

DYNISCO MODEL 1194

Smart Pressure Transmitter for Flanged Mounting

Description

Dynisco's IPX II Series 1194 is a high performance, microprocessor based transmitter with ambient and sensor temperature compensation, featuring a thin film sensor and proprietary fabrication techniques. The Model 1194 provides the highest accuracy pressure measurement available in a 243 style 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 $\pm 0.15\%$ of range compensated for 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 - 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:

$\pm 0.15\%$ 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) ($\pm 0.25\%$ for 1500 psi range)

$\pm 0.25\%$ 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) ($\pm 0.50\%$ for 1500 psi range)

Hastelloy:

$\pm 0.30\%$ 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 1500 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 1500 psi range)

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 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)

Temperature effects:

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

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)

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).

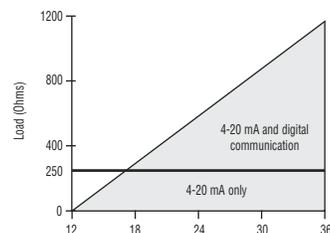
Approvals

CE approved

FM approved, Explosion - Proof, Class I, Division 1, Groups B, C and D,

Class II/III, Division 2, Groups E, F and G (optional),

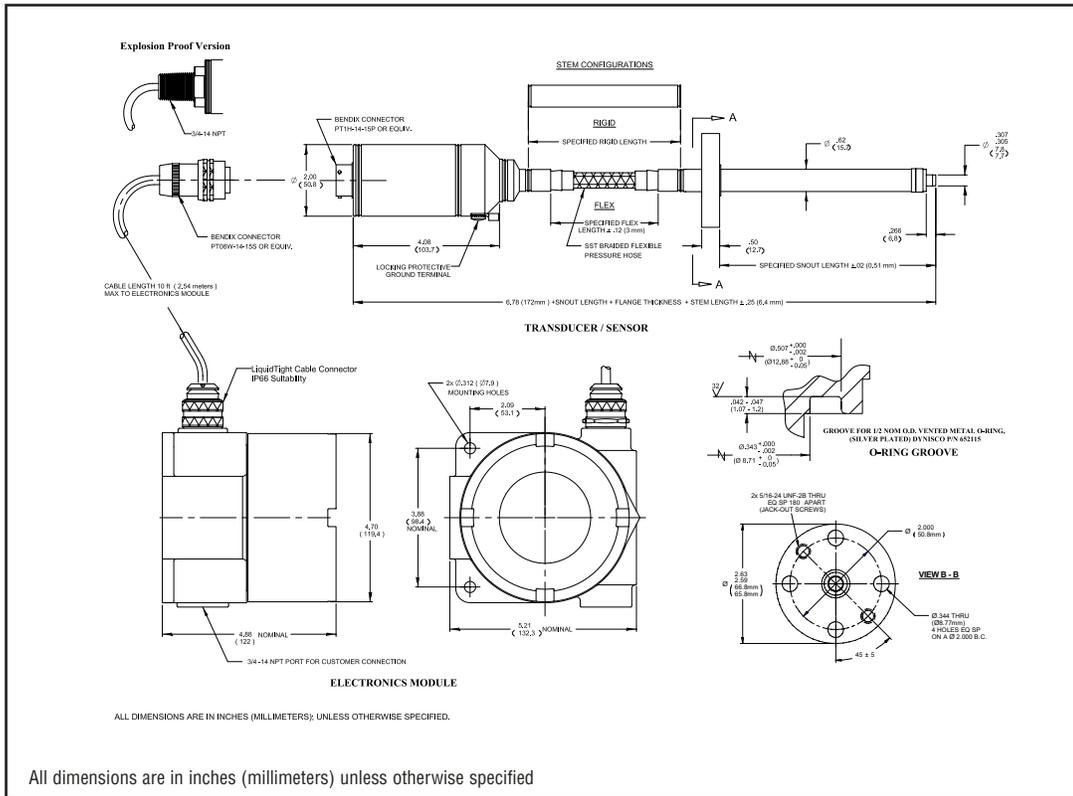
SIRA approved, Intrinsically Safe, EEx ia IIC (optional)



(Shown for standard unit without LCD display)

DYNISCO MODEL 1194

Smart Pressure Transmitter for Flanged Mounting



Ordering Guide

Model	Diaphragm Material		Pressure Range				Snout Lengths	
	Code	Description	Code	psi	Code	bar	Code	Length
N1194: No Approvals S1194: Intrinsically Safe EE x ia IIC E1194: 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 SST	1.5M	0 - 1,500	1CB	0 - 100	6	6" (152)
		with Dymax®	3M	0 - 3,000	2CB	0 - 200		
		coated diaphragm	5M	0 - 5,000	3.5CB	0 - 350		
			7.5M	0 - 7,500	5CB	0 - 500		
		H Hastelloy	10M	0 - 10,000	6.8CB	0 - 680		
							For non- standard lengths please consult factory.	

Standard Stem (Extension) Lengths		Temperature Output		LCD Display		Communication Protocol		Options		Cable Length	
Code	Length	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description
0	0" (0)	(Blank)	No second	(Blank)	No display	H	HART	M625	Full snout	(Blank)	120" (3048)
18	18" (457)		4-20mA output	D2	Programmable		configurable		temperature	L72	72" (1829)
30	30" (762)	T	Second		pressure and				compensated		
			4-20mA output		temperature				to 660°F		
					display				(350°C)		
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: E1194H - 3M - 6/18 - D2 - H

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

