

# **SPX-T Series Model 3342**

1/2-20 UNF Thread-Mounted Pressure Transmitter with Temperature Compensation



## **Features**

- 1/2-20 UNF thread pressure transmitter
- Reduce temperature drift by ~80% over non-compensated units
- Accuracy to ±0.15% FS
- Temperature output available (RTD or 4-20mA)
- HART<sup>™</sup> digital communications
- 0-500 to 0-10,000psi range options
- Rugged welded electronics housing

# **Description**

The SPX-T is a smart 4-20mA pressure transmitter that includes Temperature Compensation and DynaLarity™, a Dynisco innovation. The SPX-T delivers the best spec performance in the line. Temperature Compensation is based on an RTD measurement that compensates for temperature variations which reduces temperature-related drift and increases accuracy. No need to re-zero for temperature changes after installation. DynaLarity uses an advanced algorithm that will linearize offsets due to process effects on the sensor. Combined Temperature Compensation and DynaLarity reduces temperature-related drift by as much as 80% and improves accuracy by more than 60% over other sensors. Process temperature output is available. HART communication is standard. The SPX3342 is an all-welded construction that features a 1/2-20 UNF thread for installation in standard transducer mounting holes. Many other threaded configurations are available.









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### **Specifications**

#### PERFORMANCE CHARACTERISTICS

Voltage Input: 13-32Vdc (IS, EX versions: 13-30Vdc)

Output, analog: 4-20mA

(pressure std; temp. optional)

Output, digital: HART

**Accuracy\*:** ±0.15% FS (≥3M)

±0.25% FS (1.5M) ±0.50% FS (<1.5M)

**Repeatability:**  $\pm 0.1\%$  FS **Electronics Ambient Temp (T**<sub>Ambient</sub>):  $\pm 0.1\%$  FS  $70^{\circ}$ F (20°C)

Electronics Operating Temp:-20 to +185°F (-29 to 85°C)Electronics Compensated Temp. Range:70 to 185°F (20 to 85°C)Snout Operating Temp:32 to 752°F (0 to 400°C)Snout Compensated Temp. Range:70 to 572°F (20 to 300°C)

**Overload Pressure Rating:** 1.5x FS

Range: 500 to 10,000psi Rangeabilty: 6:1 turndown

**Load Resistance:** 250Ω @18Vdc; 500Ω @23Vdc

#### **MECHANICAL & PACKAGING**

**Diaphragm Temperature Limit:** 752°F (400°C), max **Mounting Torque:** 500 in/lbs, max

Wetted Parts: DyMax<sup>™</sup> coated 15-5 PH SST diaphragm

Weight, net (typical): 4 lbs (1.8 Kg)

**Display:** Model SPXD loop-powered display

available

#### **APPROVALS & CERTIFICATIONS**

Marks, Certifications, Registrations: CE, CE-PED

**Agency Approvals:** 

FM (EX), conduit fitting:

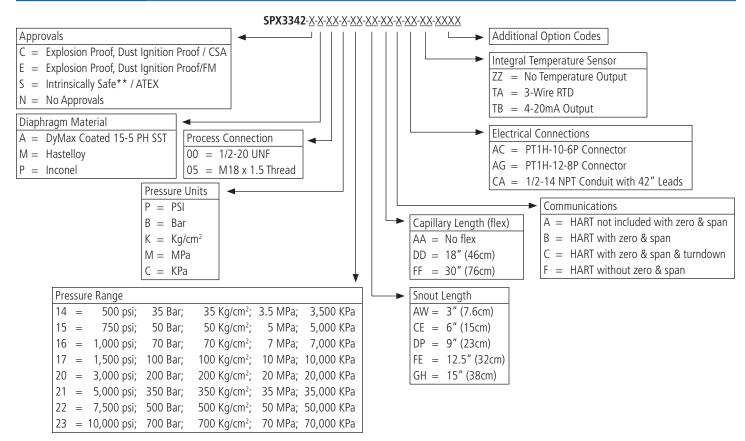
(Explosion Proof) Class I, Div 1, Groups A, B, C, D (Dust Ignition Proof) Class II & III, Div 1, Groups E, F, G

CSA (EX), conduit fitting:

(Explosion Proof) Class I, Div 1, Groups B, C, D (Dust Ignition Proof) Class II & III, Div 1, Groups E, F, G

ATEX (IS): (Intrinsically Safe) II 1 G Ex ia IIC

# **Ordering Guide**



<sup>\*</sup>Accuracy is defined as the combined error expressed as a percentage of full scale (FS) output with the above specifications of: Electronics ambient temp; Snout compensated temperature range; Capillary of \( \leq 36"; Dymax coated 15-5 SST diaphragm; Best Straight Line (BSL) % FS, per ISA-37.3. Consult factory for availability and specifications of non-standard configurations.

