DYNISCO MODELS 830, 850 & 860
General Purpose Pressure Transducers ±0.5% Accuracy

Description
Models 830, 831, 850, 851, 860 and 861 general purpose transducers offer flexible design and a pressure measurement accuracy of ±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 ±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

Benefits
- Reliable pressure measurement
- Direct input to supervisory control systems
- Choice of pressure ranges
- Better accuracy at operating temperature
- Easy set - up
- Proven technology



Specifications

Performance Characteristics
Ranges (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: *830/850/860:* 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)

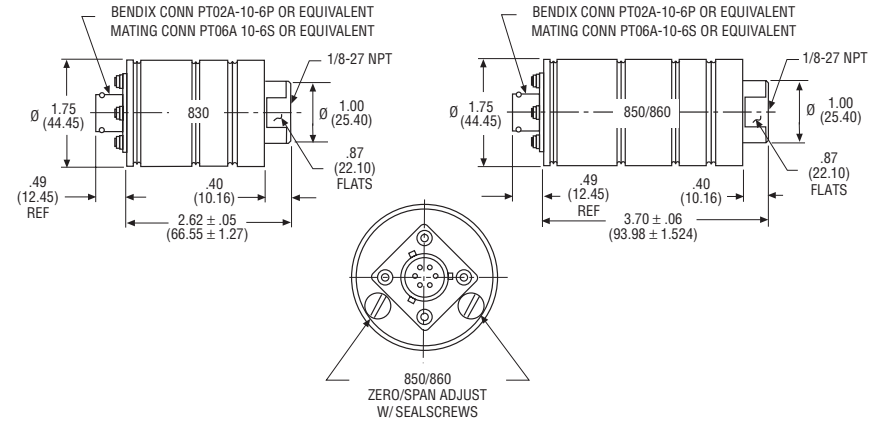
Mechanical Characteristics
Safe overpressure: 1.5 x rated pressure
Burst pressure:
100 to 250 psi: 10 x rated pressure
500 to 3,000 psi: 5 x rated pressure
5,000 to 10,000 psi: 3 x rated pressure
15,000 to 30,000 psi: 2.5 x rated pressure

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

CYRONIX INSTRUMENTATION & CONTROLS
12 Upjohn Road Unit 5
Don Mills Ontario
M3B 2V9
Tel: 416 444-6614
Fax: 416 444-0353
Toll Free: 1 888-CYRONIX
www.cyronix.com

DYNISCO MODELS 830, 850 & 860

General Purpose Pressure Transducers ±0.5



All dimensions are in inches (millimeters) unless otherwise specified

Ordering Guide

Model	Pressure Port		Electrical Termination		Wiring		Pressure Range (psi)	
	Code	Description	Code	Description	Code	Wiring	Code	Range
							1C	0 - 100
							2.5C	0 - 250
							5C	0 - 500
							1M	0 - 1,000
	0	1/8 - 27 NPT internal	0	Bendix	0	6 - pin	1.5M	0 - 1,500
G830	1	1/4 - 18 NPT internal		PT02A - 10 - 6P		connector	2.5M	0 - 2,500
G850	2	7/16 - 20 UNF internal		6 - pin connector	2	6 - conductor	3M	0 - 3,000
G860		per MS33649 - 4	3	4' of 6 - conductor		cable	5M	0 - 5,000
	3	Autoclave F - 250 - C internal		cable, 1/2 - 14 NPT			7.5M	0 - 7,500
	4	1/4 - 18 NPT external		conduit fitting			10M	0 - 10,000
							15M	0 - 15,000
							20M	0 - 20,000
							30M	0 - 30,000

Options

Code	Description
K1	11 - point calibration documentation
K2	Overload stop, 100 - 500 psi only, provides safe overpressure of 5 x rated pressure
K93	Western Regional Strain Gage Committee (WRSGC) wiring code

Pressure Port

Range (psi)	Pressure Port
100 - 7,500	0, 1, 2, 4
10,000 - 30,000	3

Wiring Code

Pin	Cable	Function
A	Red	Signal +
B	Black	Signal -
C	White	Excitation +
D	Green	Excitation -
E	Blue	Shunt calibration
F	Orange	Shunt calibration

Ordering Example: G830 - 000 - 3M

CYRONIX INSTRUMENTATION & CONTROLS

12 Upjohn Road Unit 5
Don Mills Ontario
M3B 2V9

Tel: 416 444-6614
Fax: 416 444-0353
Toll Free: 1 888-CYRONIX

www.cyronix.com