

DYNISCO MODELS E243 & S243

Flange Stem Melt Pressure Transmitters for Hazardous Locations

Description

Models E243 and S243 are flanged stem versions of the 242 series. They are designed for use in hazardous locations where explosive gases are present. The E243 is a conduit fitting style unit that carries Factory Mutual (FM) explosion - proof approval. The S243 is FM and SIRA approved for intrinsically safe and is available in a conduit fitting or 6 or 8 pin connector version. Approvals are for Class I, Division I, Groups A, B, C and D.

Features

- Better than $\pm 0.25\%$ accuracy
- FM explosion-proof or FM/SIRA intrinsically safe
- Flange mounting
- 4 to 20 mA loop - powered output
- 0 - 250 to 0 - 30,000 psi
- Side zero and span adjustments
- Welded electronics housing
- Signal meets IEC801 - 3 standard
- Thermocouple or RTD option, intrinsically safe model S243 only
- Conduit fitting only Model E243, Model S243 has conduit or 6 or 8 pin connector

Benefits

- Precise pressure measurement
- Only unit of its type approved for hazardous areas
- Easy removal from process
- Output to DCS or computer system
- Choice of pressure ranges
- Convenient access, easy to use
- Extra rugged
- Broad spectrum RFI/EMI immunity
- Temperature measurement alternatives

- Choice of electrical connections



Note: E Series models carry FM explosion-proof approvals (standard unit), S Series models have FM/SIRA intrinsically safe approval only.

Specifications

Performance Characteristics

Ranges (psi): 0 - 500, 0 - 750, 0 - 1,000, 0 - 1,500, 0 - 3,000, 0 - 5,000, 0 - 7,500, 0 - 10,000, 0 - 15,000, 0 - 20,000, 0 - 30,000
Accuracy: $\pm 0.25\%$ FSO (0.5% for 500, 750 and 1,000 psi ranges)
Repeatability: $\pm 0.1\%$ FSO

Mounting torque: 40 inch - lbs. maximum

Maximum pressure: 2 x full range or 35,000 psi (whichever is less)

Material in contact with pressure media: 15 - 5 PH stainless steel, DyMax™ coated

Weight: 3 lbs.

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Electrical Characteristics

Output: 4 to 20 mA

Input voltage: 12 to 36 Vdc

Electrical termination: 1/2 to 14 NPT conduit fitting with 42" (1.15m) long lead wires

Optional: 6 or 8 pin connector (model S243 only)

Zero balance adjustment range: -40% to +10%; -80% to +20% for <500 psi

Gain span adjustment range: -10% to +50%

Load resistance: 1,200 Ohms maximum at 36 Vdc, 600 Ohms maximum at 24 Vdc

Temperature Characteristics

Transducer diaphragm:

Maximum diaphragm temperature: 750°F (400°C)

Zero shift due to temperature change: 15 psi/100°F typical (27 psi/100°C)

Electronics housing:

Operating temperature range: -20°F to +185°F (-29°C to +85°C)

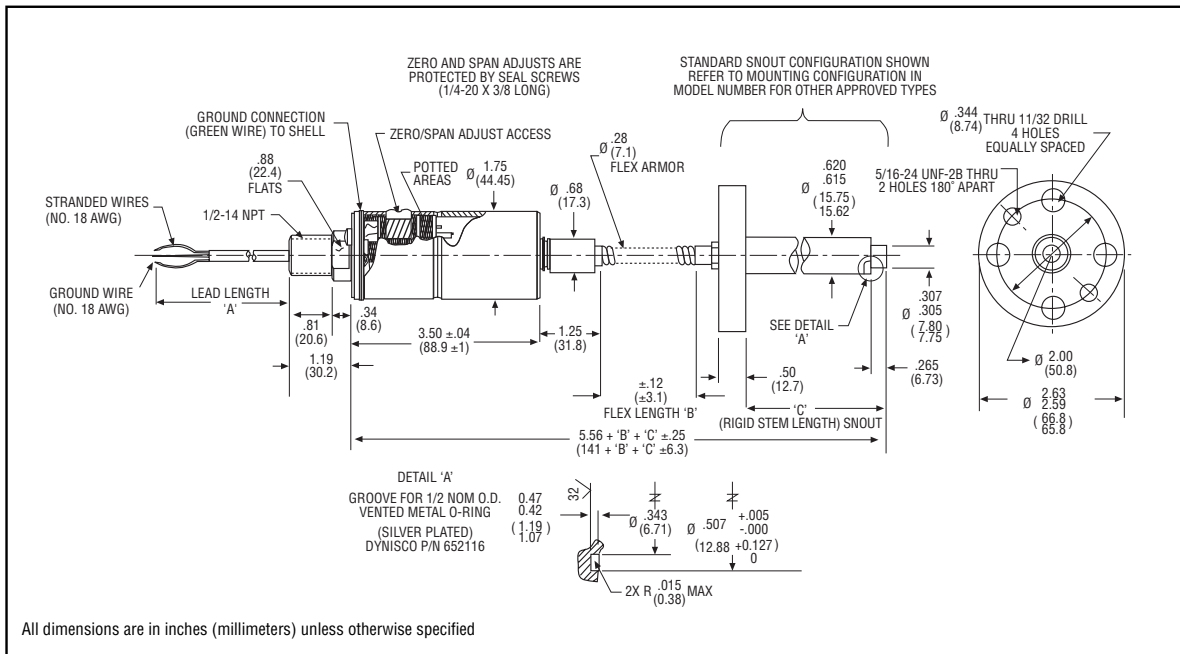
Temperature effects over a compensated temperature range of 0 to +150°F (-18°C to +65°C):

Zero: 0.01% full scale/°F maximum (0.02% full scale/°C maximum)

Span: 0.01% full scale/°F maximum (0.02% full scale/°C maximum)

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Ordering Guide

Model	Diaphragm and Material Coating		Mounting Configuration	
	Code	Material/Coating	Code	Mounting
E243 (FM Explosion - proof)	(Blank)	15 - 5 PH SST with DyMax™ coating	(Blank)	Standard flange (as shown)
	B	15 - 5 PH SST with Borofuse coating	FX	Additional flange types (FM and i.e. F1, F2, etc.)
	H	Hastelloy		Please consult factory
	I	Inconel		Standard flange as shown
S243 (FM and SIRTA Intrinsically Safe)	T	15 - 5 PH SST with Titanium Nitride Coating	Blank	

Pressure Range (psi)		Rigid Stem		Flexible Stem		Lead Length	Electrical Connection		Thermocouple/RTD	
Code	Range	Code	Length	Code	Length		Description	Conduit Fitting w/Cable	Connectors	Code
2.5C (M18)	0 - 250					42" (standard)	Conduit fitting	C6 = PT02A-10-6P	TC	J
5C	0 - 500					Additional lengths available up to 999"	with cable	C6G = PT02H-10-6P		(Model S242 only)
7.5C	0 - 750						42" (standard)	C6H = PT1H-10-6P		
1M	0 - 1,000							C7D = DIN 7 pins		
1.5M	0 - 1,500	3	3"				Additional lengths available up to 999"	C7T = TAJIMI		
3M	0 - 3,000	4	4"					C8 = PC02E-12-8P		
5M	0 - 5,000	6	6"	30	30"					
7.5M	0 - 7,500	9	9"							
10M	0 - 10,000	12	12"							
15M	0 - 15,000									
20M	0 - 20,000									
30M	0 - 30,000									

Note: 1. Consult factory for available options and alternate full scale settings
 2. Model PT253 (0 - 5 Vdc output) and model PT263 (0 - 10 Vdc output) also available. Please consult factory.

Ordering Examples: E243 - 5C - 6/18; S243 - 5M - 6/30 - C6H; S243 - 1M - 6/30 - C6 - TC