



# PT139 & PT139A Rugged Test Transducers

# Operating Manual

## Introduction

The Dynisco model PT139 pressure transducers are designed to measure up to 10,000 psi. These models incorporate a 350-ohm, bonded foil strain gage Wheatstone Bridge. This proven technology provides an output of 0 ÷ 3.0 mV/V (nominal), proportional to hydraulic pressure (within the specified error band). These transducers convert changes in applied pressure into corresponding changes in output voltage. This output signal can be fed into a wide range of readout instruments with millivolt sensitivity.

## Pressure Fitting

The pressure fitting on the PT139 transducer is a 1/8"-27 NPT internal port. The fitting is fabricated from high-strength stainless steel.

Model	Pressure Range (psi)	Dim. D1	Dim D2	Dim DL
PT139	15-75	1.00 (25.40)	1.125 (28.575)	2.25 (57.15)
PT139	100-10,000	0.87 (22.10)	1.00 (25.4)	1.95 (49.5)
PT139A	300-10,000	0.688 (17.48)	0.75 (19.05)	

All dimensions are in inches (millimeters) unless

## Wiring

All PT139's are equipped with a 6-pin, Bendix PT1H-10-6P (or equal) receptacle. The mating plug is a Bendix PT06A-10-6S (SR) or equivalent, Dynisco P/N 711600, for general service or a Bendix PT06W-10-6S or equivalent, Dynisco P/N 711610, weather-tight connector.

## Wiring (cont.)

Function	PT139 (std)	PT139-H12
Signal +	Red (A)	Excitation +
Signal -	Black (B)	Signal +
Excitation +	White (C)	Signal -
Excitation -	Green (D)	Excitation -
Internal Cal Resistor	Blue (E)	Internal Cal Resistor
	Orange (F)	

The full-scale output of the PT139 pressure transducer is 3 mV/V. The power supply should be well regulated with recommended excitation of 10 Vdc, 15 Vdc maximum to the transducer. Six conductor-shielded cable, such as Dynisco P/N 800024, should be used for transducer connections.

## Internal Shunt Calibration

Each transducer includes an internal shunt calibration ("R-Cal") function that is used to simulate a signal of 80% full scale, this is achieved by crossing pins E and F. This eliminates the need for cumbersome calibrated pressure source when scaling associated instrumentation.

## 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](mailto:repair@dynisco.com). Please call for a return authorization number (RA#) before returning any product. Damaged transducers should be returned to:  
Dynisco, LLC  
Repair Department RA#  
38 Forge Parkway, Franklin, MA 02038



*From lab to production,  
providing a window into the process*



### **Technical Assistance**

Please call 800-221-2201 or 508-541-9400  
or fax 508-541-9436.

### **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.

### **Dynisco**

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