

**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**

When using Dynisco "B" Series Cable Assembly, wire per the following 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](http://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	