

P141



Heavy Duty Pressure Transmitter

Precision Grade- For Harsh Environments

Designed for the hazardous locations

P141 Pressure Transmitter is designed for use in hazardous locations. *The entirely welded 316LSST construction is hermetically sealed.*

Manufactured for reliable service in aggressive environments

The P141 is manufactured for reliability in aggressive environments where other transmitters fail. Automated weld procedures, extreme environmental burn in, and the mounting of electronics to withstand the most severe shock and vibration applications assure safety and reliability. *Additional EMI/RFI filtering with surge protection add to the performance of the P141.*

Alternate materials for service in corrosive environments

For corrosive environments where 316L or 15-5 SS are not best suited, the P141 is available in Hastelloy C276, C22 or Inconel 718.

Certification

Each P141 transmitter is shipped with a NIST traceable calibration certificate.

CE

Conforms to EN50081-2 and EN50082-2

Standard Features

*Hermetically Sealed Package
±0.25% FSO Static Accuracy
0-3 psi through 0-15,000 psi*

Available Options

*±0.1% FSO Static Accuracy
±0.5% FSO Thermal Error Band
Hastelloy or Inconel alt. materials
Low Power*

Low Cost

Possible Switch Replacement



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

P141 Pressure Transmitter



Designed for Hazardous Locations
0-3 psi through 0-15,000 psi

Product Specifications

Electrical

Excitation	
P141A, P141B	8-38 Vdc*
P141C	2-15 Vdc
Output	
P141A	4-20 mA
P141B	0-5 Vdc*
P141C	1-2 mV/V*
Zero Balance	=± 1% FSO
FSO Setting	=± 1% FSO
Resolution	Infinite (±.001% FSO usable)
Response Time	
P141A, P141B	< 5 mS
P141C	< 1 mS
Insulation Resistance	1000 MO @ 50 Vdc
Reverse Polarity	Protected
Warm-up	< 10 mS
Power Supply Effect	=±.002% FSO per V input (P141A, P141B)
EMI/RFI	Internal Filtering (P141A, P141B)
Short Circuit Protected	Up to 40 Vdc (P141A, P141B)

Performance

Static Accuracy	=±0.25% FSO* (BFSL, RSS)* <small>(combined effects of non-linearity, hysteresis & repeatability)</small>
Repeatability	=±0.05% FSO
Temperature Effects	=±1.5% FSO over comp range* <small>(combined effects of Zero & FSO with reference at 70°F)</small>
Long Term Stability	=±0.25% FSO per year

Note: specifications are subject to change.

Mechanical

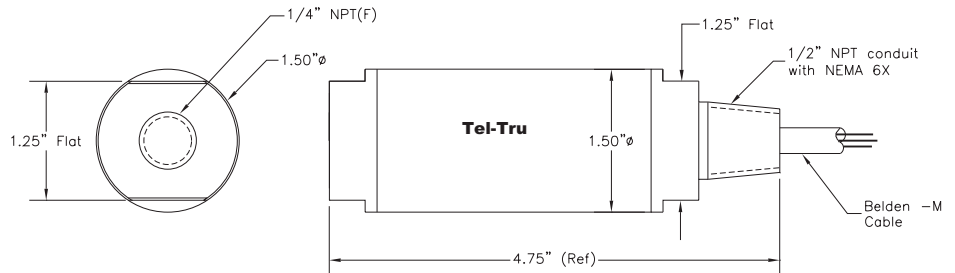
Pressure Ranges	0-3 through 0-15,000 psi <small>(Customer may specify any range/eng. unit FOC) (Absolute, vacuum, compound available options)</small>
Proof Pressure	2X Full Scale*
Burst Pressure	5X Full Scale*
Materials	
Wetted Parts*	316 & 15-5 SST*
Non-wetted Parts	316 SST plus electrical connector*
Pressure Port	1/4" NPT Female*
Electrical Connector	NEMA 4X cable exit (24" 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

* Options available

Drawing



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

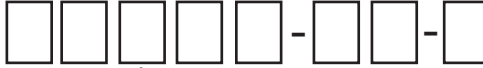
TEL-TRU PRESSURE TRANSMITTERS

Threaded Series Models P141 and 143

HOW TO ORDER EXAMPLE:

Precision Grade Rugged, 4-20 mA, 0.25% Accuracy, 0 to 100 psi, Gauge Pressure, 1/4" NPT Male, 2 ft. Wire Pigtail (NEMA 4X), Zero and span controls

Example: P141 A 3 D9A G - 01 A402 - E4



MODEL

P141
P143 Explosion Proof

OUTPUT

A 4-20 mA (2-wire)
B 0-5 Vdc (3-wire)
C 1-2 mV/V (4-wire)
K 0-10 Vdc output
 (req. 16-38 Vdc excitation)
N Hart Protocol

ACCURACY

3 0.25%
6 0.10%, avail. ≤15k PSI
 (includes improved Zero Balance to 0.5%)

PRESSURE RANGE

Vacuum	P141	P143
V1K -30 to 0" Hg		N/A
Compound		
Z1A -30" Hg to 15 psi		N/A
Z2A -30" Hg to 30 psi		N/A
Z3A -30" Hg to 60 psi		N/A
Pressure		
A8A 0 to 3 psi		N/A
B1A 0 to 5 psi		N/A
B4A 0 to 10 psi		N/A
B7A 0 to 15 psi		N/A
C6A 0 to 30 psi		N/A
D6A 0 to 60 psi		N/A
D9A 0 to 100 psi		N/A
E3A 0 to 150 psi		N/A
E5A 0 to 200 psi		N/A
E8A 0 to 300 psi		N/A
F3A 0 to 500 psi		N/A
F6A 0 to 750 psi		N/A
F8A 0 to 1,000 psi		N/A
H2A 0 to 1,500 psi		N/A
H5A 0 to 2,000 psi		N/A
H9A 0 to 3,000 psi		N/A
J4A 0 to 4,000 psi		N/A
J8A 0 to 5,000 psi		N/A
K2A 0 to 7,500 psi		N/A
K4A 0 to 10,000 psi		N/A
K7A 0 to 15,000 psi		N/A
K8A 0 to 20,000 psi		N/A
L1A 0 to 25,000 psi	N/A	N/A

OPTIONS

G2 Mate Bendix 4 pin
B1 Mate Bendix 6 pin
B110 Mate Bendix 6 pin w/ 10' wire
E4 Zero and span controls
E6 100% shunt cal resistor
A3 Inconel wetted parts
A7 Hastelloy wetted parts
D3 Improved temp. comp. to 0.5%
M2 * Local LED Display (PTD-2)
 * Must use electrical connector D200

ELECTRICAL CONNECTION

	P141	P143
A402 2' wire pigtail (NEMA 4X)		N/A
A405 5' wire pigtail (NEMA 4X)		N/A
A410 10' wire pigtail (NEMA 4X)		N/A
A420 20' wire pigtail (NEMA 4X)		N/A
A430 **30' wire pigtail (NEMA 4X)		N/A
<hr/>		
A602 1/2" NPT (M) conduit w/2' wire pigtail		
A605 1/2" NPT (M) conduit w/5' wire pigtail		
A610 1/2" NPT (M) conduit w/10' wire pigtail		
A620 1/2" NPT (M) conduit w/20' wire pigtail		
A630 **1/2" NPT (M) conduit w/30' wire pigtail		

B100 Bendix 4-pin connector		N/A
B200 Bendix 6-pin connector		N/A
D100 Mini DIN 43650C connector w/mate		N/A
D200 DIN 43650 connector w/mate		N/A

** Request quote for more than 30' wire

PROCESS CONNECTION

02 1/4" NPT (F)
01 1/4" NPT (M)
07 7/16-20 UNF (M)
11 Autoclave F-250-C
03 1/2" - NPT (M)
04 1/2" - NPT (F)
10 BSPP 1/4-19 (G1/4) M
12 BSPP 1/4-19 (G1/4) F

MODE

G Gauge Pressure Ref.
A Absolute Pressure Ref.
V Vacuum Range
C Compound Range
S Sealed (std. on P143)

P141 P143

See Range Chart
 See Range Chart

PRICES INCLUDE:

- Certificate of Calibration (directly traceable to NIST)
- NOTE: Available Upon Request--Additional Options (consult factory):
 - Process Connections
 - Electrical Connections and more than 50' wire
 - Pressure Ranges/Unit of Measure

List prices subject to change without notice (FCA Rochester, NY USA)



Tel-Tru Mfg. Co. 408 St. Paul St., Rochester, NY 14605 • P: 800.232.5335/585.232.1440 • F: 585.232.3857 • E: info@teltru.com • W: www.teltru.com