

SPX-T Series Model 3390

Button Seal, Taylor Style Replacement Flange-Mount Pressure Transmitter with Temperature Compensation



Features

- Large diaphragm and optional split flange for easier installation
- Reduce temperature drift by ~80% over non-compensated units
- Accuracy to ±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 SPX3390 is an all-welded construction that features a large diaphragm with optional split 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: $\pm 0.1\%$ FS **Electronics Ambient Temp (T**_{Ambient}): $\pm 0.1\%$ FS $\pm 0.1\%$ FS

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:** 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:

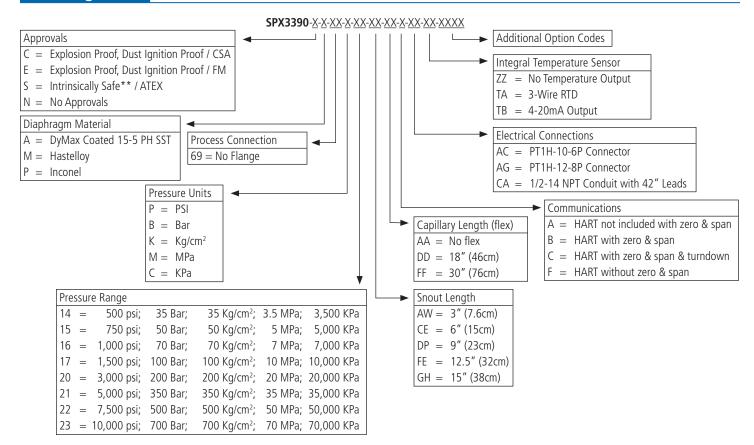
(Explosion Proof) Class I, Div 1, Groups A, B, C, D Class III, Div 1, Groups E, F, G

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



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.

^{*}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.

ELECTRICAL CONNECTIONS

