

# PT273, PT274, PT275A & PT276A Pressure Sensors

HIGH ACCURACY, COMPETITIVELY
PRICED, TOP QUALITY TRANSDUCER



# **Description**

Dynisco's PT270 Series are precision strain gage transducers designed to meet the stringent demands of pressure meausrement and control systems. In establishing design goals, a wide range of application variables, customer needs, and product costs were considered. The result- a high accuracy, competitively priced, top quality transduce. From stainless steel construction to sophisticated electronics, the PT270 series represents outstanding customer value.

#### **Features**

- Accuracy ±0.25%
- Stainless steel construction
- Sealed zero and span potentiometers
- Tight temperature compensation
- 15 to 10,000 PSI
- Advanced electronics design
- Internal shunt calibration
- 3mv/V, 5 Vdc or 4-20mA output

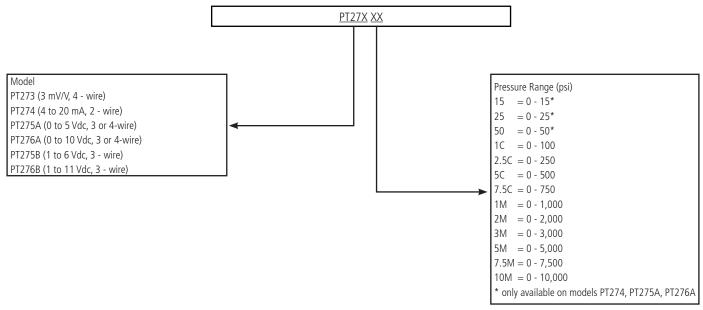
Performance Characteris	1		
Pressure Range (psi):	0 - 15, 0 - 25, 0 - 50, (available only in PT274/275A/276A) 0 - 100, 0 - 250, 0 - 500, 0 - 750, 0 - 1,000, 0 - 2,500, 0 - 3,000, 0 - 5,000, 0 - 7,500, 0 - 10,000		
Accuracy:	±0.25% FSO including linearity, hysteresis, and repeatability		
Repeatability:	±0.1% full scale		
Full Scale Output:	PT273: 3 mV/V ±0.5%		
Zero Balance:	PT273: ±2.0% full scale		
Span Adjustment:	PT274: ±5.0% full scale; PT275A/276A: ±15.0% full scale		
Zero Adjustment:	PT274/275A/276A: ±15.0% full scale		
<b>Electrical Characteristics</b>			
Input/Output Resistance:	PT273: 350 Ohms, nominal		
Loop Resistance:	PT274: 0 to 1,200 Ohms from 12 to 36 Vdc		
Insulation Resistance:	PT273: 1,000 megohms @ 50 Vdc PT274/275A/276A: 100 megohms @ 50 Vdc		
RFI/EMI Protection:	PT274/275A/276A: Meets CE standard		
Input Current:	PT275A/276A: 45 mA maxi- mum @ 2,000 Ohms		
Internal Shunt Calibration:	80% ±0.5% full scale		
Circuit Protection:	PT274/275A/276A: Power supply reverse polarity protection, output short circuit protection		
Model/Output:	Power Supply:		
PT273 (4 - wire) 3 mV/V	10 Vdc, 15 Vdc maximum		
PT274 (2 - wire) 4 to 20 mA	12 to 36 Vdc		
PT275A (3 or 4-wire) 0 to 5 Vdc	10 to 36 Vdc		
PT275B (3 - wire) 1 to 6 Vdc	10 to 36 Vdc		
PT276A (3 or 4-wire) 0 to 10 Vdc	14 to 36 Vdc		
PT276B (3 - wire) 1 to 11 Vdc	14 to 36 Vdc		

Temperature Characteristics		
Operating Range:	PT273: -65°F to +250°F (-54°C to +120°C) PT274/275A/276A: -20°F to +185°F (-29°C to +85°C)	
Compensated Range	0°F - 150°F (-18°C to +66°C)	
Temperature Effect On Zero:	±0.005% full scale/°F (±0.009% FS/°C) typical, from 0°F to 150°F (-18°C to +66°C)	
Temperature Effect On Span:	±0.005% full scale/°F (±0.009% FS/°C) typical, from 0°F to 150°F (-18°C to +66°C)	
Mechanical Characteristics		
Safe Overpressure:	2 x rated pressure	
Burst Pressure:	5 x rated pressure or 30,000 psi, whichever is less	
Wetted Material:	17 - 4 PH, 15 - 5 PH stainless steel	
Cover Material:	303, 304 stainless steel	
Weight:	PT273: 4 ounces, PT274/275A/276A: 8 ounces	

# **Connector Wiring**

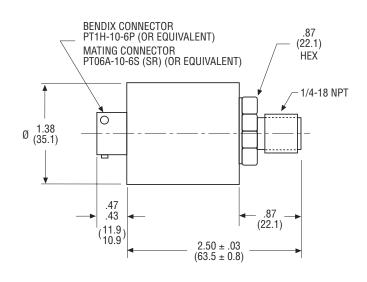
Model	Pin	Function
PT275A, PT276A,	Α	Signal+
PT275B, PT276B	В	Signal-
	C	Power+
	В	Power-
	E, F	Cal. Sig.
PT273	Α	Signal+
	В	Signal-
	C	Power+
	D	Power-
	E, F	Cal. Sig.
PT274	Α	Power+
	В	Power-
	E, F	Cal. Sig.

# Ordering Guide for PT273, PT274, PT275A & PT276A Pressure Sensors



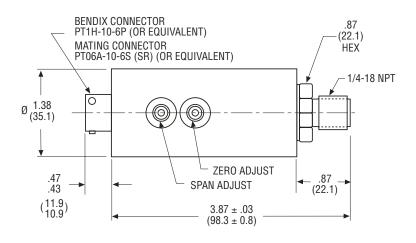
Mating connector PN/711600 or 6 - pin cable assembly sold separately. For additional options please consult factory.

### **Dimensions**



All dimensions are inches (mm) unless otherwise specified.

PT273



PT274, PT275, PT275B, PT276 and PT276B



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.

DSPT270

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