

SPX-T Series Model 3391

Button Seal Flange-Mount Pressure Transmitter with Temperature Compensation



Features

- Large diaphragm and mounting flange for easier installation
- 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 SPX3391 is an all-welded construction that features a large diaphragm and mounting flange for easier installations. Many other flange-mount configurations are available.

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: | ±0.1% FS |
| Electronics Ambient Temp (T_{Ambient}): | 70°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 |
| Rangeability: | 6:1 turndown |
| Load Resistance: | 250Ω @18Vdc; 500Ω @23Vdc |

MECHANICAL & PACKAGING

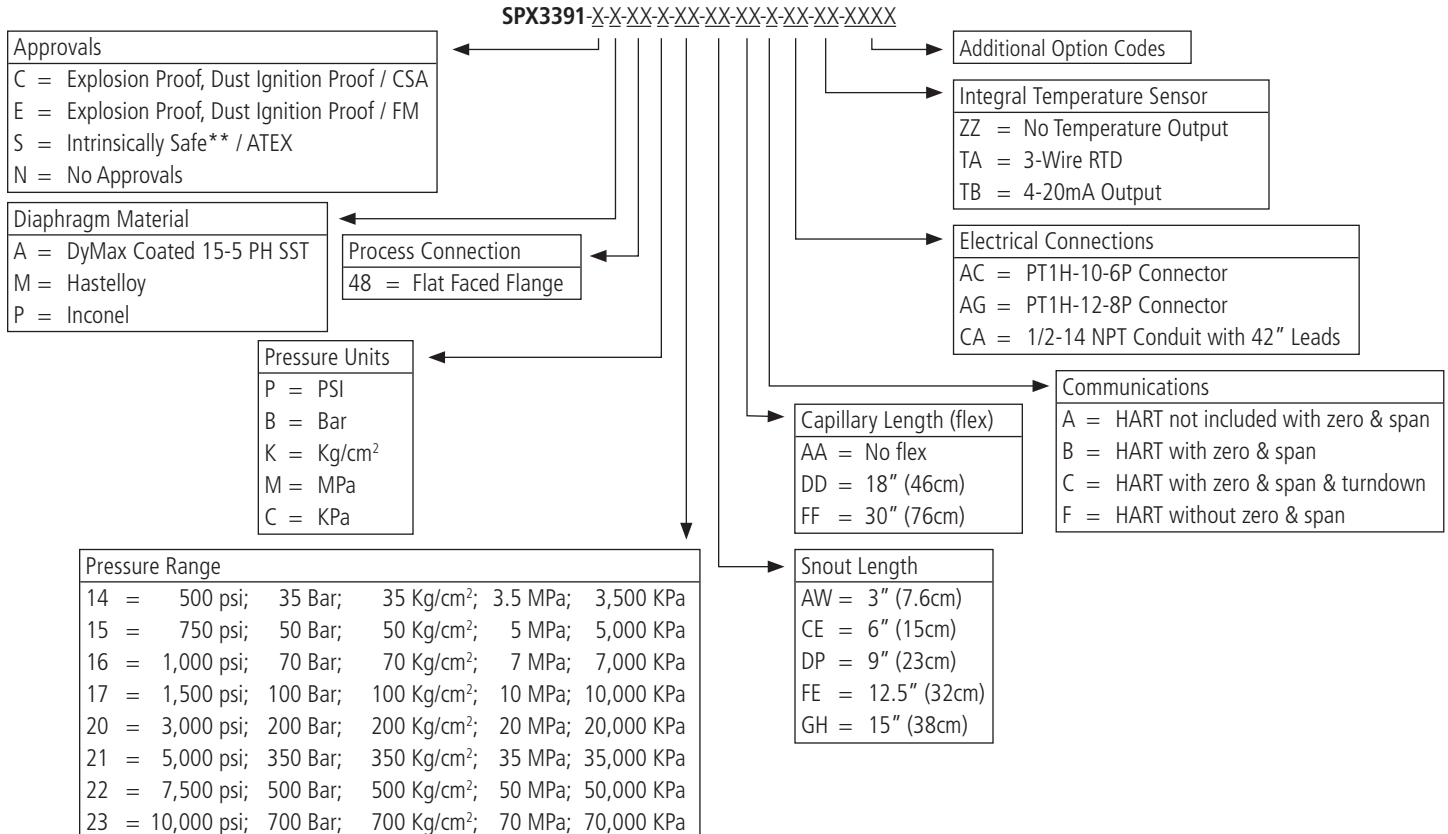
| | |
|-------------------------------------|---|
| Diaphragm Temperature Limit: | 752°F (400°C), max |
| Mounting Torque: | 125 in/lbs, max |
| Wetted Parts: | DyMax™ coated 15-5 PH SST diaphragm |
| Weight, net (typical): | 4 lbs (1.8 Kg) |
| Display: | Model SPXD loop-powered display available |

APPROVALS & CERTIFICATIONS

| | |
|--|--|
| Marks, Certifications, Registrations: | CE, CE-PED |
| Agency Approvals: | |
| FM (EX), conduit fitting: (Explosion Proof) (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 |

*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.

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

CONNECTOR VERSION

