

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, Armoloy 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

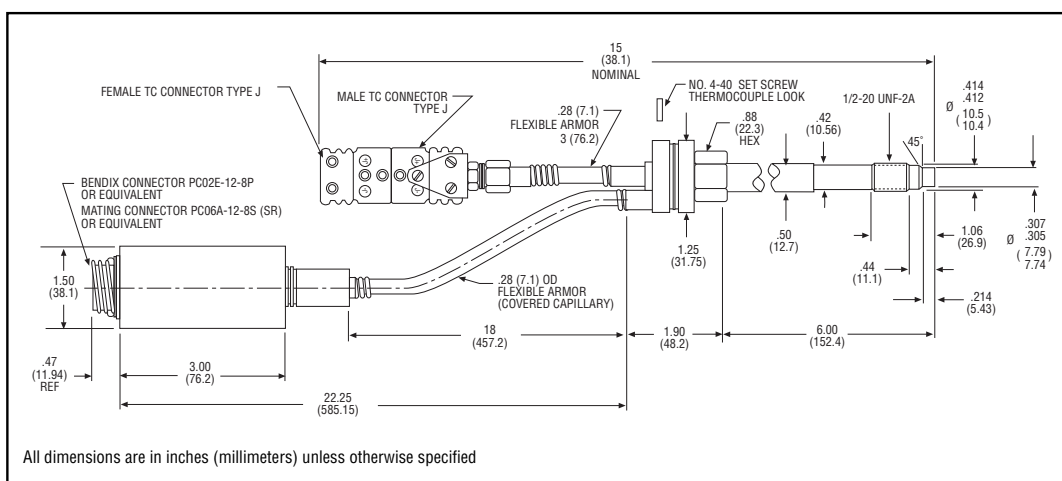
Temperature Characteristics

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. Refer to Options and Accessories Section.
- Transducer Options: Refer to Options and Accessories Section 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. Refer to Options and Accessories Section for additional delivery time on products with added options.