

PT130, PT140, PT150 & PT160 Hydraulic Pressure Sensors

IDEAL FOR HIGH TEMPERATURE PROCESSES



Description

Dynisco's PT130, PT 140, PT150 & PT160 are designed to measure hydraulic pressure on injection molding machines. The series withstands cyclic pressure and provides outstanding performance under the severe demands of measuring the injection ram and clamp pressure of injection molding machines. Variations in the hydraulic pressure profile indicate irregularities during the injection and feeding stages of the molding operation and provide information about the stability of the injection ram system.

Features

- 3 mV/V output
- Accuracy $\pm 0.50\%$
- Handles temperatures up to 285°F (140°C)
- All welded, stainless steel construction
- Rugged design
- Internal shunt calibration
- Compact

Performance Characteristics	
Pressure Range (psi):	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: 5 Vdc, 10 Vdc, 4 to 20 mA ±1.0% typical (±2.0% maximum)
Zero Balance:	±1.0% typical (±2.0% maximum)
Electrical Characteristics	
Input Resistance:	PT130: 420 Ohms ±10%
Output Resistance:	PT130: 370 Ohms ±10%
Internal Shunt Calibration:	PT130/150/160: 80% ±0.5% full scale typical (±1.0% maximum)
Load Resistance:	PT150/160: 2,000 Ohms minimum
Maximum Loop Resistance:	PT140: 0 to 1,100 Ohms from 14 to 36 Vdc
Wiring:	Reverse polarity protection of excitation leads
Output:	Input Voltage:
3 mV/V	10 Vdc recommended, 15 Vdc maximum
0 to 5 Vdc (4 - wire)	11 to 32 Vdc, ±12 to ±16 Vdc
1 to 6 Vdc (3 - wire)	11 to 32 Vdc
0 to 10 Vdc (4 - wire)	16 to 32 Vdc, ±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 5.5 ounces

Ordering Guide for PT130, PT140, PT150 & PT160 Series

PT1X0 XX

Model
PT130 (3 mV/V)
PT140 (4 - 20 mA)
PT150 (5 Vdc)
PT160 (10 Vdc)

Pressure Range (psi)
5C = 0 - 500
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

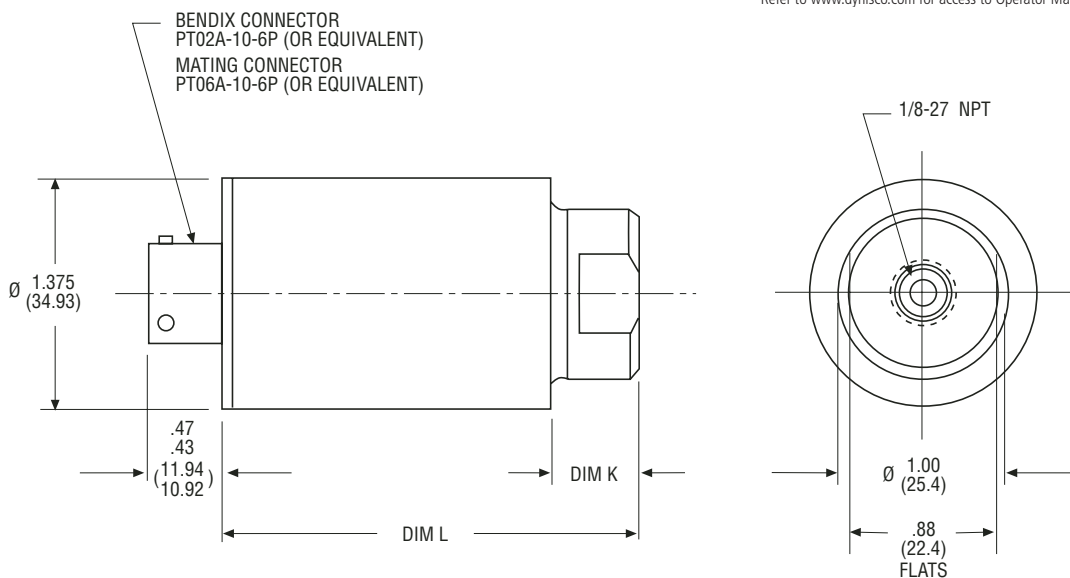
Connector Wiring

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

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.
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Model	Pressure Range	Dim K	Dim. L
PT130, PT150, PT160	500 - 10,000	.55 (13.97)/.49 (12.45)	2.55 (64.77)/2.48 (62.99)
PT140	500 - 10,000	.58 (14.73)/.52 (13.21)	3.78 (96.01)/3.71 (94.23)



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 naleznete na www.dynisco.com
 Rev.:1216