

DYNISCO MODEL 2195

Smart Pressure Transmitter for Button-Seal Mounting

Description

Dynisco's IPX II series 2195 is a high performance, microprocessor based transmitter with ambient and sensor temperature compensation, featuring a thin film sensor and proprietary fabrication techniques. Series 2195 provides a high accuracy pressure measurement available in a button-seal mounting. Ranging and setup of the transmitter may be accomplished with a dual LCD display, the Windows™ based Smartlink software or by using a HART® communicator.

Features

- Accuracy of $\pm 0.25\%$ of range compensated for process temperature (range specific)
- Temperature compensation
- 4 to 20 mA, 2 - wire output
- 6:1 span turn - down capability
- Split design
- Optional second 4 to 20 mA signal for temperature
- Optional programmable LCD display
- HART digital communication
- FM approved models
- Intrinsically safe models

Benefits

- Improves process optimization and removes temperature effects
- Improves accuracy
- Process industry standard
- Allows use in multiple ranges
- Easy to install
- Output temperature signal to display system
- At line readout of pressure or temperature
- Process industry standard
- Approved for operation in hazardous areas
- Approved for EEx ia IIC



Specifications

Performance Characteristics

Ranges:

psi: 0 - 750, 0 - 1,500, 0 - 3,000, 0 - 5,000, 0 - 7,500, 0 - 10,000

bar: 0 - 50, 0 - 100, 0 - 200, 0 - 350, 0 - 500, 0 - 680

Accuracy:

$\pm 0.25\%$ of full scale range: Within 20% to 100% of range and within process temperatures of 77°F to 575°F (25°C to 300°C) ($\pm 0.50\%$ for 750 psi range)

$\pm 0.50\%$ of full scale range: Within 0% to 20% of range and within process temperatures of 77°F to 575°F (25°C to 300°C) ($\pm 1.00\%$ for 750 psi range)

Hastelloy:

$\pm 0.50\%$ of full scale range: Within 20% to 100% of range and within process temperatures of 77°F to 575°F (25°C to 300°C) ($\pm 1.00\%$ for 750 psi range)

$\pm 1.00\%$ of full scale range: Within 0% to 20% of range and within process temperatures of 77°F to 575°F (25°C to 300°C)

Temperature Characteristics

Operating temperature ranges (compensated):

Process: 77°F to 575°F (25°C to 300°C) optional to 660°F (350°C)

Electronics: 77°F to 176°F (25°C to 80°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: 0 to 32 second time constant, adjustable through HART communicator or SmartLink Software.

Power supply: 12 to 42 Vdc for non intrinsically safe; 12 to 30 Vdc for intrinsically safe.

LCD Display

Allows transducer to be configured and ranged at line before or after installation. Displays process pressure, 0 - 100% bar graph and temperature (optional).

Approvals

CE approved

FM approved, Explosion - Proof, Class I, Division I, Groups B, C and D, Class II/III, Division 2, Groups E, F and G (optional),

SIRA approved, Intrinsically Safe, EEx ia IIC (optional)

Resolution: 0.035% full scale or better

Zero span and adjustment: Zero: +84% of range; Span: 16% to 100% of range

Turn-down: 6:1

Overpressure limit: 1.5 x range

Sample rate: >10/sec

Long term stability: <0.09% of full scale per year

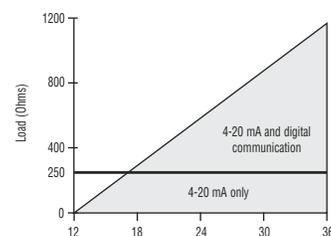


Temperature effects:

Electronics: $\pm 0.15\%$ span/99°F ($\pm 0.15\%$ span/55°C)

Electronics housing: IP66, NEMA 4x

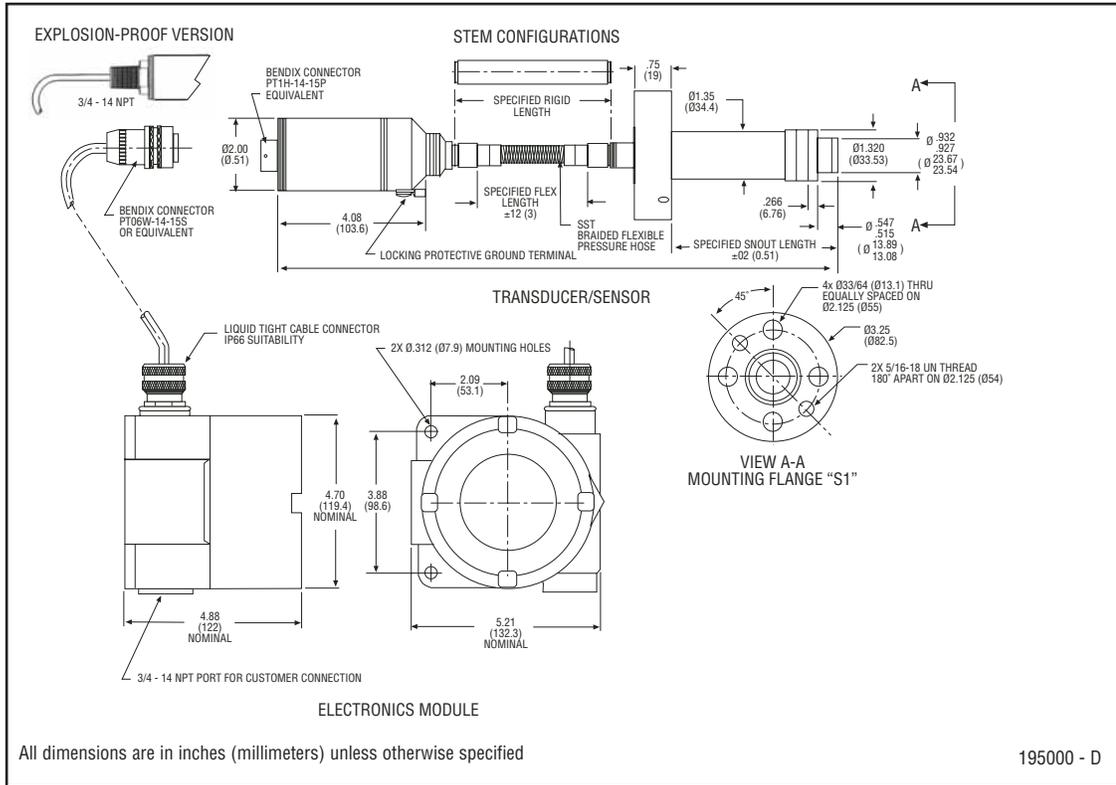
Load limitation: Maximum loop resistance is determined by the voltage of the external power supply. Digital communication requires a minimum loop resistance of 250 Ohms. (See sample below)



(Shown for standard unit without LCD display)

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Ordering Guide

Model	Diaphragm Material		Flange Type		Flange Options		Pressure Ranges				Snout Length	
	Code	Description	Code	Description	Code	Description	Code	psi	Code	bar	Code	Length
N2195: No Approvals S2195: Intrinsically Safe, EE x ia IIC E2195: Explosion-Proof Class 1, Division 1, Groups B, C and D Class II/III, Division 2, Groups E, F and G	(Blank)	15-5 PH SS with Dymax® coated diaphragm	(Blank)	Standard flange	(Blank)	Non-welded flange	7.5C	0 - 750	50B	0 - 50	2.4	2.4" (61)
			SX	Different flange type consult factory	W	Welded flange	1.5M	0 - 1,500	1CB	0 - 100	4.77	4.77" (121)
							3M	0 - 3,000	2CB	0 - 200	5	5" (127)
							5M	0 - 5,000	3.5CB	0 - 350	6	6" (152)
			H	Hastelloy			7.5M	0 - 7,500	5CB	0 - 500		
						10M	0 - 10,000	6.8CB	0 - 680			For non-standard lengths please consult factory.

Standard Stem (Capillary) Lengths		Temperature Output		LCD Display		Communication Protocol		Options		Cable Length	
Code	Length	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description
18	18" (457)	(Blank)	No second 4-20mA output	(Blank)	No display	H	HART configurable	M625	Full snout temperature compensated to 660°F (350°C)	(Blank)	120" (3048)
30	30" (762)	T	Second 4-20mA output	D2	Programmable dual LCD display					L72	72" (1829)
"R" after code refers to rigid. For non-standard lengths please consult factory Note: Max. "snout & capillary" lengths is 36" (914)										CE and intrinsically safe models are supplied with 72" (1824) of cable.	

All dimensions are in inches (millimeters) unless otherwise specified.

Ordering Example: N2195 - 10M - 6/18 - H - M625

- Notes:**
- Please consult factory for alternate full scale settings and available options.
 - Consult factory for different flange size and rating.
 - Mounting bracket P/N 190750 is recommended.
 - 10M units are compensated to at least 7.5M and extrapolated to 10M

