

PT450FA/PT450TA Flange Mounted Pressure Sensors

*IDEAL FOR PROCESSING
LOW VISCOSITY MATERIALS*



Description

Dynisco's PT450 Series offers melt pressure measurement in ranges from 0 - 250 through 0 - 10,000 psi at accuracies down to 0.25% and process temperatures up to 700°F. For easy installation, the flexible stem transducer is offered in flanged (model PT450FA) and threaded (model PT450TA) versions. Both models are ideal for processing low viscosity materials and applications such as fiber spinning and polymer transport lines.

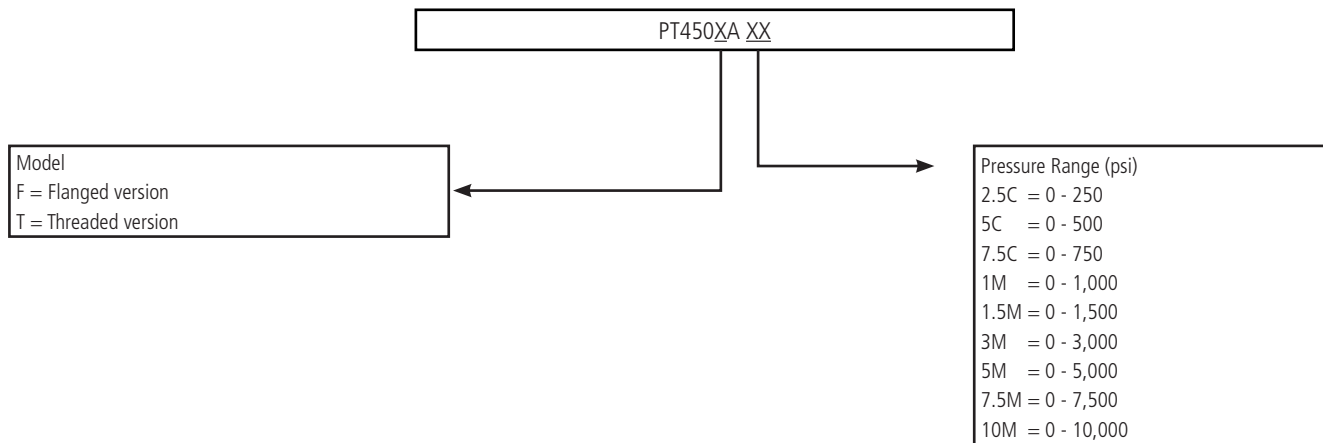
Features

- Accuracy of better than $\pm 0.25\%$
- Choice of flanged or threaded configurations
- 0 - 250 to 0 - 10,000 psi
- Withstands processes up to 700°F
- Internal 80% shunt calibration
- Replacement for traditional "button - seal" units

Performance Characteristics	
Ranges (psi):	0 - 250, 0 - 500, 0 - 750, 0 - 1,000, 0 - 1,500, 0 - 3,000, 0 - 5,000, 0 - 7,500, 0 - 10,000
Accuracy:	±0.25% FSO; ±0.75% FSO for 250 psi range
Repeatability:	±0.1% FSO
Mounting Torque:	PT450FA: 100 to 125 inch - lbs. for an adequate seal PT450TA: 100 inch - lbs. for an adequate seal; 500 inch - lbs. maximum with no zero shift or change in performance
Maximum Pressure:	3 x full range
Material In Contact With Pressure Media:	17 - 4 PH stainless steel, DyMax™ coated
Effect Of Elevation Of Strain Gage Housing Above Diaphragm:	5 psi/ft.
Weight:	3.5 lbs.

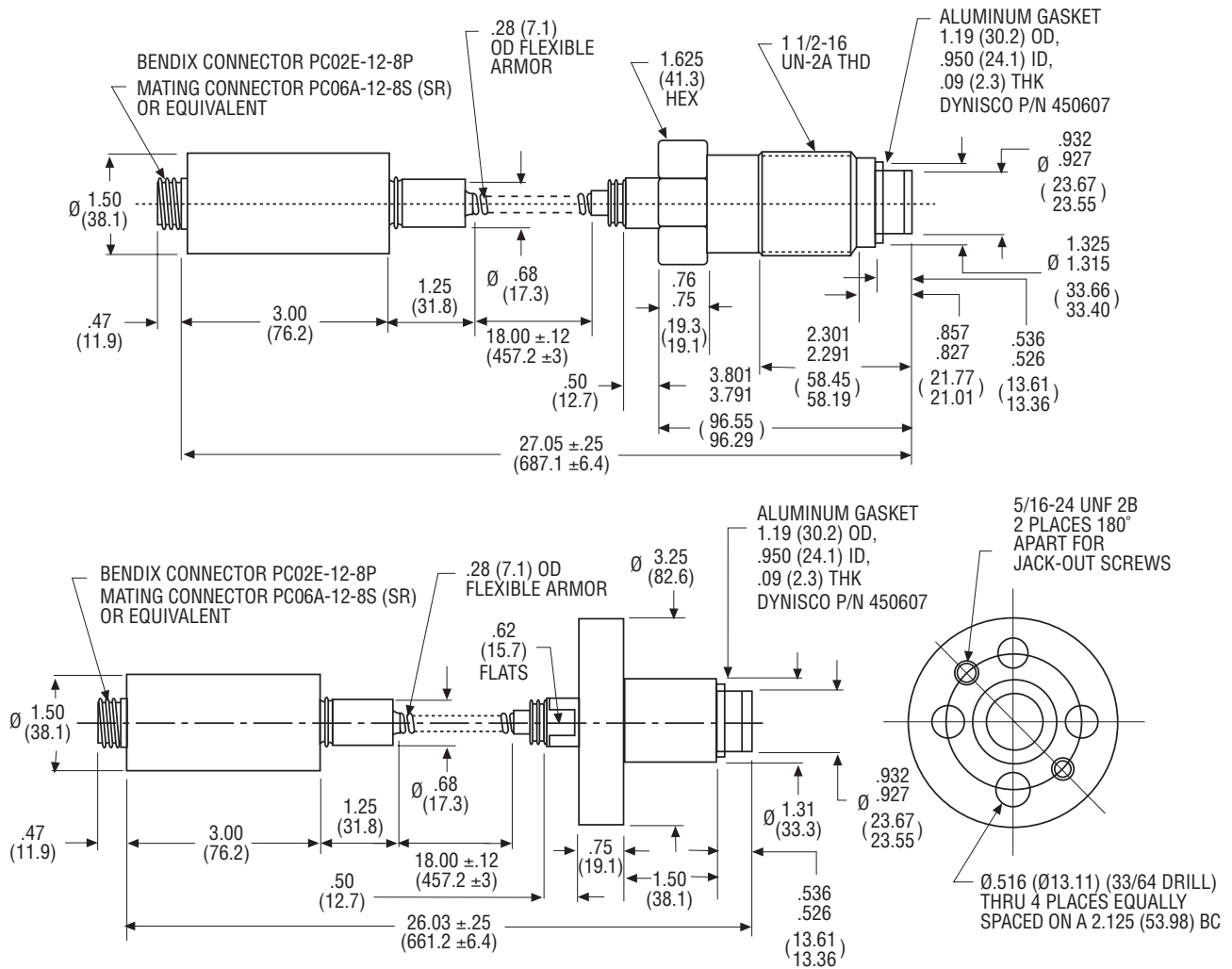
Temperature Characteristics	
Transducer Diaphragm:	
Maximum Diaphragm Temperature:	750°F (400°C)
Zero Shift due to Temperature Change:	0.5% psi/100°F from 75°F to 450°F; 2 psi/100°F from 450°F to 600°F change
Electronics Housing:	
Maximum Temperature:	250°F (121°C)
Zero Shift due to Temperature Change:	0.5 psi/100°F from 75°F to 450°F; 2 psi/100°F from 450°F to 600°F change
Sensitivity Shift due to Temperature Change:	0.005% full scale/°F maximum (0.01% full scale/°C)
Electrical Characteristics	
Configuration:	Four active arm bonded Wheatstone bridge strain gage
Bridge Resistance:	Input: 345 Ohms minimum; Output: 350 Ohms ±10%
Full Scale Output:	3.33 mV/V ±2.0%
Zero Balance:	±5% FSO (in vertical position)
Excitation:	10 Vdc recommended, 12 Vdc maximum
Internal Shunt Calibration (R-Cal):	80% FSO ±0.5%
Insulation Resistance:	1000 megohms at 50 Vdc

Ordering Guide for PT450FA Series



Mating connector Dynisco P/N 710700 or 8-pin mating connector cable assembly sold separately. Accuracy may be affected if non-standard configurations are used. For additional options please consult factory.

Dimensions



All dimensions are in inches (millimeters) unless otherwise specified