



## PT415D

FOOD EXTRUSION PRESSURE TRANSDUCER



### Description

Dynisco's PT415D Series of washdown pressure transducers are the ideal choice for food and medical extrusion measurements requiring a fill material that meets FDA and USDA requirements. Model PT415D uses a special high temperature fill (NaK, Sodium Potassium) and an Inconel diaphragm to allow accurate pressure measurements in processes with temperatures as high as 1000°F. The transducers are supplied with a high accuracy (0.5%), great repeatability and reliability. An 1/2-14 NPT conduit fitting or 6-pin hermetically sealed bendix-style connector is used for easy connect and disconnect.

### Features

- 3.33 mV/V full scale output
- Accuracy of better than  $\pm 0.5\%$
- Pressure ranges from 0 - 500 psi to 0 - 10,000 psi
- All welded stainless steel with washdown capability
- FDA recognized safe (GRAS) for food and medical applications
- Available with hermetic connector or conduit fitting
- Internal 80% shunt calibration
- CE approved

**Performance Characteristics**

<b>Ranges (psi):</b>	0 - 500 0 - 750 0 - 1,000 0 - 1,500 0 - 3,000 0 - 5,000 0 - 7,500 0 - 10,000
<b>Accuracy:</b>	±0.5% FSO
<b>Repeatability:</b>	±0.2% FSO
<b>Mounting torque:</b>	500 inch - lbs. maximum
<b>Maximum pressure:</b>	2 x full range
<b>Material in contact with pressure media:</b>	15 - 5 PH stainless steel, Dymax® coated
<b>Weight:</b>	2 lbs.

**Electrical Characteristics**

<b>Configuration:</b>	Four active arm bonded Wheatstone bridge strain gage
<b>Bridge resistance:</b>	Input: 345 Ohms minimum; Output: 350 Ohms ±10%
<b>Full scale output:</b>	3.3 mV/V ±2%
<b>Internal shunt calibration (R-Cal):</b>	80% FSO ±0.5%
<b>Insulation resistance:</b>	1,000 megohms at 50 Vdc
<b>Zero balance:</b>	±5% FSO

**Temperature Characteristics**

<b>Transducer diaphragm:</b>	
<b>Maximum diaphragm temperature:</b>	750°F (400°C)
<b>Zero shift due to temperature change:</b>	15 psi/100°F maximum (27 psi/100°C)
<b>Electronics housing:</b>	
<b>Maximum temperature:</b>	250°F (121°C)
<b>Zero shift due to temperature change:</b>	±0.01% full scale/°F maximum (±0.02% full scale/°C)
<b>Sensitivity shift due to temperature change:</b>	±0.005% full scale/°F maximum (±0.01% full scale/°C maximum) ±0.01%/°F maximum 500, 750, 1,000 psi (±0.02% full scale/°C maximum)

# Ordering Guide for PT415D

## Delivery

Please call for specific delivery information

Pressure Range (psi)	
5C	= 0 - 500
7.5C	= 0 - 750
1M	= 0 - 1,000
1.5M	= 0 - 1,500
3M	= 0 - 3,000
5M	= 0 - 5,000
7.5M	= 0 - 7,500
10M	= 0 - 10,000

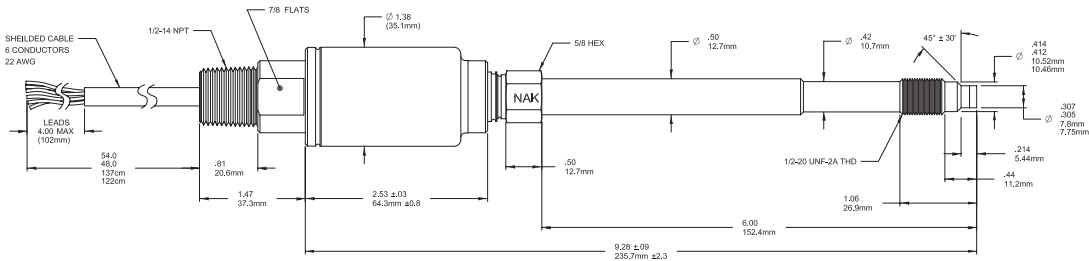
PT415D XX X XXXX

Connector  
B314 (optional 6 - pin electrical connector)

Rigid Stem Length  
3 = 3 in  
4 = 4 in  
6 = 6 in  
9 = 9 in  
12 = 12 in

Mating connector P/N711600 or 6 - pin cable assembly for B314 option sold separately.  
Transducer Options: Call for complete information on stem length, diaphragm and thread coatings, and compensation.

## Dimensions



All dimensions are in inches (millimeters) unless otherwise specified