

DYNISCO MODELS 840 & 841

Amplified Pressure Transmitters for Hazardous Areas

Description

The models 840 and 841 pressure transmitters have certified versions for use in hazardous areas, with explosion - proof and ATEX/intrinsically safe models available. These 2 - wire transmitters convert pressure to a 4 to 20 mA signal for easy interface with process control instrumentation, while the compact design simplifies installation. A sour gas service option conforms to NACE standard MR - 01 - 75.

Features

- Accuracy of $\pm 0.5\%$ (840), $\pm 0.25\%$ (841)
- Explosion - proof and ATEX/intrinsically safe models
- Loop powered, 4 to 20 mA output
- Welded, stainless steel construction
- Encapsulated electronics
- Ranges to 60,000 psi

Benefits

- Reliable pressure measurement
- Hazardous area certification available
- Output to DCS or computer systems
- For use in hostile environments
- Stable pressure signal
- Measurement at high pressures



Specifications

Performance Characteristics

Ranges (psi): 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, 0 - 35,000, 0 - 40,000, 0 - 50,000, 0 - 60,000
Other ranges available. Please consult factory.

Accuracy:

840: $\pm 0.5\%$ psi
841: $\pm 0.25\%$ psi including linearity, hysteresis and repeatability

Electrical Characteristics

Full scale output: 4 to 20 mA, 2 - wire
Input voltage: 12 to 36 Vdc
Insulation resistance: 100 megohms @ 50 Vdc

Zero balance $\pm 2\%$ FSO
Zero adjustment: $\pm 5\%$ FSO
Span adjustment: $\pm 5\%$ psi
Loop resistance: 0 - 1,200 Ohms from 12 to 36 Vdc

Temperature Characteristics

Operating range: -20° to $+185^{\circ}$ F (-29° C to $+85^{\circ}$ C)
Compensated range: 0° to $+150^{\circ}$ F (-18° C to $+66^{\circ}$ C)
Temperature effect on zero:
840: $\pm 0.01\%$ full scale/ $^{\circ}$ F ($\pm 0.018\%$ full scale/ $^{\circ}$ C) typical
 $\pm 0.02\%$ full scale/ $^{\circ}$ F ($\pm 0.036\%$ full scale/ $^{\circ}$ C) maximum
841: $\pm 0.005\%$ full scale/ $^{\circ}$ F ($\pm 0.009\%$ full scale/ $^{\circ}$ C)

Temperature effect on span:
840: $\pm 0.02\%$ full scale/ $^{\circ}$ F ($\pm 0.036\%$ full scale/ $^{\circ}$ C)
841: $\pm 0.005\%$ full scale/ $^{\circ}$ F ($\pm 0.009\%$ full scale/ $^{\circ}$ C)

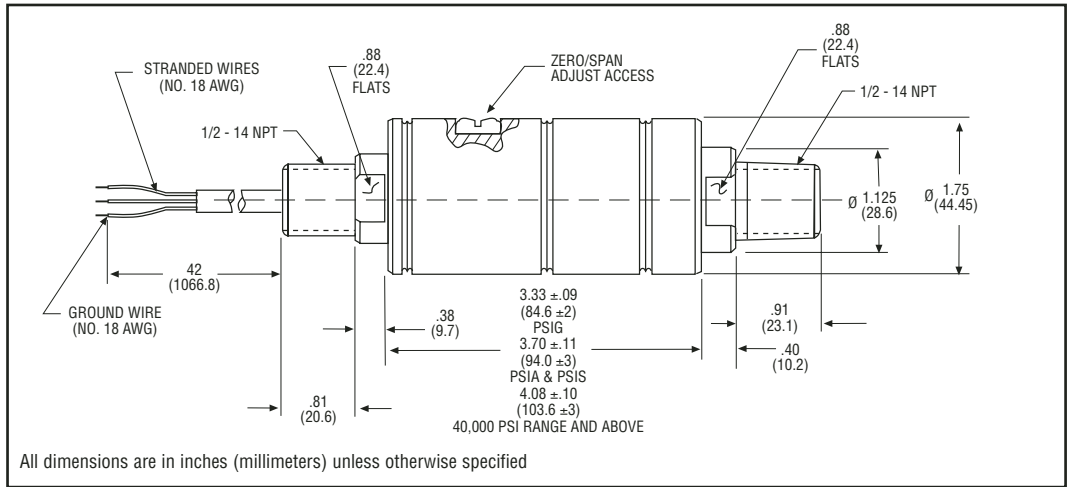
Mechanical Characteristics

Safe overpressure: 250 - 30,000 psi: 1.5 x rated pressure
35,000 - 60,000 psi: 1.2 x rated pressure
Burst pressure:
250 psi: 10 x rated pressure
500 - 3,000 psi: 5 x rated pressure
5,000 - 10,000 psi: 3 x rated pressure
15,000 - 30,000 psi: 2.5 x rated pressure
40,000 - 60,000 psi: 1.5 x rated pressure

Wetted material: 17 - 4 PH, 15 - 5 PH stainless steel
Cover material: 303, 304 stainless steel
Weight: Approximately 17 ounces

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Pressure Transmitters for Hazardous Areas



Note: Shown with 1/2 - 14 NPT external pressure port

Ordering Guide

Pressure Reference		Model	Approval		Pressure Port	
Code	Description		Code	Description	Code	Description
G	Gage	840	(blank)	No Approvals	0	1/8-27 NPTF Internal (up to 20000 psi)
S	Sealed	(+/- 0.5%)	E	Explosion Proof	1	1/4-18 NPTF Internal (up to 20000 psi)
A	Absolute	841	S	ATEX Approved Intrinsically Safe	2	7/16-20 NPTF Internal (up to 20000 psi)
		(+/- 0.25%)			3	F-250-C Autoclave (up to 60000 psi)
					4	1/4-18 NPTF External (up to 10000 psi)
					5	1/2-14 NPTF External (up to 10000 psi)
					6	7/16-20 UNF External (up to 7500 psi)
					7	R1/4 Metric (up to 10000 psi)
					8	3/4-16 UNF External (up to 10000 psi)
					A	1/2-14 BSP External (up to 40000 psi)
					B	1/2-14 NPSM External (up to 60000 psi)
					C	F-562-C Autoclave (up to 60000 psi)
					D	1" BSP Internal (up to 30000 psi)
					G	F-375-C Autoclave (up to 60000 psi)

Electrical Termination		Wiring		Pressure Range (PSI)	
Code	Description	Code	Description	Code	Description
0	PT02A-10-6P Connector	0	Pin A (+)	2.5C	0 - 250
1	PT02H-10-6P Connector		Pin B (-)	5C	0 - 500
4	1/2-14 NPT Conduit with 2 Wire 42" Leads	4	Red (+)	7.5C	0 - 750
			Black (-)	1M	0 - 1000
				1.5M	0 - 1500
				2.5M	0 - 2500
		9	Special C.F.	3M	0 - 3000
				5M	0 - 5000
				7.5M	0 - 7500
				10M	0 - 10000
				15M	0 - 15000
				20M	0 - 20000
				30M	0 - 30000
				35M	0 - 35000
				40M	0 - 40000
				50M	0 - 50000
				60M	0 - 60000

Delivery & Options

Please call for specific delivery information.