



**TEL-TRU MANUFACTURING CO.**

# **P143** Explosion Proof Pressure Transmitter

## Certified for Hazardous Locations

### Approved for hazardous locations

The P143 Pressure Transmitter is designed and approved for use in hazardous locations. The P143's entirely welded 316L SST construction is hermetically sealed making it ideal for the worst of pressure applications. CSA/CUS Explosion Proof certified for Class I Div 1 and Class I Div 2 Groups A, B, C, D.

### Manufactured for reliable service in aggressive environments

The P143 is manufactured for reliability in aggressive environments where other transmitters fail. Automated weld procedures, extreme environmental burn in, and the mounting of our electronics to withstand the most severe shock and vibration applications are all geared toward safety and reliability. Additional EMI/RFI filtering with surge protection add to the performance of the P143.

### Alternate materials for service in corrosive environments

For corrosive environments where 316L or 15-5 SST are not best suited, the P143 is available in Hasteloy C276, C22 or Inconel 718.

### NIST

Each P143 transmitter is shipped with a NIST traceable calibration certificate.

*mV/V, Vdc, mA<sub>dc</sub>  
outputs available*



### Standard Features

- Hermetically Sealed Package
- ±0.25% FSO Static Accuracy
- 0-100 psi through 0-20,000 psi

### Available Options

- ±0.1% FSO Static Accuracy
- ±0.5% FSO Thermal Error Band
- Hasteloy or Inconel alt. materials
- Low power

SST, Hasteloy, or Inconel wetted parts



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# P143 Explosion Proof Pressure Transmitter

0-100 psi through 0-25,000 psi  
Low-Cost Explosion Proof Process Transmitter

## Product Specifications

### Electrical

Excitation	P143C	2-15 Vdc
	P143A & P143B	8-38 Vdc*
Output	P143C	1-2mV/V*
	P143B	0-5 Vdc*
	P143A	4-20 mAdc
Zero Balance		±1% FSO
FSO Setting		±1% FSO
Resolution		Infinite (±.001% FSO usable)
Response Time	P143C	< 1mS
	P143A & P143B	< 5 mS
Insulation Resistance		1000 MΩ @ 50 Vdc
Reverse Polarity		Protected
Warm-up		< 10 mS
Power Supply Effect (P143A & P143B)		±.002% FSO per V input
EMI/RFI		Internal Filtering (P143A & P143B)
Short Circuit Protected		Up to 40 Vdc (P143A & P143B)

### Certifications

CSA/CUS Explosion Proof Class I Div 1 Groups A, B, C, D  
CSA/CUS Explosion Proof Class I Div 2 Groups A, B, C, D  
Master Contract Number: 236039  
Certificate Number: 1815757

### Mechanical

Pressure Ranges	0-100 psi through 0-25,000 psi (Customer may specify any range/eng. unit FOC) (Absolute, vacuum, compound available options)
Proof Pressure	2X Full Scale*
Burst Pressure	5X Full Scale*
Materials	
Wetted Parts*	316 & 15-5 SST*
Non-wetted Parts	316 SST plus electrical connector*
Pressure Port	1/4"-NPT Female*
Electrical Connector	NEMA 4X cable exit with 24" of cable*
Dimensions	per outline below
Weight	nominal 15 oz

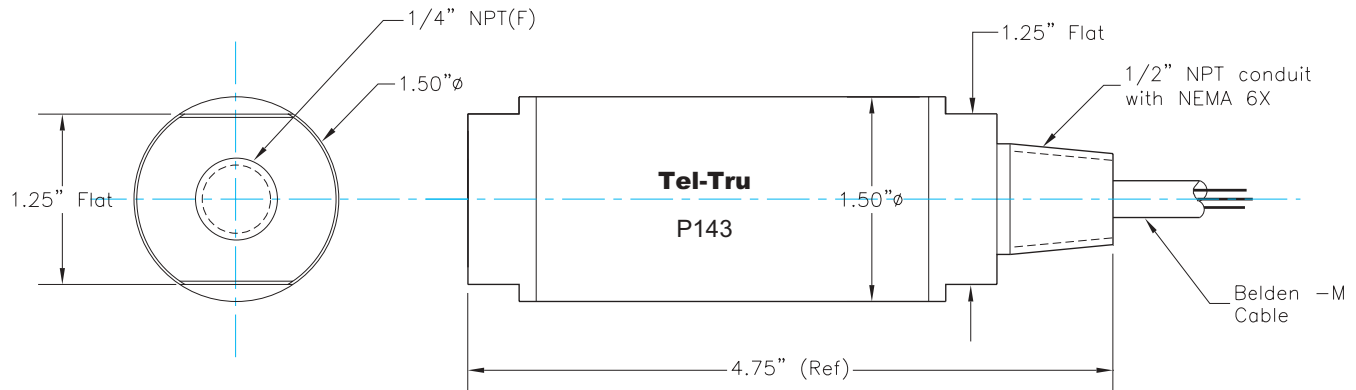
### Environmental

Compensated Temp Range	0 to 170 °F
Operating Temp Range	-40 to 200 °F
Storage Temp Range	-40 to 250 °F

### Performance

Static Accuracy	±0.25% FSO* (BFSL, RSS)* (combined effects of non-linearity, hysteresis & repeatability)
Repeatability	±0.1% FSO
Temperature Effects	±1.5% FSO over comp range* (combined effects of Zero & FSO with reference at 70°F)
Long Term Stability	±0.25% FSO per year

### \* Options Available



### Standard Wiring:

Model	Output	+ Power	- Power	+ Signal	- Signal
P143C	mV/V dc 4 wire	Red	Black	Green	White
P143B	0-5 (10) Vdc 3 Wire	Red	Black	Green	+Sig ref to - Power
P143A	4-20 mAdc 2 Wire	Red		Black	

Tel-Tru Manufacturing Co. reserves the right to change specifications without prior notification. Please contact the factory for the latest revision.

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