DYNISCO MODEL IPX182
Smart Pressure Transmitter for Standard Thread Mounting

Description
Dynisco’s IPX182 is a smart pressure transmitter with ambient and process temperature compensation, featuring a thin film sensor and proprietary fabrication techniques. The IPX182 provides the most accurate 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 ±0.15% 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:
psi: 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:
±0.15% of range: Within pressures of 20% to 100% of range and process temperatures of 77°F to 575°F (25°C to 300°C) (±0.25% for 1500 psi range)
±0.25% of range: Within pressures of 0 psig to 20% of range and above process temperatures (±0.50% for 1500 psi range)
Hastelloy:
±0.30% of range: Within pressures of 20% to 80% 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 (±1.00% for 1500 psi 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: +80% of range
Span: 20% to 100% of range
Turn-down: 5:1 maximum
Overpressure limit: 1.5 x range
Sample rate: ≤50 maec
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)
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Ordering Example: IPX182 - 3M - 6/30 - M625

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/N 195901 recommended.
• 10M units are compensated to at least 7.5M and extrapolated to 10M.

Ordering Guide

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All dimensions are in inches (millimeters) unless otherwise specified

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