

# 830, 850 & 860 Series General Purpose Pressure Sensors

*FLEXIBLE DESIGN*



## Description

Dynisco models 830, 850, and 860 general purpose transducers offer flexible design and a pressure measurement accuracy of  $\pm 0.50\%$  full scale output. Interchangeable configuration allows users to specify the pressure range, pressure port and output level that meet specific application requirements. A bonded strain gage sensor provides reliable operation in a wide range of industrial applications.

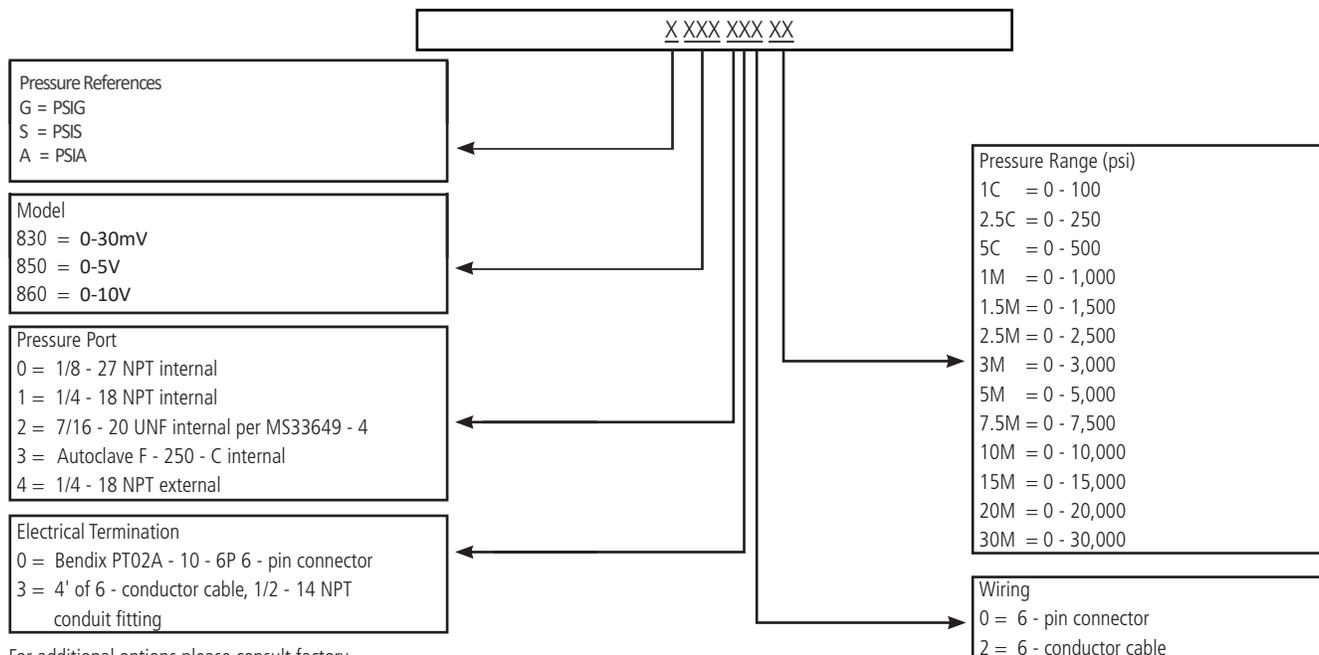
## Features

- Accuracy  $\pm 0.5\%$
- 3 mV/V, 5 Vdc and 10 Vdc outputs
- 0 - 100 to 0 - 30,000 psi
- Excellent temperature compensation
- Internal shunt calibration
- Bonded strain gage sensor

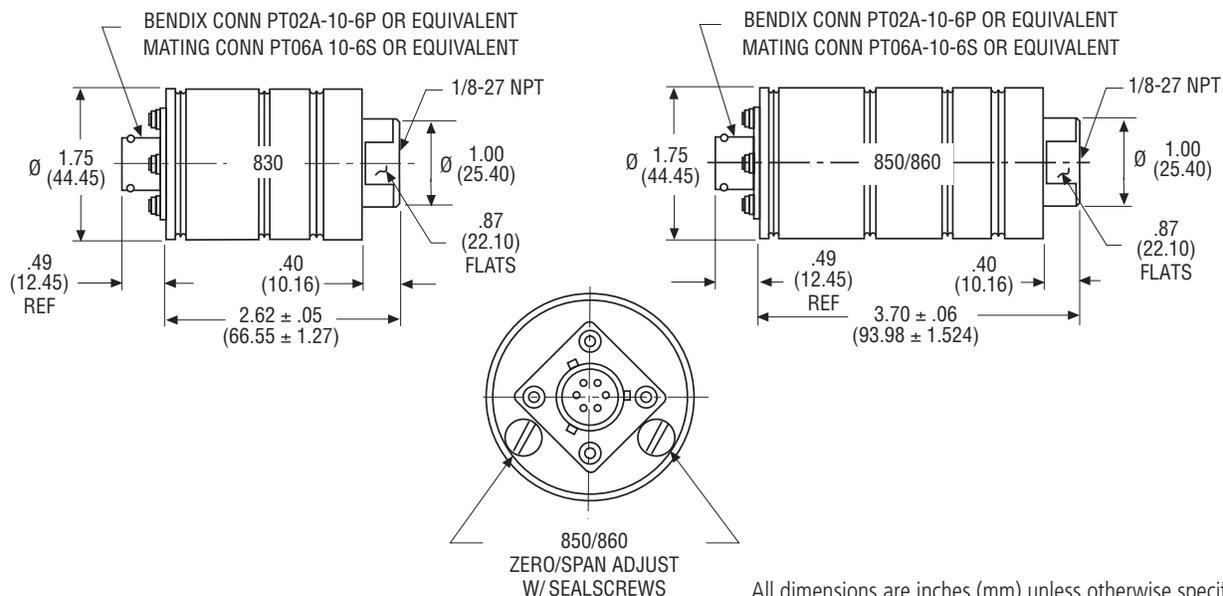
Performance Characteristics	
Pressure Range (psi):	0 - 100, 0 - 250, 0 - 500, 0 - 1,000, 0 - 1,500, 0 - 2,500, 0 - 3,000, 0 - 5,000, 0 - 7,500, 0 - 10,000, 0 - 15,000, 0 - 20,000, 0 - 30,000
Accuracy:	±0.5% FSO including linearity, hysteresis, and repeatability
Electrical Characteristics	
Full Scale Output:	830: 3 mV/V ±2.0% 850/860: 5 Vdc/10 Vdc
Input/Output Resistance:	830: 425 ±75 Ohms/375 ±25 Ohms
Zero Balance:	830: ±3% FSO
Zero And Span Adjustment:	850/860: ±5% FSO
Excitation:	830: 10 Vdc recommended, 15 Vdc maximum 850: ±12 to ±16 Vdc, 24 to 32 Vdc 860: ±14 to ±16 Vdc, 24 to 32 Vdc
Insulation Resistance:	830: 1,000 megohms @ 50 Vdc 850/860: 100 megohms @ 50 Vdc
Internal Shunt Calibration:	30/850/860: 80% ±0.5% FSO (typical) 80% ±1% FSO (maximum)
Input Current:	850/860: 45 mA (maximum) @ 2K load

Temperature Characteristics	
Operating Range:	830: -65° to +250°F (-54°C to +120°C) 850/860: -20° to +185°F (-29°C to +85°C)
Compensated Range	830/850/860: 0° to 150°F (-18°C to +66°C)
Temperature Effect On Zero:	830/850/860: ±0.01% full scale/°F (±0.018% full scale/°C) typical; ±0.02% full scale /°F (±0.036% full scale/°C) maximum
Temperature Effect On Span:	830: ±0.01% full scale/°F (±0.018% full scale/°C); 850/860: ±0.02% full scale /°F (±0.036% full scale/°C)
Mechanical Characteristics	
Safe Overpressure:	1.5 x rated pressure
Burst Pressure:	100 to 250 psi: 10 x rated pressure 500 to 3,000 psi: 5 x rated pressure 5,000 to 10,000 psi: 3 x rated pressure 15,000 to 30,000 psi: 2.5 x rated pressure
Wetted Material:	17 - 4 PH, 15 - 5 PH stainless steel
Cover Material:	303, 304 stainless steel
Weight:	850/860: Approximately 17 ounces; 830: 13 ounces

## Ordering Guide for 830, 850 & 860 Series



## Dimensions



All dimensions are inches (mm) unless otherwise specified.  
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 Refer to [www.dynisco.com](http://www.dynisco.com) for access to Operator Manual and other support documentation.  
 DS83560  
 Rev: 0117



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