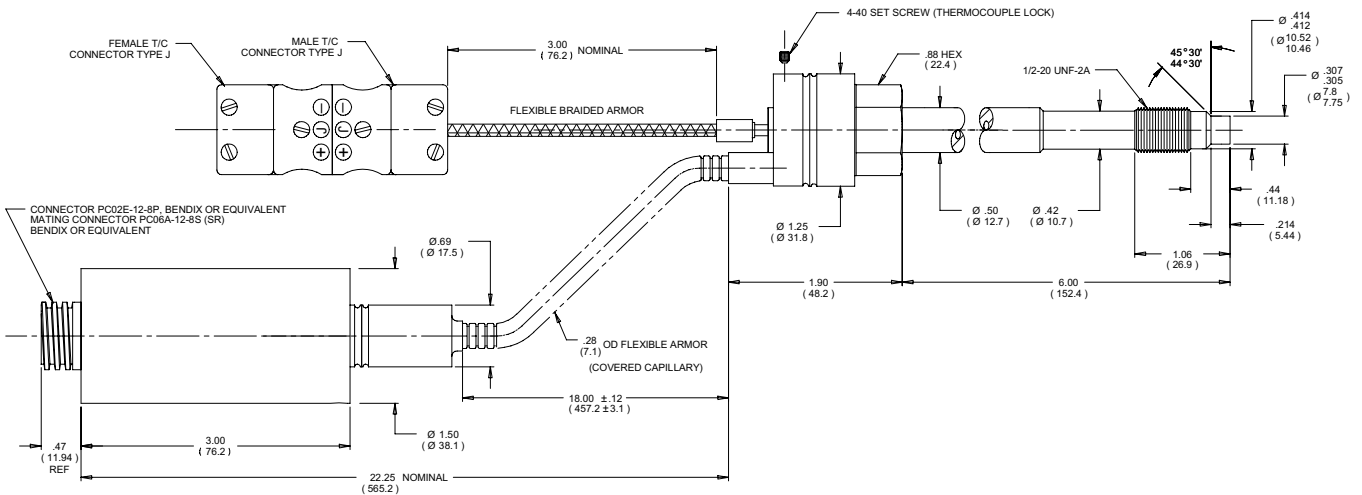
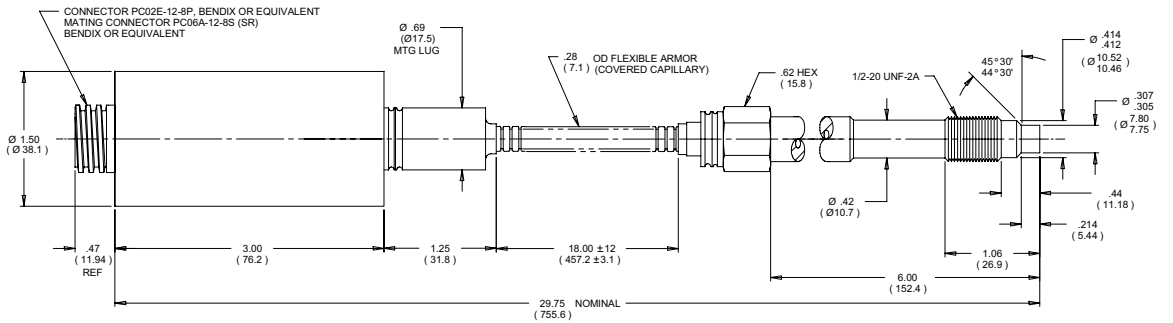
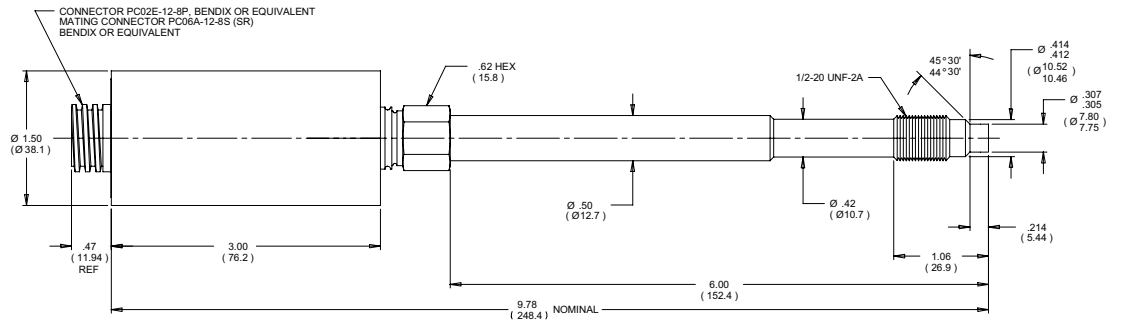
Ordering Guide for PT420 Series



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)



All dimensions are inches (mm) unless otherwise specified.
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Refer to www.dynisco.com for access to Operator Manual and other support documentation.
DSPT420A
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