



## SPX2291



### Features

- HART™ digital communication
- Better than +/- 0.5% combined error
- 4 - 20 mA loop-powered output
- 0 - 25 to 0 -10,000 psi
- Explosion Proof, ATEX/Intrinsically Safe approved
- Meets PED and CE requirements

### Benefits

- Configurable via handheld
- Precise repeatable pressure measurements
- Output supplied directly to DCS or PLC
- Customer defined pressure ranges
- Approved for hazardous environments
- Meets new EC requirements

### Description

The SPX2291 is a smart 4 - 20 mA button seal pressure transmitter designed for use in hazardous locations. The SPX2291 is all welded construction that features a large diaphragm and mounting flange for easy installation. Optional thermocouple or RTD configurations are available to provide melt temperature. The SPX2291E has explosion proof approval for Class 1, Division I, Groups A, B, C & D. The explosion proof model employs a conduit fitting with 42" leads. The SPX2291S is ATEX/Intrinsically Safe approved for II 1 G 100a Eex ia IIC, Zones 0 and 1. The intrinsically safe and ATEX models can be supplied with either a conduit fitting or a hermetic 6 pin bendix connector.

### Specifications

#### PERFORMANCE CHARACTERISTICS

**Output:** 4 - 20 mA, with optional HART™  
**Input Voltage:** 16 - 36 Vdc (Standard)  
 16 - 30 Vdc (ATEX & Intrinsically Safe Applications)  
**Combined Error:** +/- 0.5% FSO  
 (Including Linearity, Repeatability & Hysteresis)  
**Repeatability:** +/- 0.1% FSO  
**Rangability:** 3:1 Turndown  
**Over Pressure:** 2 X FSO < 7,500 psi;  
 1.5 x FSO for 10,000 psi  
**Zero Balance Adjustment Range:** -40% to +10%;  
 -80% to +20% for < 500 psi  
**Gain Span Adjustment Range:** +/- 2% FSO maximum  
**Load Resistance:** 500 Ω @ 26 Vdc, 1000 Ω @ 36 Vdc

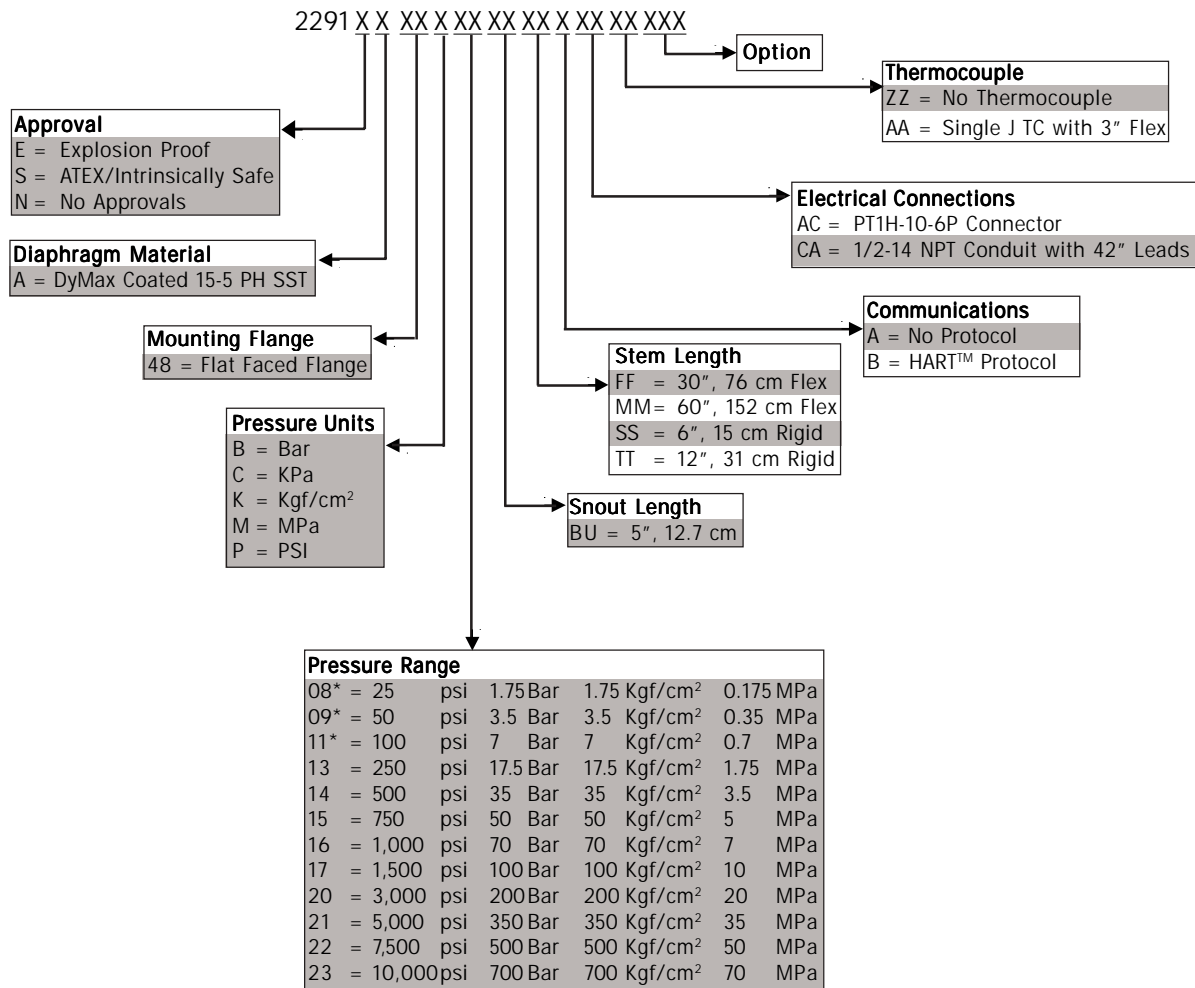
#### TEMPERATURE & MECHANICAL CHARACTERISTICS

**Max Diaphragm Temperature:** 600°F (315°C)  
**Zero Shift (due to temperature change):**  
 1 psi/100°F Typical (from 75 to 450°F)  
 2 psi/100°F Typical (from 450 to 600°F)  
**Electronics Operating Temperature:**  
 -20° to 185°F (-29° to 85°C)  
**Effects over Compensated Temperature Range of  
 0° to 150°F (-18° to 65°C) - Zero & Span (each):**  
 0.01% FS/°F max (0.02% FS/°C max)

**Mounting Bolt Torque:** 125 inch/lbs. maximum  
**Standard Wetted Parts:** DyMax™ coated 15-5 PH SST

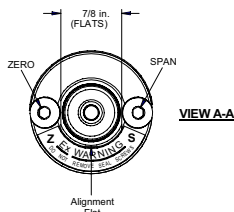
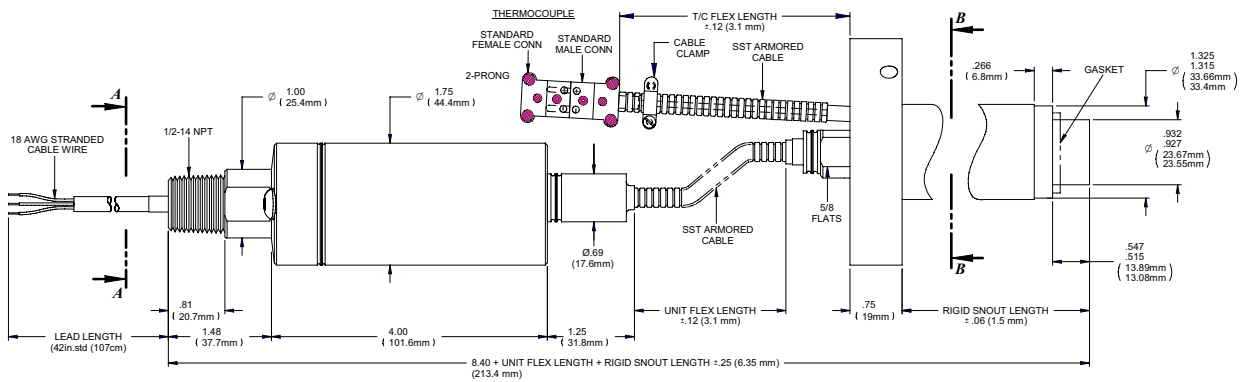
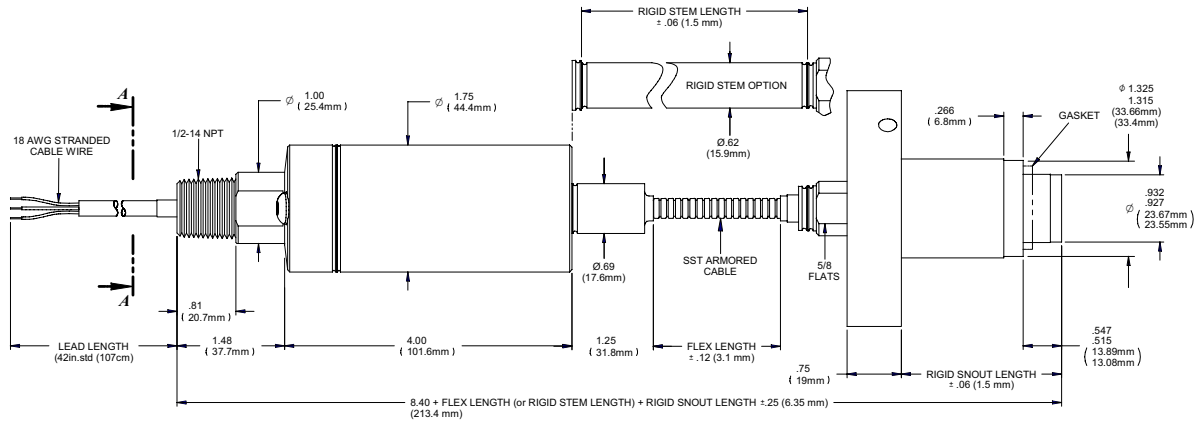


## Ordering Guide

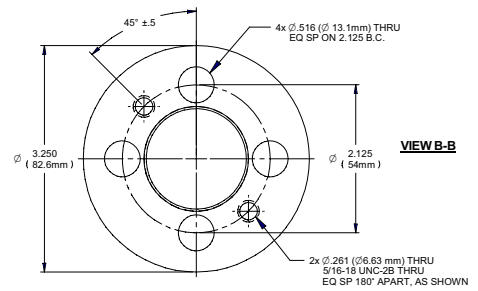


\*Pressure Ranges below 250 psi are supplied with rigid capillary.

Shaded sections refer to standard configurations. Accuracy may be affected if non-standard configurations are used. For additional options please consult factory.



Cable Wiring	
Color	Function
RED	E+
BLACK	E-
GREEN	GROUND
ORANGE	Rcal +
BLUE	Rcal -



All dimensions are inches (mm).