

# 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.

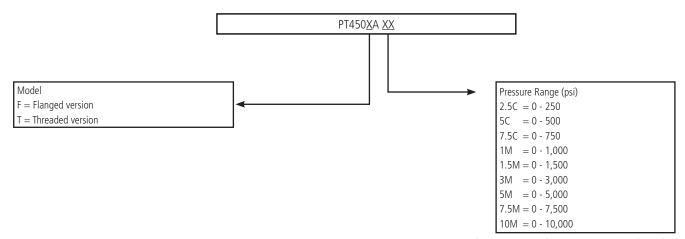
#### **Features**

- Accuracy of better than ±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% FS0; ±0.75% FS0 for 250 psi range
Repeatability:	±0.1% FS0
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.

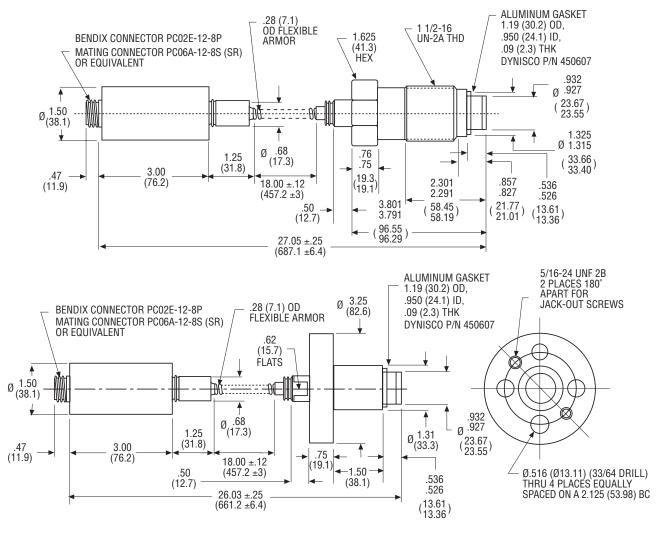
Temperature Characteristics	
Transducer Diaphragm:	
Maximum Diaphragm Temperature:	750°F (400°C)
Zero Shift due to Temperature Change:	0.5% psi/100°F from 75°F to 450°F; 2 psi/100°F from 450°F to 600°F change
Electronics Housing:	
Maximum Temperature:	250°F (121°C)
Zero Shift due to Temperature Change:	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)
<b>Electrical Characteristics</b>	
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



All dimensions are inches (mm) unless otherwise specified. ©2016. Dynisco reserves the right to make changes without notice. Refer to www.dynisco.com for access to Operator Manual and other support documentation. DSPT450TFA Rev: 0117

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**Dynisco** 

38 Forge Parkway Franklin, MA 02038 Hotline 1-800-Dynisco www.dynisco.com Phone +1 508 541 9400 +1 508 541 6206 Fax

Email infoinst@dynisco.com

Dynisco Europe, GmbH

Pfaffemstr. 21 74078 Hellbronn Germany

Fax

Phone +49 7131 297 0 +49 7131 297 166 Email dyniscoeurope@dynisco.com Dynisco Shanghai

Building 7A, No. 568 Longpan Rd Malu Jiading, 201801 China

+86 21 34074072-819 Phone +86 400 728 9117 Toll Free Fax +86 21 34074025