

SPX-T Series Model 3291

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 $\pm 0.25\%$ 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 SPX3291 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*:	±0.25% FS (≥3M) ±0.50% FS (1.5M) ±0.75% 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

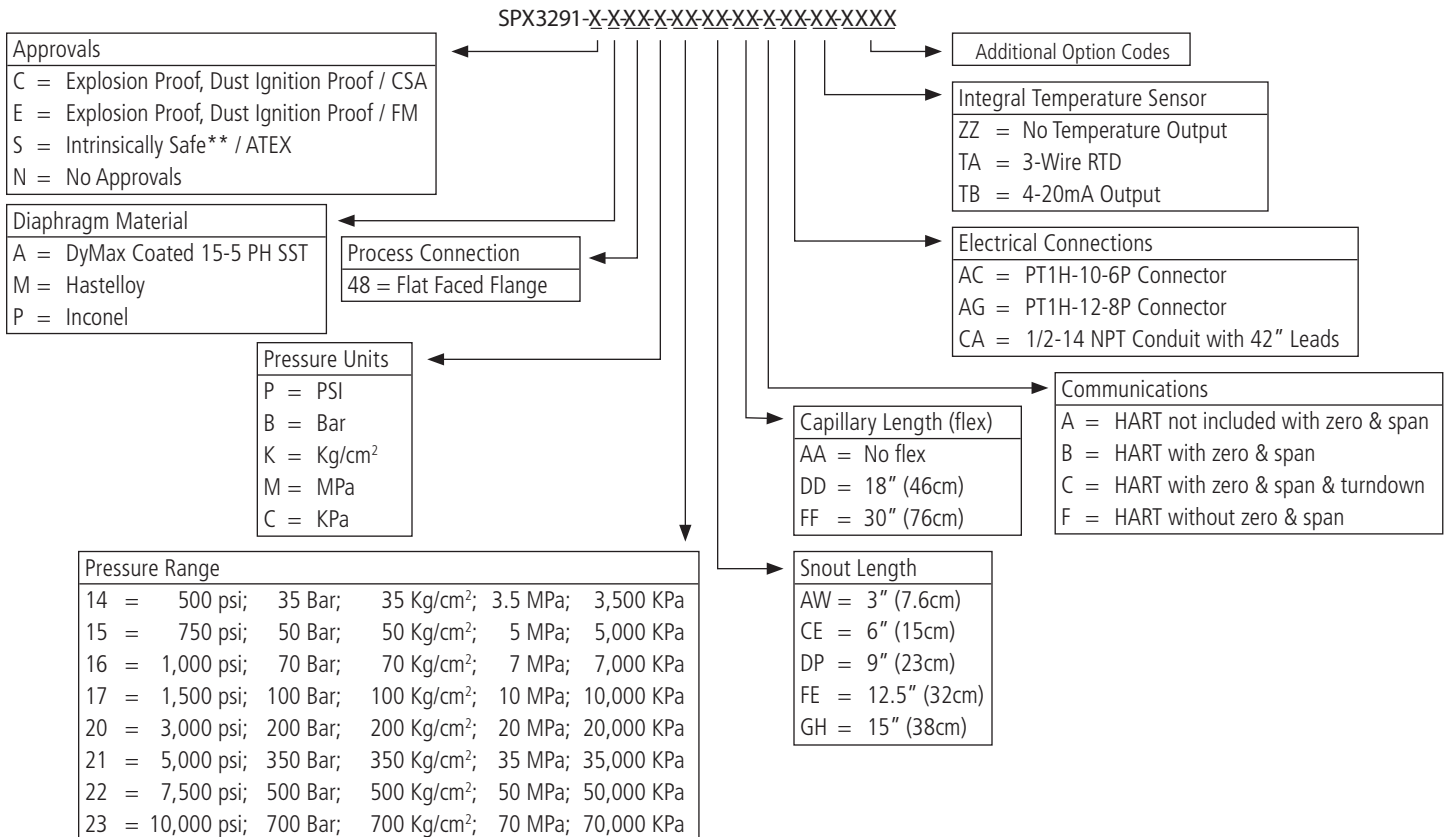
Diaphragm Temperature Limit:	752°F (400°C), max
Mounting Torque:	125 in/lbs, max
Wetted Parts:	DyMax™ coated 15-5 PH SST diaphragm
Weight, net (typical):	4 lbs (1.8 Kg)
Display:	Model SPXD loop-powered display available

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.

