Hydraulic/Pneumatic Pressure Transducers

Dynisco Models
PT130
PT140
PT150
PT160

Description

Dynisco's 100 Series models are built to handle the extreme environments of hydraulic applications and corrosive media. The contoured pressure sensing diaphragm ensures greater accuracy and provides longer operating life. An internal shunt calibration provides quick transducer and system calibration. A choice of 3 mV/V, 5 V, 10 V or 4 to 20 mA outputs is offered.

Features

- Excellent resistance to shock and vibration
- Fully temperature compensated
- 3 mV/V, 5 V, 10 V, or 4 to 20 mA outputs
- Withstands rugged hydraulic applications
- Generous discounts for OEM quantities
- Surface mount technology
- Internal shunt calibration (PT130, PT150, PT160)



Specifications

Performance Characteristics

Ranges (psi): 0 - 15, 0 - 25, 0 - 50, 0 - 100, 0 - 250, 0 - 500, 0 - 750, 0 - 1,000, 0 - 2,500, 0 - 3,000, 0 - 5,000, 0 -10,000
Accuracy: ±0.5% full scale including linearity, hysteresis, and repeatability

Full scale output:
PT130: 3 mV/V ±1.0% typical (±2.0% maximum)
PT140/150/160: 4 to 20 mA, 5 Vdc, 10 Vdc ±1.0% typical (±2.0% maximum)
Zero balance: ±1.0% typical (±2.0% maximum)

Electrical Characteristics

Input resistance : *PT130:* 420 Ohms ±20%
Output resistance: *PT130:* 370 Ohms ±10%
Load resistance: *PT150/160:* 2,000 Ohms minimum
Internal shunt calibration:
PT130/150/160: 80% ±0.5% full scale typical (±1.0% maximum)
Maximum loop resistance: *PT140:* 0 to 1,100 Ohms from 14 to 36 Vdc
Reverse polarity protection: PT140/150/160

Output:	Input voltage:
3 mV/V	10 Vdc recommended, 15 Vdc maximum
0 to 5 Vdc (4 - wire)	11 to 32 Vdc recommended, ±12 to ±16 Vdc
1 to 6 Vdc (3 - wire)	11 to 32 Vdc
0 to 10 Vdc (4 - wire)	16 to 32 Vdc recommended, ±14 to ±16 Vdc
1 to 11 Vdc (3 - wire)	16 to 32 Vdc
4 to 20 mA (2 - wire)	14 to 36 Vdc

Temperature Characteristics

Operating range: *PT130:* -65°F to +250°F (-54°C to +120°C);
PT140/150/160: -20°F to +185°F (-29°C to +85°C)
Compensated range: 0°F to 150°F (-18°C to+ 66°C)

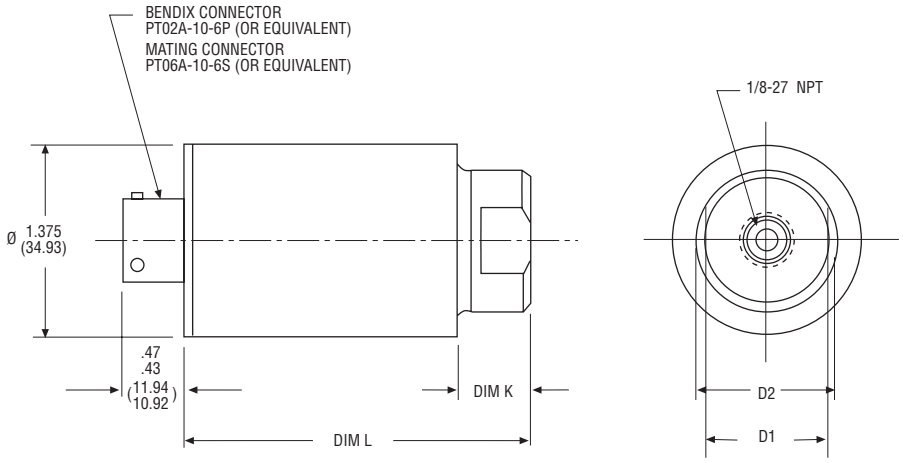
Temperature effect on zero: *PT130:* ±0.005% full scale/°F (±0.009% full scale/°C) typical (±0.01%/±0.018% maximum);
PT140/150/160: ±0.02% full scale/°F (±0.036% full scale/°C)
Temperature effect on span: ±0.02% full scale/°F (±0.036% full scale/°C)

Mechanical Characteristics

Safe overpressure: 2 x rated pressure
Burst pressure: 5 x rated pressure
Wetted material: 17 - 4 PH, 15 - 5 PH stainless steel

Cover material: 303, 304 stainless steel
Weight: Approximately 5 ounces

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Model	Pressure Range	Dim. K	Dim. L	Dim. D1	Dim. D2
PT130	15 - 50	.91 (23.11)/.85 (21.59)	2.55 (64.77)/2.48 (62.99)	1.00 (25.40)	1.13 (28.70)
PT130 PT150 PT160	1C - 10M 15 - 10M 15 - 10M	.55 (13.97)/.49 (12.45)	2.55 (64.77)/2.48 (62.99)	.88 (22.35)	1.00 (25.40)
PT140	15 - 10M	.58 (14.73)/.52 (13.21)	3.35 (85.09)/3.47 (88.13)	.88 (22.35)	1.00 (25.40)

All dimensions are in inches (millimeters) unless otherwise specified

Ordering Guide

Model	Pressure Range (psi)	
	Code	Range
	15	0 - 15
	25	0 - 25
	50	0 - 50
PT130 (3 mV/V)	1C	0 - 100
PT140 (4 - 20 mA)	2.5C	0 - 250
PT150 (5 Vdc)	5C	0 - 500 *
PT160 (10 Vdc)	7.5C	0 - 750
	1M	0 - 1,000 *
	2.5M	0 - 2,500 *
	3M	0 - 3,000
	5M	0 - 5,000
	10M	0 - 10,000

*Pressure ranges express delivery for model PT130 only.

Connector Wiring

Model	Pin	Function
PT130 PT150 PT160	A B C D E, F	Signal+ Signal- Excitation+ Excitation- Int. Shunt Cal.
PT140	A B	Excitation+ Excitation-

- Ordering Example: PT130 - 2.5C
- Mating connector PN711600 or a 6 - pin cable assembly sold separately. Refer to Options and Accessories Section.

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.

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