

DYNISCO MODEL TPT432A

High Accuracy Melt Pressure Transducer with Thermocouple

Description

The model TPT432A transducer simultaneously measures both temperature and pressure at a single point. The pressure sensor is the same as in the PT422A with the addition of a removable thermocouple, that can be replaced during operation.

Features

- Better than $\pm 0.25\%$ accuracy
- 3.33 mV/V FSO
- Internal 80% shunt calibration
- All stainless steel wetted parts
- 0 - 500 to 0 - 30,000 psi
- Excellent thermal stability and repeatability
- Integral thermocouple

- RTD and optional thermocouples

Benefits

- Precise pressure measurement
- Standard low level output
- Easy set - up
- Corrosion resistant
- Choice of pressure ranges
- Ideal for high temperature processes
- Simultaneously measure pressure/temperature in one location
- Allows for temperature measurement alternatives



Specifications

Performance Characteristics

Ranges (psi): 0 - 500, 0 - 750, 0 - 1,000, 0 - 1,500, 0 - 3,000, 0 - 5,000, 0 - 7,500, 0 - 10,000, 0 - 15,000, 0 - 20,000, 0 - 30,000
Accuracy: $\pm 0.25\%$ FSO ($\pm 0.5\%$ FSO for 500, 750, 1,000 psi ranges)
Repeatability: $\pm 0.1\%$ FSO ($\pm 0.2\%$ FSO 500, 750, 1,000 psi)
Mounting torque: 500 inch - lbs. maximum

Maximum pressure: 2 x full range or 35,000 psi (whichever is less)
Material in contact with pressure media: 15 - 5 PH stainless steel, DyMax™ coated
Weight: 2.5 lbs.
Thermocouple: Type J



Electrical Characteristics

Configuration: Four active arm bonded Wheatstone bridge strain gage
Bridge resistance: *Input:* 345 Ohms; *Output:* 350 Ohms $\pm 10\%$
Full scale output: 3.33 mV/V $\pm 2\%$
Zero balance: $\pm 5\%$ FSO

Excitation: 10 Vdc recommended, 12 Vdc maximum
Internal shunt calibration (R-Cal): 80% FSO $\pm 0.5\%$
Insulation resistance: 1,000 megohms at 50 Vdc

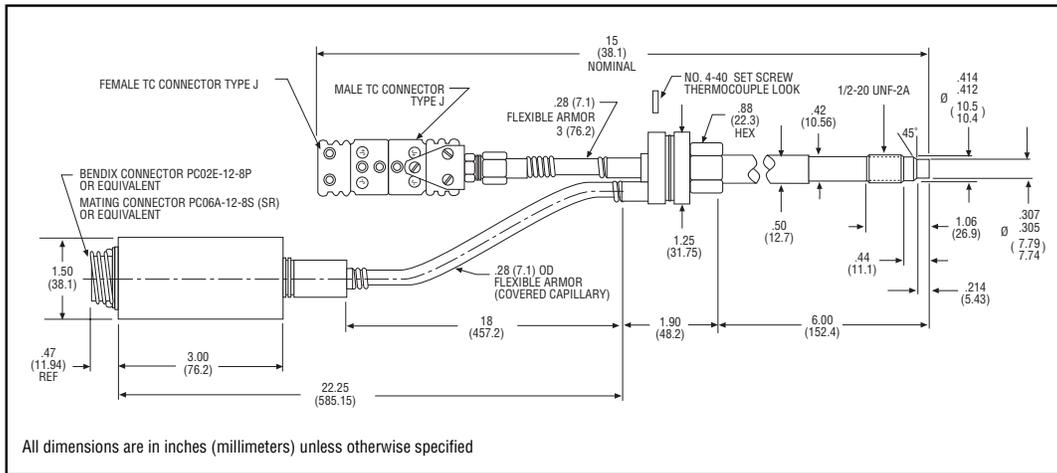
Temperature Characteristics

Transducer diaphragm:
Maximum diaphragm temperature: 750°F (400°C)
Zero shift due to temperature change: 15 psi/100°F typical (27 psi/100°C)

Electronics housing:
Maximum temperature: 250°F (121°C)
Zero shift due to temperature change: $\pm 0.01\%$ full scale/°F maximum ($\pm 0.02\%$ full scale/°C)
Sensitivity shift due to temperature change: $\pm 0.005\%$ full scale/°F maximum ($\pm 0.01\%$ full scale/°C)

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Ordering Guide

Model	Pressure Range (psi)		Rigid Stem		Flexible Stem	
	Code	Range	Code	Length	Code	Length
TPT432A	5C	0 - 500				
	7.5C	0 - 750				
	1M	0 - 1,000				
	1.5M	0 - 1,500	3	3"		
	3M	0 - 3,000	4	4"		
	5M	0 - 5,000	6	6"	18	18"
	7.5M	0 - 7,500	9	9"		
	10M	0 - 10,000	12	12"		
	15M	0 - 15,000				
	20M	0 - 20,000				
30M	0 - 30,000					

Ordering Example: TPT432A - 5M - 6/18

- Mating connector P/N710700 or 8 - pin cable assembly sold separately.
- Transducer Options: Call for complete information on thermocouples, stem length, transducer diaphragm, diaphragm and thread coatings, electrical connectors and fill media.

Delivery

■ Express delivery. Call for delivery information on other configurations.