DYNISCO MODEL PT290

Button-Seal Mounting Pressure Transmitters for Process Control in Hazardous Areas

Description
The PT290 transmitters were developed as a lower cost replacement for button-seal transmitters. The PT290 is built to use existing mounting hardware and in locations where similar Taylor units had been installed. Models are available with Factory Mutual (FM) explosion-proof or FM intrinsically safe (SIRA) approvals. Both models are approved for Class I, Division I, Groups A, B, C and D. The 290 Series is the ideal choice for low pressure applications.

Features
- Accuracy of better than ±0.5% full scale
- 0 - 25 psi (0 - 2 bar) to 0 - 10,000 psi (0 - 700 bar)
- Replacement for traditional “button-seal” units
- New diaphragm design
- 4 to 20 mA loop powered output
- New side-mounted zero and span adjustments
- Various configurations
- New amplifier
- Heavy-duty welded electronics housing
- Thermocouple or RTD option available

Benefits
- Improves process optimization
- Proper range choice improves performance
- Installs in “button” seal holes
- Improved stability
- Industry standard
- Reduces set-up time
- Easy to install
- Superior resistance to electromagnetic noise
- Environmental protection
- Temperature measurement from same process connection

Performance Characteristics

Ranges:
- psi: 0 - 25, 0 - 50, 0 - 100, 0 - 250, 0 - 500, 0 - 750, 0 - 1,000, 0 - 1,500, 0 - 3,000, 0 - 5,000, 0 - 7,500, 0 - 10,000
- bar: 0 - 2, 0 - 3, 0 - 7.0 - 15, 0 - 30, 0 - 50, 0 - 100, 0 - 200, 0 - 350, 0 - 500, 0 - 700

Accuracy: ±0.5% FSO
Repeatability: ±0.1% FSO
Maximum pressure: 2 x full range below 7,500 psi, 1.5 x full range for 10,000 psi
Material in contact with pressure media: DyMax™ coated 15-5 PH stainless steel
Weight: 2 lbs. (.9 kg)

Electrical Characteristics

Input voltage: 12 to 36 Vdc
Output: 4 to 20 mA (2-wire)
Maximum load resistance: 600 Ohms at 24 Vdc, 1,200 Ohms at 36 volts
Gain (span) adjustment range: ±25% FSO minimum, factory set to within ±0.5%

Temperature Characteristics

Transducer diaphragm:
- Maximum transducer diaphragm temperature: 750°F (400°C)
- Zero shift due to temperature change:
  - 1.0 psi/100°F typical (from 75°F to 450°F)
  - 2.0 psi/100°F typical (from 450°F to 600°F)
  - .07 bar/38°C typical (from 24°C to 232°C)
  - .14 bar/38°C typical (from 232°C to 315°C)

Electronics housing:
- Operating temperature range: -20°F to +140°F (-28°C to +60°C)
- Temperature effects over a compensated range of 0°F to 140°F (-18°C to +60°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)
## Ordering Guide

<table>
<thead>
<tr>
<th>Model</th>
<th>Diaphragm Material/Coating</th>
<th>Approvals</th>
<th>Pressure Range</th>
<th>Snout</th>
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<tbody>
<tr>
<td></td>
<td>Code Material/Coating Code</td>
<td>Code Description</td>
<td>Code psi Code bar</td>
<td>Length</td>
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<tr>
<td>PT290</td>
<td>15 - 5 PH SST with DyMax™ coating</td>
<td>No approval</td>
<td>25 0 - 25 2B (0 - 2)</td>
<td>Specify length from 1.2 to 10.0 decimal inches (3.05 to 25.4 cm)</td>
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<tr>
<td></td>
<td>B 15 - 5 PH SST with Borofuse Coating</td>
<td>E FM Explosion - proof</td>
<td>50 0 - 50 3B (0 - 3)</td>
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<td>H Hastelloy</td>
<td>S FM intrinsically safe</td>
<td>1C 0 - 100 7B (0 - 7)</td>
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<td>I Inconel</td>
<td>2.5C 0 - 250 15B (0 - 15)</td>
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<td>T 15 - 5 PH SST with Nitride Coating</td>
<td>5C 0 - 500 35B (0 - 30)</td>
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<td>7.5C 0 - 750 4CB (0 - 40)</td>
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<td>1.5M 0 - 1,500 1CB (0 - 100)</td>
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<td>3M 0 - 3,000 2CB (0 - 200)</td>
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<td>5M 0 - 5,000 3.5CB (0 - 350)</td>
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<td>7.5M 0 - 7,500 5CB (0 - 500)</td>
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<td>10M 0 - 10,000 7CB (0 - 700)</td>
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<td>15M 0 - 15,000 9CB (0 - 900)</td>
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<td>20M 0 - 20,000 10CB (0 - 1000)</td>
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<td>25M 0 - 25,000 12CB (0 - 1200)</td>
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<td>30M 0 - 30,000 14CB (0 - 1400)</td>
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###茎长度

- 要求长度从0到36英寸（0到91.4厘米）
- 在数量后添加“R”字母

###适用连接

- 42°标准
- C6 = PT02A - 10 - 6P
- C6G = PT02H - 10 - 6P
- C6H = PT1H - 10 - 6P
- C7D = DIN 7 pins
- C7T = TAJIMI
- C8 = PC02E - 12 - 8P

###注释：
- 请咨询工厂，已批准的模型
- 不适用于爆炸防护

###订购示例：
- PT290S - 3M - 6/60
- PT290H - 5M - 4.8/60 - C6 - TC