DYNSISCO MODELS E242 & S242
Thread-Mount Melt Pressure Transmitters for Hazardous Locations

Description
Models E242 and S242 are designed for use in hazardous locations where explosive gases are present. The E242 is a conduit fitting style unit that carries Factory Mutual (FM) explosion-proof approval. The S242 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. Its all-welded construction features a 1/2 - 20 UNF thread for installation in standard transducer mounting holes.

Features
- Better than ±0.25% accuracy
- FM explosion-proof or FM/SIRA intrinsically safe
- 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 S242 only
- Conduit fitting only Model E242, Model S242 has conduit or 6 or 8 pin connector

Benefits
- Precise pressure measurement
- Carries either IS or EP certification for hazardous areas
- 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/SIRA intrinsically safe and 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, 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: 500 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 14 NPT conduit fitting with 42” (1.15m) long lead wires
Optional: 6 or 8 pin connector (model S242 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

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<tr>
<th>Model</th>
<th>Diaphragm/Material Coating</th>
<th>Mounting Configuration</th>
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<tbody>
<tr>
<td>E242</td>
<td>15 - 5 PH SST with DyMax™ coating</td>
<td>1/2 THD (standard)</td>
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<tr>
<td>S242</td>
<td>15 - 5 PH SST with Borofuse coating</td>
<td>1/2B</td>
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<td>1/2L</td>
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<td>I Inconel</td>
<td>M14</td>
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<td></td>
<td>T 15 - 5 PH SST with Titanium Nitride Coating</td>
<td>M18</td>
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Pressure Range (psi) | Rigid Stem | Flexible Stem | Lead Length | Electrical Connection | Thermocouple/RTD |
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<td>15</td>
<td>Conduit fitting</td>
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<tr>
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<td>5C</td>
<td>0 - 500</td>
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<td>C6</td>
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<td></td>
<td>7.5C</td>
<td>0 - 750</td>
<td>15</td>
<td>PT02A-10-6P</td>
<td>J (Model S242 only)</td>
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<td>0 - 1,000</td>
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<td>0 - 1,500</td>
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<td>PT02H-10-6P</td>
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<td></td>
<td>7.5M</td>
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<td>0 - 10,000</td>
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<td>DIN 7 pins</td>
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<td>30M</td>
<td>0 - 30,000</td>
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<td>120</td>
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Notes:
1. Consult factory for available options and alternate full scale settings
2. Model PT252 (0 - 10 Vdc) and model PT262 (0 - 5 Vdc) also available. Please consult factory.

Ordering Examples: E242 - 5C - 6/18; S242 - 5M - 6/30 - C6H; S242 - 5M - 6/30 - C8 - TC