DYNISCO MODEL IPX192

Smart Pressure Transmitter for Thread Mounting

Description

Dynisco's IPX192 is a high performance, microprocessor based pressure transmitter with ambient and process temperature compensation, featuring a thin film sensor and proprietary fabrication techniques. The IPX192 provides the most accurate pressure measurement available in a 1/2 - 20 UNF mounting. Remote digital communication utilizing the HART® protocol and HART 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
- LCD display optional
- Pressure and temperature process outputs
  - Pressure variable on 4 to 20 mA signal
  - Temperature variable on HART protocol

Benefits

- Improves process optimization and removes temperature effects
- Industry standard
- Process industry standard
- Allows use in multiple ranges
- Improved accuracy
- Dual readout from a single display
- Two process variables on a HART 4 to 20 mA signal



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

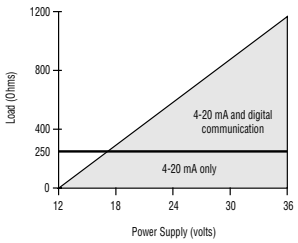
Operating temperature ranges (compensated):
Process: 77˚F to 575˚F (25˚C to 300˚C) option to 660˚F (350˚C)
Electronics: 77˚F to 140˚F (25˚C to 60˚C)

Temperature effects:
Electronics: ±0.15% of range/100˚F (±0.027% of range/10˚C)
Humidity limits: 0% to 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: 17 to 36 Vdc
Electronics housing: IP 67, NEMA 4, 6

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)



(Shown for standard unit without LCD display)

Optional LCD Display

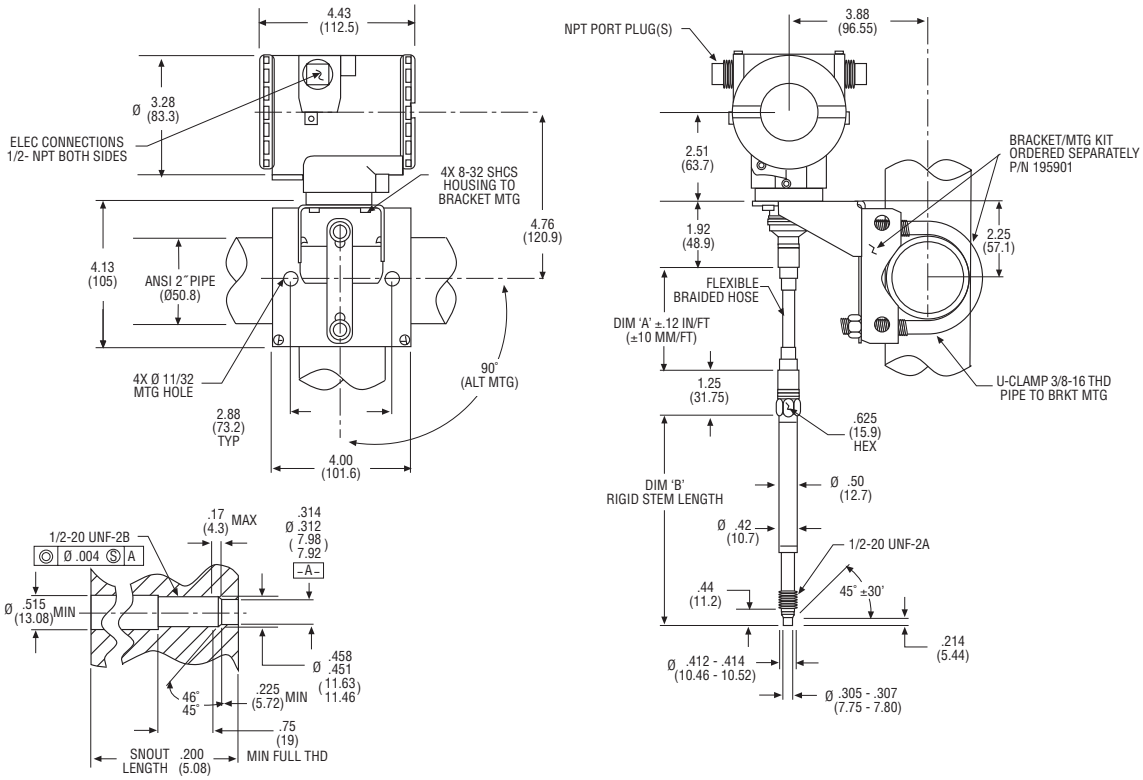
Two lines: Top line 4.5 digits; bottom line 5 characters; Displays process pressure and temperature simultaneously

Approvals

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

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All dimensions are in inches (millimeters) unless otherwise specified

192015 - A

Ordering Guide

Model	Approvals	Display		Diaphragm		Pressure Range				Rigid Stem		Flexible Stem		Options	
	Description	Code	Description	Code	Material/Coating	Code	psi	Code	bar	Code	Length	Code	Length	Code	Description
	Factory Mutual Approved Class I, Division II, Groups A, B, C & D	(Blank)	No display	(Blank)	15 - 5 PH SST	1.5M	0 - 1,500	1CB	(0 - 100)	6	6 (152)	30	30 (762)	M625	Temperature compensated to 350˚C
		I	In - line display (pressure & process temperature displayed)		with DyMax™ Coating	3M	0 - 3,000	2CB	(0 - 200)	12	12 (304)				
IPX192FM						5M	0 - 5,000	3.5CB	(0 - 350)						
				H	Hastelloy	7.5M	0 - 7,500	5CB	(0 - 500)					M626	Accuracy to 0.15% (1.5M)
						10M	0 -10,000	6.8CB	(0 - 680)						

Ordering Example: IPX192FMIH - 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: • Mounting bracket P/N195901 recommended.
• 10M units are compensated to at least 7.5M and extrapolated to 10M.

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