DYNISCO MODEL PX182
Smart Pressure Transmitter for Standard Thread Mounting

Description
Dynisco’s PX182 is a smart pressure transmitter with ambient and process temperature compensation, featuring a thin film sensor and proprietary fabrication techniques. The PX182 provides a high accuracy pressure measurement available in a 1/2 - 20 UNF mounting. HART® digital communication utilizing a HART compatible hand-held communicator enables re-ranging of the transmitter for maximum control of your process.

Features
- Accuracy of better than ±0.25% of range independent of process temperature
- 4 to 20 mA, 2 - wire output
- HART digital communication
- 5:1 span turn - down capability
- Ambient and process temperature compensation
- Optional 100 Ohm platinum RTD output

Benefits
- Improves process optimization and removes temperature effects
- Industry standard
- Process industry standard
- Allows use in multiple ranges
- Improved accuracy
- Process temperature measurement without a second intrusion into the process

Specifications

Performance Characteristics
Ranges:
psig: 0 - 1,500, 0 - 3,000, 0 - 5,000, 0 - 7,500, 0 - 10,000
bar: 0 - 100, 0 - 200, 0 - 350, 0 - 500, 0 - 680
Accuracy: ±0.25% of range: Within pressures of 20% to 100% of range and process temperatures of 77˚F to 575˚F (25˚C to 300˚C) (±0.50% for 1500 psi range)
±0.50% of range: Within pressures of 0 psig to 20% of range and above process temperatures (±1.00% for 1500 psi range)
Hastelloy: ±0.60% of range: Within pressures of 20% to 80% of range and process temperatures of 77˚F to 575˚F (25˚C to 300˚C) (±1.00% for 1500 psi range)
±1.00% of range: Within pressures of 0 psig to 20% of range

Temperature Characteristics
Operating temperature ranges (compensated):
Process: 77˚F to 575˚F (25˚C to 300˚C), option to 660˚F (350˚C)
Electronics: 77˚F to 140˚F (25˚C to 60˚C)

Electrical Characteristics
Output: 2 - wire, 4 to 20 mA. Hart digital communication superimposed on the 4 to 20 mA signal is available for remote configurations
Damping: Adjustable through HART communicator
Power supply: 12 to 36 Vdc
Electronics housing: IP 55, NEMA 3

Approvals (optional)
FM approved, Class I, Division II, Groups A, B, C and D

Resolution: 0.035% or better
Zero span and adjustment:
Zero: ±0% of range
Span: 20% to 100% of range
Turn-down: 5:1 maximum
Overpressure limit: 1.5 x range
Sample rate: ≤50 msec
Long term stability: <0.09% of span per year

Temperature effects:
Electronics: ±0.15% of range/100˚F (±0.027% of range/10˚C)
Humidity limits: 0% - 90% relative humidity non-condensing

Load limitation: Maximum loop resistance is determined by the voltage of the external power supply. Digital communication requires a minimum loop resistance of 250 Ohms. (See below)
Accuracy is based upon a maximum total length of process connection and flexible capillary of 36" (914). For each 6" (152) of length added accuracy is reduced by 0.10% to maximum length of 48" (1219) total. For total unit lengths over 48" (1219), the error correction software performance is reduced. Consult factory for specific requirements.

Notes:
• FM approved units include end cap with conduit connector and 20 ft. (6 meter) leads.
• Standard unit includes a 6 pin Bendix connector and requires optional cable 929008 - 10 ft. (3 meter).
• Standard unit with M315 option includes an 8 pin Bendix connector and requires optional cable 801726.
• Mounting bracket P/N195901 recommended.
• 10M units are compensated to at least 7.5M and extrapolated to 10M.

Ordering Guide

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<th>Model</th>
<th>Approvals</th>
<th>Diaphragm Material/Coating</th>
<th>Pressure Range</th>
<th>Rigid Stem</th>
<th>Flexible Stem</th>
<th>Options</th>
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<tbody>
<tr>
<td>(Blank) Standard</td>
<td>(Blank) 15 - 5 PH SST</td>
<td>0 - 1,000</td>
<td>1CB (0 - 100)</td>
<td>6 6 (152)</td>
<td>30 30 (762)</td>
<td>M315 3 - wire w/ RTO output (max temp.)</td>
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<tr>
<td>FM</td>
<td>3M</td>
<td>0 - 3,000</td>
<td>2CB (0 - 200)</td>
<td>12 12 (304)</td>
<td>N/A</td>
<td>M325 Temperature compensated to 660°F (350°C)</td>
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<tr>
<td>PX182</td>
<td>H Hastelloy</td>
<td>0 - 5,000</td>
<td>3SCB (0 - 500)</td>
<td>10M</td>
<td>6.8CB (0 - 680)</td>
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<td>Approved Class I, Division II, Groups A, B, C &amp; D</td>
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Ordering Example: PX182 - 3M - 6/30 - MXXX

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