

# 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  $\pm 0.15\%$  FS
- Temperature output available (RTD or 4-20mA)
- HART™ 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.



## Specifications

### PERFORMANCE CHARACTERISTICS

<b>Voltage Input:</b>	13-32Vdc (IS, EX versions: 13-30Vdc)
<b>Output, analog:</b>	4-20mA (pressure std; temp. optional)
<b>Output, digital:</b>	HART
<b>Accuracy*:</b>	±0.15% FS (≥3M) ±0.25% FS (1.5M) ±0.50% FS (<1.5M)
<b>Repeatability:</b>	±0.1% FS
<b>Electronics Ambient Temp (T<sub>Ambient</sub>):</b>	70°F (20°C)
<b>Electronics Operating Temp:</b>	-20 to +185°F (-29 to 85°C)
<b>Electronics Compensated Temp. Range:</b>	70 to 185°F (20 to 85°C)
<b>Snout Operating Temp:</b>	32 to 752°F (0 to 400°C)
<b>Snout Compensated Temp. Range:</b>	70 to 572°F (20 to 300°C)
<b>Overload Pressure Rating:</b>	1.5x FS
<b>Range:</b>	500 to 10,000psi
<b>Rangeability:</b>	6:1 turndown
<b>Load Resistance:</b>	250Ω @18Vdc; 500Ω @23Vdc

\*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 ≤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.

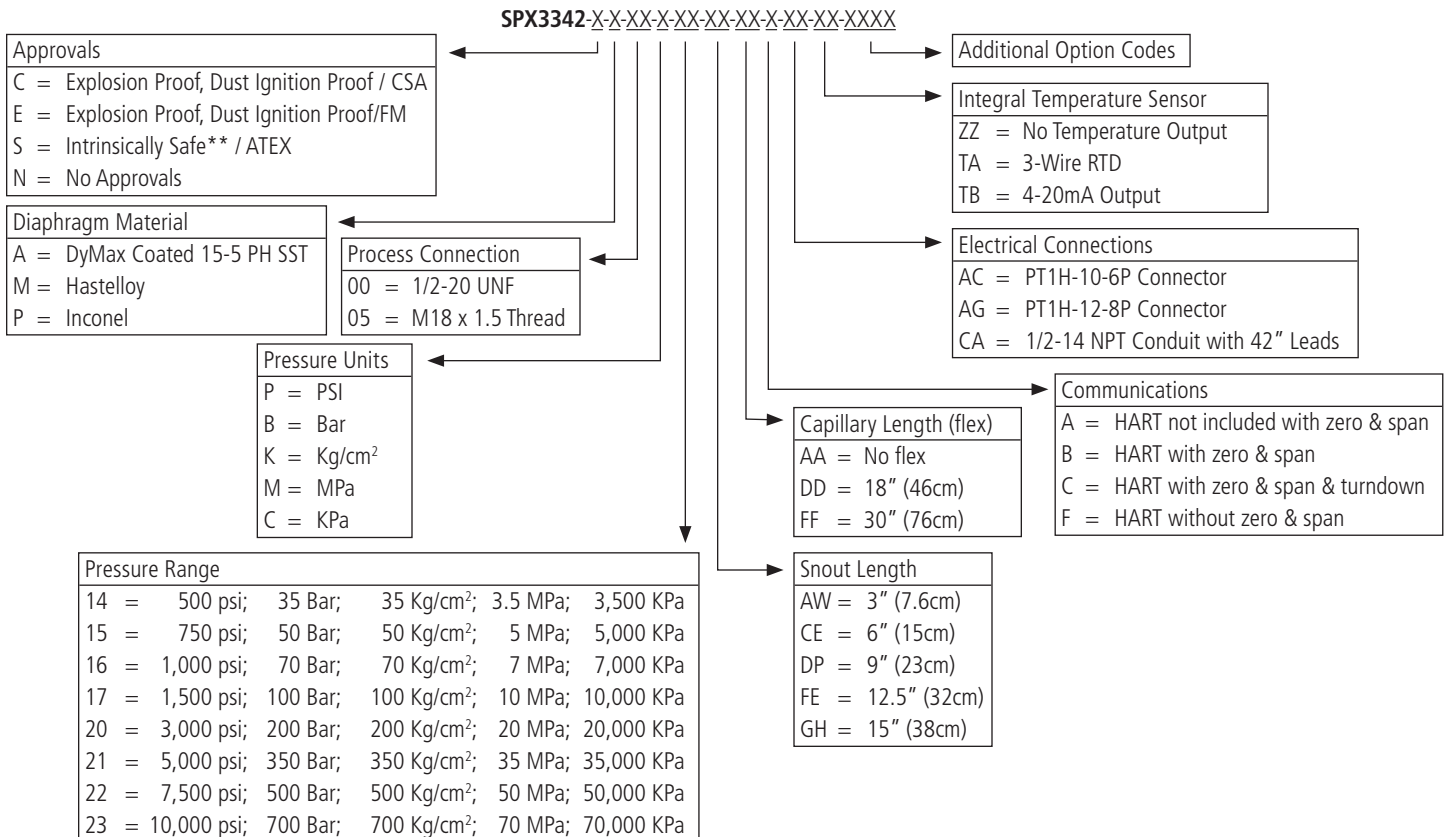
### MECHANICAL & PACKAGING

<b>Diaphragm Temperature Limit:</b>	752°F (400°C), max
<b>Mounting Torque:</b>	500 in/lbs, max
<b>Wetted Parts:</b>	DyMax™ coated 15-5 PH SST diaphragm
<b>Weight, net (typical):</b>	4 lbs (1.8 Kg)
<b>Display:</b>	Model SPXD loop-powered display available

### APPROVALS & CERTIFICATIONS

<b>Marks, Certifications, Registrations:</b>	CE, CE-PED
<b>Agency Approvals:</b>	
FM (EX), conduit fitting: (Explosion Proof) (Dust Ignition Proof)	Class I, Div 1, Groups A, B, C, D Class II & III, Div 1, Groups E, F, G
CSA (EX), conduit fitting: (Explosion Proof) (Dust Ignition Proof)	Class I, Div 1, Groups B, C, D Class II & III, Div 1, Groups E, F, G
ATEX (IS): (Intrinsically Safe)	II 1 G Ex ia IIC

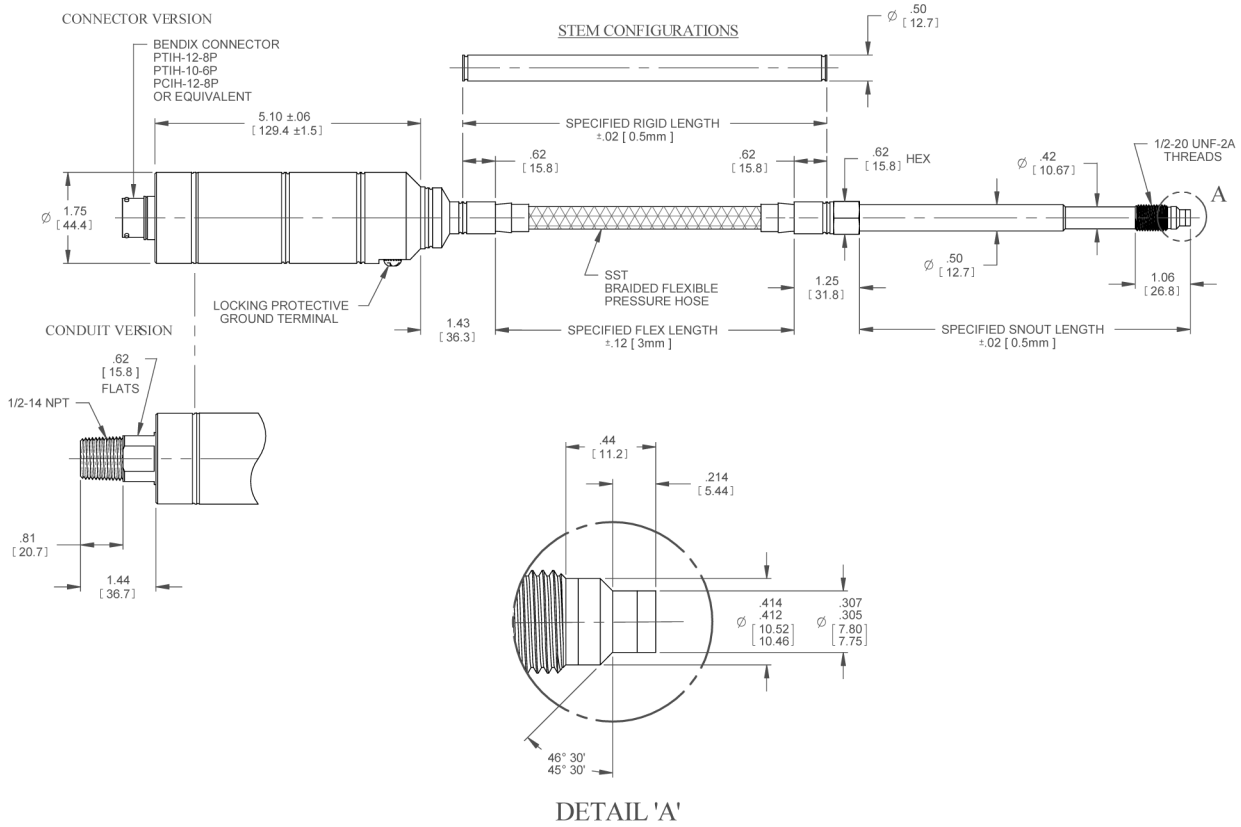
## Ordering Guide



Certain configurations cannot be combined on the same unit (example: Approval "E" and Electrical Connections "AC" or "AG" are not compatible). The Ordering Guide shows only a sample of configuration options. Contact Dynisco for additional options, pricing and lead times.

\*\*IS approved units requires separate purchase of IS approved cable. Contact Dynisco for part number and length.

ELECTRICAL CONNECTIONS



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.  
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