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

NEW EXTENDED LIFE COATING

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)

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 msec
Long term stability: <0.09% of span per year

Temperature Characteristics

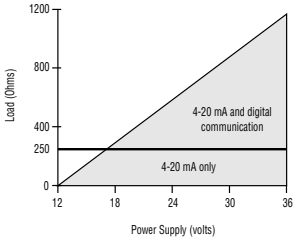
Operating temperature ranges (compensated):
Process: 77˚F to 575˚F (25˚C to 300˚C) option to 660˚F (350˚C)
Electronics: 77˚F to 140˚F (25˚C to 60˚C)

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

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

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)

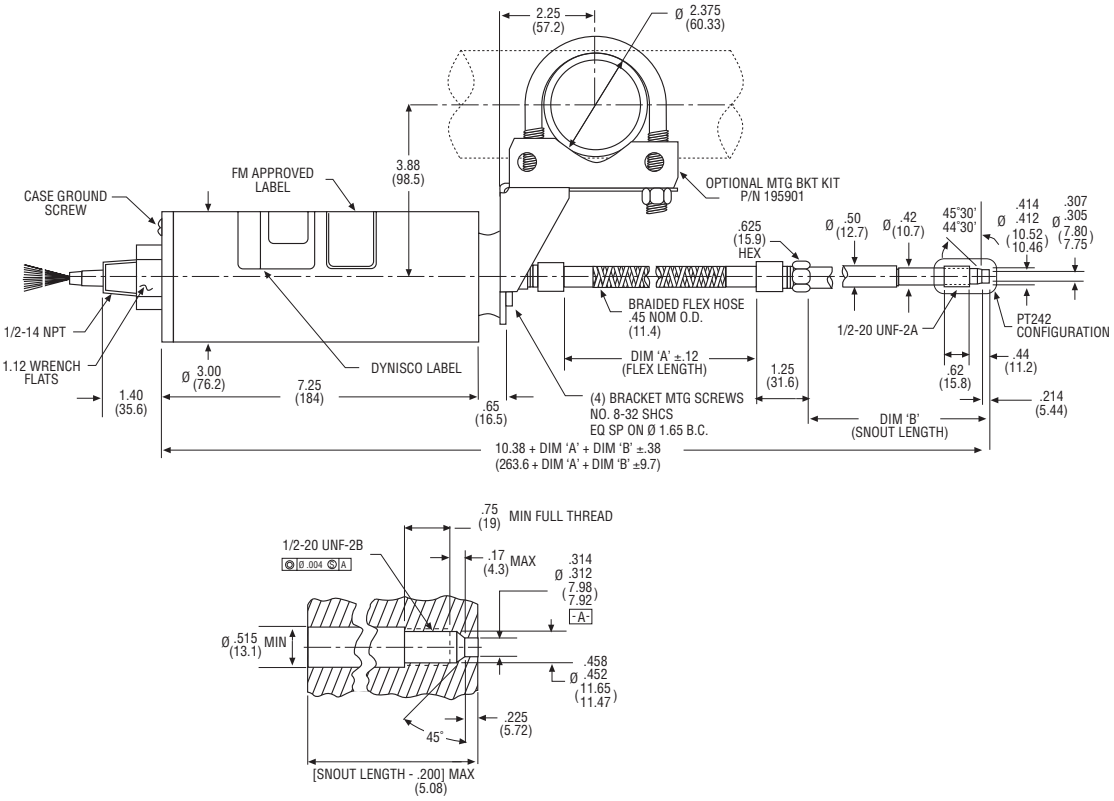


Approvals (optional)

FM approved, Class I, Division II, Groups A, B, C and D

DYNISCO MODEL IPX182

Smart Pressure Transmitter for Standard Thread Mounting



All dimensions are in inches (millimeters) unless otherwise specified

182002 - A

Ordering Guide

Model	Approvals		Diaphragm Material/Coating		Pressure Range				Rigid Stem		Flexible Stem		Options	
	Code	Description	Code	Material/Coating	Code	psi	Code	bar	Code	Length	Code	Length	Code	Description
	(Blank)	Standard	(Blank)	15 - 5 PH SST with DyMax™ Coating	1.5M	0 - 1,500	1CB	(0 - 100)	6	6 (152)	30	30 (762)	M315	3 - wire w/ RTD output (snout temp.)
	FM	Factory Mutual Approved Class I, Division II, Groups A, B, C & D			3M	0 - 3,000	2CB	(0 - 200)	12	12 (304)				
IPX182					5M	0 - 5,000	3.5CB	(0 - 350)						
			H	Hastelloy	7.5M	0 - 7,500	5CB	(0 - 500)					M625	Temperature compensated to 350°C
					10M	0 - 10,000	6.8CB	(0 - 680)					M626	Accuracy to 0.15% (1.5M)

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/N195901 recommended.
- 10M units are compensated to at least 7.5M and extrapolated to 10M.

WE'VE GOT HART FIELD COMMUNICATIONS PROTOCOL ABILITY