

PT130, PT140, PT150 & PT160 Hydraulic Sensor

Operating Manual





OPERATING PRINCIPLE

The PT100 Series Industrial Transducer is used to make pressure measurements for hydraulic applications and corrosive media up to 10,000 psi. These models incorporate a four-arm, 350-ohm bonded foil Wheatstone bridge strain gage. An amplifier can be added to this proven technology to provide a high-level output signal (e.g. 0 – 5 V dc or 0 – 10Vdc) proportional to the pressure (within the specified error band).

SHUNT CALIBRATION

Internal – All 100 Series transducers contain an internal Shunt Calibration resistor, R-CAL, which provides a simulated output of 80% of full scale when pins E and F are shorted.

External – The model PT130 also provides an output of 80% of full scale when a 34,935-ohm Shunt Calibration resistor is placed across pins B and D. External R-CAL feature is not available on models PT160 and PT150.

NOTE: The internal and external R-CAL should not be used at the same time because incorrect readings will result.

PRESSURE FITTING

The pressure fitting on all 100 Series transducers contains a 1/8"-27 NPT internal pressure port. The fitting is fabricated from high-strength stainless steel.

ELECTRICAL CONNECTORS

All models are equipped with a six pin, Bendix PT02A-10-6P receptacle. The customer supplied mating plug is a socket, Bendix PT06A-10-6S, or equivalent.

ELECTRICAL CHARACTERISTICS

Model	Wiring	Signal	Excitations
PT130	4 wire	3 mV/V	10 V dc Recommended, 15 V dc Max.
PT150	4 wire 3 wire	0-5 V dc 1-6 V dc	12-32 V dc ± 12 to ± 16 V dc 12-32 V dc
PT160	4 wire 3 wire	0-5 V dc 1-6 V dc	16-32 V dc, ± 14 to ± 16 V dc 16-32 V dc

WIRING CODES

Function	PT130	PT150 and PT160	
		4 wire	3 wire
Signal +	A	A	A
Signal –	B	B	D
Excitation +	C	C	C
Excitation –	D	D	D
R-Cal Int.	E, F	E, F	E, F
R-Cal Ext.	B, D	-	-

WIRING COLOR CODE

Red	Signal (+)
Black	Signal (-)
White	Excitation (+)
Green	Excitation (-)
Blue/Orange	R-Cal

TRANSDUCER REPAIR

Questions concerning warranty, repair cost, delivery, and requests for a RA# should be directed to the Dynisco Repair Department, 508-541-9400 or email: repair@dynisco.com. Please call for a return authorization number (RA#) before returning any product. Damaged transducers should be returned to:

Dynisco Instruments

Attn: RA # _____

38 Forge Parkway

Franklin, MA 02038

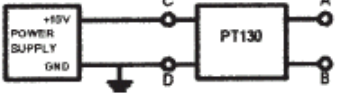


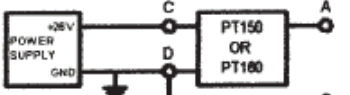
TECHNICAL ASSISTANCE

Please call 800-221-2201 or 508-541-9400 or fax 508-541-9206.

WARRANTY

This Dynisco product is warranted under terms and conditions set forth in the Dynisco Web Pages. Go to www.dynisco.com and click on "Instruments". Click "Product Warranty" at the bottom of any page for complete details.

POWER SUPPLY/TRANSDUCER WIRING DIAGRAMS

TRANSDUCER	OUTPUT	POWER SUPPLY	WIRING DIAGRAMS
PT130	3mV/V	SINGLE	
PT150 OR PT 160	0-5 Vdc or 0-10 Vdc 4-WIRE	SINGLE	
PT150 OR PT 160	0-5 Vdc or 0-10 Vdc 4-WIRE	SPLIT	
PT150 OR PT 160	1-6 Vdc or 1-11 Vdc 3-WIRE	SINGLE	

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