



PT273, PT274, PT275A & PT276A Pressure Sensors

Operating Manual



INTRODUCTION

The Dynisco Series PT27X series pressure transducers are designed to measure from 0 – 15 psi up to 0 - 10,000 psi. These models incorporate a 350-ohm, bonded foil strain gage Wheatstone Bridge. This proven technology provides an output of proportional to pressure (within the specified error band). These transducers convert changes in applied pressure into corresponding changes in voltage or current output signals. This output signals can be fed into a wide range of measurement and control instrumentation.

Each transducer includes an internal shunt calibration (“R-Cal”) function that is used to simulate a signal of 80% full scale. This eliminates the need for cumbersome calibrated pressure source when scaling associated instrumentation.

PRESSURE FITTING

The pressure fitting on the PT27X series transducers is a 1/4”-18 NPT external pressure port. The fitting is fabricated from high-strength stainless steel.

WIRING

All PT27X’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.

Figure 1. Input/Output Electrical Characteristics

Model	Wiring	Output Signal	Supply	Load
PT273	4-wire	3 mV/V	10 Vdc 15 Vdc max	350Ω, nominal
PT275A	3 or 4-wire	0 – 5 Vdc	10 – 36 Vdc	2000Ω, minimum
PT275B	3-wire	1 – 6 Vdc	10 – 36 Vdc	2000Ω, minimum
PT276A	3 or 4-wire	0 – 10 Vdc	14 – 36 Vdc	2000Ω, minimum
PT276B	3-wire	1 – 11 Vdc	14 – 36 Vdc	2000Ω, minimum

Figure 2. Connector Pin-Out

Function	PT273	PT275A	PT275B	PT276A	PT276B
Signal +	A	A	A	A	A
Signal -	B	B	B	B	B
Supply +	C	C	C	C	C
Supply -	D	D	D	D	D
CalSignal	E,F	E,F	E,F	E,F	E,F

Figure 3. Cable Assembly Coding

When using Dynisco “B” series conductor cable assemblies, wire per the following color code:

Signal +	Red
Signal -	Black
Supply +	White
Supply -	Green
Cal Signal	Blue/Orange

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. 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.