DYNISCO MODEL 2194
Smart Pressure Transmitter for Flanged Mounting

Description
Dynisco’s IPX II series 2194 is a high performance, microprocessor based transmitter with ambient and sensor temperature compensation, featuring a thin film sensor and proprietary fabrication techniques. Series 2194 provides a high 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 ±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 preserve 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:
- ±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) (±0.50% for 1500 psi range)
- ±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) (±1.00% for 1500 psi range)

Hastelloy:
- ±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) (±1.00% for 1500 psi range)
- ±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.

Power supply:
- 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: ±0.15% span/99°F (±0.15% span/55°C)

Electronics housing: IP66, NEMA 4x
Lead 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 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)
# DYNISCO MODEL 2194

**Smart Pressure Transmitter for Flanged Mounting**

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

## Ordering Guide

<table>
<thead>
<tr>
<th>Model</th>
<th>Diaphragm Material</th>
<th>Pressure Range</th>
<th>Snout Lengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>N2194</td>
<td>No Approvals</td>
<td>15-5 PH SST</td>
<td>0 - 1,500</td>
</tr>
<tr>
<td></td>
<td>(Blank)</td>
<td>0 - 3,000</td>
<td>0 - 100</td>
</tr>
<tr>
<td>S2194</td>
<td>Intrinsically Safe</td>
<td>Dymax®</td>
<td>0 - 5,000</td>
</tr>
<tr>
<td>EE x is IIC</td>
<td>coated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E2194</td>
<td>Explosion-Proof</td>
<td>coated Hastelloy</td>
<td>0 - 7,500</td>
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<tr>
<td></td>
<td>Class 1, Division 1, Groups B, C and D</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Class II/III, Division 2, Groups E, F and G</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Standard Stem (Capillary) Lengths

<table>
<thead>
<tr>
<th>Code</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0’ (0)</td>
</tr>
<tr>
<td>18</td>
<td>18’ (457)</td>
</tr>
<tr>
<td>30</td>
<td>30’ (762)</td>
</tr>
</tbody>
</table>

**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.