DYNISCO MODELS PT241E & PT241S
Flange-Mount Melt Pressure Transmitters for Hazardous Locations

Description
Models PT241E and PT241S Flange-Mounted Melt Pressure Transmitters are designed for use in hazardous locations where explosive gases are present. The PT241E is a conduit fitting style unit that carries Factory Mutual (FM) explosion-proof approval. The PT241S is FM and SIRA approved for intrinsically safe and is available in a conduit fitting or 6 or 8 pin connector version. Approvals are for Class I, Division I, Groups A, B, C and D.

Features
- FM explosion-proof, FM/SIRA intrinsically safe
- 4 to 20 mA loop-powered output
- 0 to 250 to 0 to 1,000 psi
- Convenient access
- Extra rugged
- Signal meets IEC 801-3 standard
- Thermocouple or RTD option, intrinsically safe model PT241S only
- Conduit fitting only Model PT241E, Model PT241S has conduit or 6 or 8 pin connector

Benefits
- Only unit of its type approved for hazardous areas
- Output to DCS or computer system
- Choice of pressure ranges
- Side zero and span adjustments
- Welded electronics housing
- Broad spectrum RF/EMI immunity
- Temperature measurement alternatives
- Option of electrical connections

Note: E Series models carry FM explosion-proof approvals (standard unit), S Series models have FM/SIRA intrinsically safe approval only.

Specifications

Performance Characteristics
- Ranges (psi): 0 - 250, 0 - 500, 0 - 750, 0 - 1,000
- Maximum pressure: 2 x full range
- Material in contact with pressure media: DyMax coated 15-5 PH stainless steel
- Weight: 3 lbs.
- Accuracy: ±1.0% for 250, 500, 750 and 1,000 psi
- Repeatability: ±0.1% FS

Electrical Characteristics
- Output: 4 to 20 mA
- Input voltage: 12 to 36 Vdc
- Zero balance adjustment range: -40% to +10%; -80% to +20% for <500 psi
- Gain span adjustment range: -10% to +50%
- Load resistance: 1,200 Ohms maximum at +36 Vdc, 600 Ohms maximum at +24 Vdc
- Electrical termination: 1/2 to 14 NPT conduit fitting with 42” (1.15m) long lead wires
- Optional: 6 or 8 pin connector (model PT241S only)

Temperature Characteristics
- Transducer diaphragm:
  - Maximum diaphragm temperature: 750°F (400°C)
  - Zero shift due to temperature change: 15 psi/100°F typical (27 psi/100°C)
- Electronics housing:
  - Operating temperature range: -20°F to +185°F (-29°C to +85°C)
  - Temperature effects over a compensated temperature range of 0 to +150°F (18°C to +85°C):
    - Zero: 0.01% full scale/F maximum (0.02% full scale/C maximum)
    - Span: 0.01% full scale/F maximum (0.02% full scale/C maximum)

Note: E Series models carry FM explosion-proof approvals (standard unit), S Series models have FM/SIRA intrinsically safe approval only.
### Ordering Guide

<table>
<thead>
<tr>
<th>Model</th>
<th>Diaphragm Material/Coating</th>
<th>Approvals</th>
<th>Pressure Range</th>
<th>Snout</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Code Material/Coating</td>
<td>Code</td>
<td>Code psi</td>
<td>Code bar</td>
<td></td>
</tr>
<tr>
<td>15 - 5 PH SST with DyMax™ coating</td>
<td>E FM Explosion-proof</td>
<td>2.5C 0 - 250</td>
<td>17B (0 - 17)</td>
<td>2.031&quot;</td>
<td></td>
</tr>
<tr>
<td>B 15 - 5 PH SST with Borofuse Coating</td>
<td>S FM Intrinsically safe</td>
<td>5C 0 - 500</td>
<td>35B (0 - 35)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H Hastelloy</td>
<td></td>
<td>7.5C 0 - 750</td>
<td>50B (0 - 50)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I Inconel</td>
<td></td>
<td>1M 0 - 1,000</td>
<td>70B (0 - 70)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T 15 - 5 PH SST with Titanium Nitride Coating</td>
<td></td>
<td>1.5M 0 - 1,500</td>
<td>1CB (0 - 100)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Stem Lengths

<table>
<thead>
<tr>
<th>Rigid</th>
<th>Flexible</th>
<th>Conduit Fitting with Cable</th>
<th>Connectors</th>
<th>Thermocouple/RTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specify length from 0 to 12 inches (0 to 30.5 cm) and add &quot;R&quot; after number</td>
<td>18&quot;</td>
<td>42&quot; standard</td>
<td>C6 = PT02A - 10 - 6P</td>
<td>Please consult factory.</td>
</tr>
<tr>
<td>Additional lengths available up to 999&quot;</td>
<td></td>
<td></td>
<td>C6G = PT02H - 10 - 6P</td>
<td>Not available on explosion-proof models</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C6H = PT1H - 10 - 6P</td>
<td>approved models</td>
</tr>
</tbody>
</table>

**Note:** Consult factory for available options and alternate full scale settings

**Ordering Examples:** PT241E - 5C - 2.031/18; PT241S - 5M - 2.031/18 - C6H