DYNISCO MODELS E243 & S243
Flange Stem Melt Pressure Transmitters for Hazardous Locations

Description
Models E243 and S243 are flanged stem versions of the 242 series. They are designed for use in hazardous locations where explosive gases are present. The E243 is a conduit fitting style unit that carries Factory Mutual (FM) explosion-proof approval. The S243 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
• Better than ±0.25% accuracy
• FM explosion-proof or FM/SIRA intrinsically safe
• Flange mounting
• 4 to 20 mA loop - powered output
• 0 - 250 to 0 - 30,000 psi
• Side zero and span adjustments
• Welded electronics housing
• Signal meets IEC801 - 3 standard
• Thermocouple or RTD option, intrinsically safe model S243 only
• Conduit fitting only Model E243, Model S243 has conduit or 6 or 8 pin connector

Benefits
• Precise pressure measurement
• Only unit of its type approved for hazardous areas
• Easy removal from process
• Output to DCS or computer system
• Choice of pressure ranges
• Convenient access, easy to use
• Extra rugged
• Broad spectrum RFI/EMI immunity
• Temperature measurement alternatives
• Choice 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 - 500, 0 - 750, 0 - 1,000, 0 - 1,500, 0 - 3,000, 0 - 5,000, 0 - 7,500, 0 - 10,000, 0 - 15,000, 0 - 20,000, 0 - 30,000
Accuracy: ±0.25% FSO (0.5% for 500, 750 and 1,000 psi ranges)
Repeatability: ±0.1% FSO

Mounting torque: 40 inch - lbs. maximum
Maximum pressure: 2 x full range or 35,000 psi (whichever is less)
Material in contact with pressure media: 15 - 5 PH stainless steel, DyMax™ coated
Weight: 3 lbs.

Electrical Characteristics
Output: 4 to 20 mA
Input voltage: 12 to 36 Vdc
Electrical termination: 1/2 to 1 NPT conduit fitting with 42" (1.15m) long lead wires
Optional: 6 or 8 pin connector (model S243 only)

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

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 +65°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)
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Ordering Guide

<table>
<thead>
<tr>
<th>Model</th>
<th>Diaphragm and Material Coating</th>
<th>Mounting Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>E243 (FM Explosion-proof)</td>
<td>(Blank) 15 - 5 PH SST with DyMax™ coating</td>
<td>(Blank) Standard flange (as shown)</td>
</tr>
<tr>
<td>S243 (FM and SIRA Intrinsically Safe)</td>
<td>B 15 - 5 PH SST with Borofuse coating</td>
<td>FX Additional flange types (FM and i.e. F1, F2, etc.)</td>
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<tr>
<td></td>
<td>H Hastelloy</td>
<td>Please consult factory</td>
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<tr>
<td></td>
<td>I Inconel</td>
<td>Blank Standard flange as shown</td>
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<tr>
<td></td>
<td>T 15 - 5 PH SST with Titanium Nitride Coating</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Pressure Range (psi)</th>
<th>Rigid Stem</th>
<th>Flexible Stem</th>
<th>Lead Length</th>
<th>Electrical Connection</th>
<th>Thermocouple/RTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>Range</td>
<td>Code</td>
<td>Code</td>
<td>Description</td>
<td>Connectors</td>
</tr>
<tr>
<td>2.5C (M18)</td>
<td>0 - 250</td>
<td></td>
<td></td>
<td>42&quot; (standard)</td>
<td>Conduit fitting</td>
</tr>
<tr>
<td>5C</td>
<td>0 - 500</td>
<td></td>
<td></td>
<td></td>
<td>with cable</td>
</tr>
<tr>
<td>7.5C</td>
<td>0 - 750</td>
<td></td>
<td></td>
<td></td>
<td>42&quot; (standard)</td>
</tr>
<tr>
<td>1M</td>
<td>0 - 1,000</td>
<td>3 3&quot;</td>
<td>4 4&quot;</td>
<td>Additional lengths</td>
<td>Additional lengths</td>
</tr>
<tr>
<td>1.5M</td>
<td>0 - 1,500</td>
<td>3 3&quot;</td>
<td>4 4&quot;</td>
<td>available up to 999&quot;</td>
<td>available up to 999&quot;</td>
</tr>
<tr>
<td>3M</td>
<td>0 - 3,000</td>
<td>6 6&quot;</td>
<td>30 30&quot;</td>
<td></td>
<td>available up to 999&quot;</td>
</tr>
<tr>
<td>5M</td>
<td>0 - 5,000</td>
<td>9 9&quot;</td>
<td></td>
<td></td>
<td>(For model S242 only)</td>
</tr>
<tr>
<td>7.5M</td>
<td>0 - 7,500</td>
<td>12 12&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10M</td>
<td>0 - 10,000</td>
<td>12 12&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15M</td>
<td>0 - 15,000</td>
<td>12 12&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20M</td>
<td>0 - 20,000</td>
<td>12 12&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30M</td>
<td>0 - 30,000</td>
<td>12 12&quot;</td>
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</table>

Note: 1. Consult factory for available options and alternate full scale settings
2. Model PT253 (0 - 5 Vdc output) and model PT263 (0 - 10 Vdc output) also available. Please consult factory.

Ordering Examples: E243 - 5C - 6/18; S243 - 5M - 6/30 - C6H; S243 - 1M - 6/30 - C6 - TC