**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 ±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

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

### Temperature Characteristics

| Transducer diaphragm: |  
| Maximum diaphragm temperature: | 750°F (400°C)  
| Zero shift due to temperature change: | 15 psi/100°F maximum (27 psi/100°C)  
|  
| Electronics housing: |  
| Maximum temperature: | 250°F (121°C)  
| Zero shift due to temperature change: | ±0.01% full scale/°F maximum (±0.02% full scale/°C)  
| Sensitivity shift due to temperature change: | ±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)  

### Electrical Characteristics

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


Ordering Guide for PT415D

**Delivery**
Please call for specific delivery information.

<table>
<thead>
<tr>
<th>Pressure Range (psi)</th>
<th>Rigid Stem Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC 0 - 500</td>
<td>3 in B314</td>
</tr>
<tr>
<td>7.5C 0 - 750</td>
<td>4 in B314 (optional 6 - pin electrical connector)</td>
</tr>
<tr>
<td>1M 0 - 1,000</td>
<td>6 in B314</td>
</tr>
<tr>
<td>1.5M 0 - 1,500</td>
<td>9 in B314</td>
</tr>
<tr>
<td>3M 0 - 3,000</td>
<td>12 in B314</td>
</tr>
<tr>
<td>5M 0 - 5,000</td>
<td>18 in B314</td>
</tr>
<tr>
<td>7.5M 0 - 7,500</td>
<td>24 in B314</td>
</tr>
<tr>
<td>10M 0 - 10,000</td>
<td>30 in B314</td>
</tr>
</tbody>
</table>

Mating connector P/N 711600 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 inches (millimeters) unless otherwise specified.

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All dimensions are inches (mm) unless otherwise specified.

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Refer to www.dynisco.com for access to Operator Manual and other support documentation.

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