

P161

Ultra-High Pressure Transmitter



*Precision Grade--
Up to 100,000 psi High Pressure Measurement*

Designed for measurement of high pressure

Tel-Tru's P161 is designed for the OEM or end user where ruggedness, high performance, and reliability are required at a competitive price.

Key feature of the welded sensing element design is its small size, which greatly reduces the amount of force exerted by high pressure. The P161 is a one piece precision machined sensing element. This feature makes the P161 ideal for high-cyclical / high pressure applications.

Designed for high cycles

Manufactured for extended life cycle

The P161 is built using advanced manufacturing techniques, with automated weld procedures, extreme environmental burn-in and thorough residual stress relieving techniques. The P161 is modular and configurable to meet customers' exact requirements.

Ruggedized NEMA 4X packaging

Every P161 is rated to NEMA 4X standards regardless of pressure range or format. Pressure ranges are available from 0-60,000 psi through 0-100,000 psi.

Certification

Every P161 is shipped with a NIST traceable calibration certificate.

CE

Conforms to EN50081-2 and EN50082-2



NEMA 4X

Standard Features

- = ±0.5% FSO Static Accuracy*
- NEMA 4X Packaging*
- = ±0.25% FSO/YR Stability*

Available Options

- = ±0.25% or 0.1% FSO Static Accuracy*
- Zero/Span Controls with Cal*

Note: specifications are subject to change.



Tel-Tru Manufacturing Co.
408 St. Paul Street
Rochester, New York 14605 USA
Phone: 585-232-1440 • 800-232-5335 • Fax: 585-232-3857 • E-mail: info@teltru.com • Web: www.teltru.com

P161 Pressure Transmitter



Precision Grade Ultra-High Pressure Transmitter

0-60,000 psi through 0-100,000 psi

Product Specifications

Electrical

Excitation	
P161A, P161B	8-38 Vdc*
P161C	2-15 Vdc
Output	
P161A	4-20 mA
P161B	0-5 Vdc*
P161C	1-2 mV/V*
Zero Balance	= ±1% FSO
FSO Setting	= ±1% FSO
Resolution	Infinite (±.001% FSO usable)
Response Time	
P161A, P161B	< 5 mS
P161C	< 1mS
Insulation Resistance	1000 MO @ 50 Vdc
Reverse Polarity	Protected
Warm-up	< 10 mS
Power Supply Effect	= ±.002% FSO per V input (P161A, P161B)
EMI/RFI	Internal Filtering (P161A, P161B)
Short Circuit Protected	Up to 40 Vdc (P161A, P161B)

Performance

Static Accuracy	= ±0.5% FSO* (BFSL, RSS)* (combined effects of non-linearity, hysteresis & repeatability)
Repeatability	= ±0.15% 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

Note: specifications are subject to change.

Mechanical

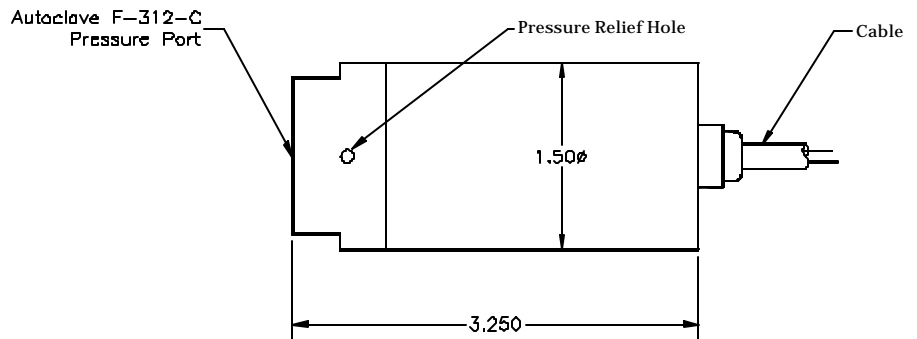
Pressure Ranges	0-60,000 through 0-100,000 psi (Customer may specify any range/eng. unit FOC)
Proof Pressure	2X Full Scale* (160k psi max)
Burst Pressure	5X Full Scale* (180k psi max)
Materials	
Wetted Parts*	15-5 SST
Non-wetted Parts	316 SST plus electrical connector*
Pressure Port	Autoclave F-312C
Electrical Connector	NEMA 4X cable exit (24" cable)*
Dimensions	per outline below
Weight	nominal 12 oz

Environmental

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

* Options Available

Outline



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