

# PT139 & PT139A Rugged Test Transducers

MEASURE HYDRAULIC PRESSURE IN EXTREME ENVIRONMENTS



## **Description**

Dynisco's PT139 & PT139A pressure transmitters are designed to measure hydraulic pressure in extreme environments of vehicle and other hydraulic and pneumatic applications. These withstand cyclic pressure and provide outstanding performance under the severe demands of the industrial market.

The small and rugged design make them ideal for restricted space applications. The all welded steel construction is ideal for demanding industrial or heavy duty applications. They are environmentally sealed transducers that prevent contamination.

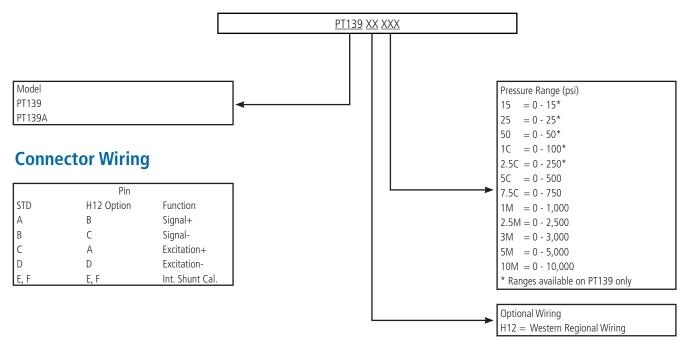
#### **Features**

- 3 mV/V full scale output
- Accuracy better than  $\pm 0.5\%$
- Pressure ranges from 0-15 PSI to 0-10,000 PSI
- Pressure/vacuum service
- Extended operating temperature range
- All welded, stainless steel construction
- Withstands severe shock and vibration
- Internal 80% shunt calibration
- CE approval

| Performance Characteristics |  |  |  |  |
|-----------------------------|--|--|--|--|
| Pressure Range (psi):       | PT139 only:<br>0 - 15, 0 - 25,<br>0 - 50, 0 - 75,<br>0 - 100, 0 - 250<br>PT139, PT139A:<br>0 - 300, 0 - 500,<br>0 - 1,000, 0 - 2,500,<br>0 - 5,000, 0 - 10,000 |  |  |  |
| Accuracy:                   | ±0.5% full scale including linearity, hysteresis and repeatability   |  |  |  |
| Full Scale Output:          | 3 mV/V ±1.0% typical (±2.0% maximum)   |  |  |  |
| Zero Balance:               | ±1.0% typical<br>(±2.0% maximum)   |  |  |  |
| Electrical Characteristics  |  |  |  |  |
| Input Resistance:           | 420 Ohms ±20%  |  |  |  |
| Output Resistance:          | 370 Ohms ±10%  |  |  |  |
| Internal Shunt Calibration: | 80% ±0.5% full scale typical (±1.0% maximum)   |  |  |  |
| Excitation:                 | 10 Vdc recommended,<br>15 Vdc maximum  |  |  |  |

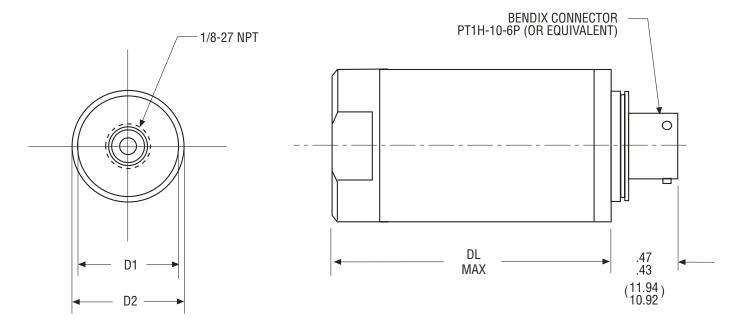
| Temperature Characteristics |  |  |  |  |
|-----------------------------|--|--|--|--|
| Operating Range:            | -65° to +285°F<br>(-54°C to +140°C)                              |  |  |  |
| Compensated Range           | -40° to +275°F<br>(-40°C to +135°C)                              |  |  |  |
| Temperature Effect On Zero: | $\pm 0.008\%$ full scale/°F ( $\pm 0.014\%$ full scale/°C)       |  |  |  |
| Temperature Effect On Span: | ±0.008% full scale/°F<br>(±0.014% full scale/°C)                 |  |  |  |
| Mechanical Characteristics  |  |  |  |  |
| Safe Overpressure:          | 2 x rated pressure   |  |  |  |
| Burst Pressure:             | 5 x rated pressure   |  |  |  |
| Wetted Material:            | 17 - 4 PH,<br>15 - 5 PH stainless steel                          |  |  |  |
| Cover Material:             | 303, 304 stainless steel   |  |  |  |
| Weight:                     | PT139: Approximately 5 ounces;<br>PT139A: Approximately 2 ounces |  |  |  |

# **Ordering Guide for PT139 & PT139A Series**



Mating connector PN/711600 or 6 - pin cable assembly sold separately. For additional options please consult factory.

## **Dimensions**



| 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 (25.40)   | 1.95 (49.5)  |
| PT139A | 300 - 10,000         | 0.688 (17.48) | 0.75 (19.05)   | 1.30 (43.0)  |

All dimensions are inches (mm) unless otherwise specified.

















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