

P321



Sanitary Pressure Transmitter

Precision Grade- Tri-Clamp or Cherry-Burrell Fittings

Designed for the sanitary markets

Tel-Tru's P321 Series is designed for the OEM and end user where ruggedness, high performance, and reliability are required at a competitive price. *Key feature of the all welded sensing element is its isolation from induced stresses.* This results in negligible zero and span offsets due to the installation clamping force effects. This product is modular and is configurable to meet our customers' exact needs.

For CIP and Wash-Down Areas

Manufactured for reliability in clean-in-place and wash-down areas

The P321 is built using advanced manufacturing techniques, with automated welding procedures, extreme environmental burn-in and thorough residual stress relieving techniques. The P321 NEMA 4X packaging ensures reliable service in the wash-down environments of the sanitary industry regardless of signal output or pressure format.

"Backed-up" sensing diaphragm

Every P321 sensing diaphragm is "backed-up" with a solid piece of stainless steel which greatly improves the resistance to sharp objects and overpressure.

Certification

Every P321 is shipped with a NIST traceable calibration certificate.

CE

Conforms to EN50081-2 and EN50082-2



*Clamp Sizes
from 1" to 3"*

Standard Features

*=±0.25% FSO Static Accuracy
NEMA 4X Packaging
Meets 3-A Sanitary Standard 74-06 requirements*

Available Options

*=±0.1% FSO Static Accuracy
Alternate Wetted Materials
1/2"-NPT Conduit Fitting*

Note: specifications are subject to change.



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P321



Precision Grade Sanitary
0-3 through 0-1,000 psi

Product Specifications

Electrical

Excitation	8-38 Vdc*
Output	
P321A	4-20 mA
P321B	0-5 Vdc*
Zero Balance	$\pm 1\%$ FSO
FSO Setting	$\pm 1\%$ FSO
Resolution	Infinite ($\pm 0.001\%$ FSO usable)
Response Time	< 5 ms
Insulation Resistance	1000 MO @ 50 Vdc
Reverse Polarity	Protected
Warm-up	< 10 ms
Power Supply Effect	$\pm 0.002\%$ FSO per V input
EMI/RFI	Internal Filtering
Short Circuit Protected	Up to 40 Vdc

Mechanical

Pressure Ranges	0-3 through 0-1,000 psi (Customer may specify any range/eng. unit FOC) (Absolute, vacuum, compound available options)
Proof Pressure	2X Full Scale*
Burst Pressure	5X Full Scale* (Max 3,000 psi)
Materials	
Wetted Parts*	316L SS
Non-wetted Parts	316 SS plus electrical connector*
Pressure Port	2" - Tri-Clamp
Electrical Connector	NEMA 4X cable exit (24" cable)*
Dimensions	per outline below
Weight	nominal 10 oz.

Environmental

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

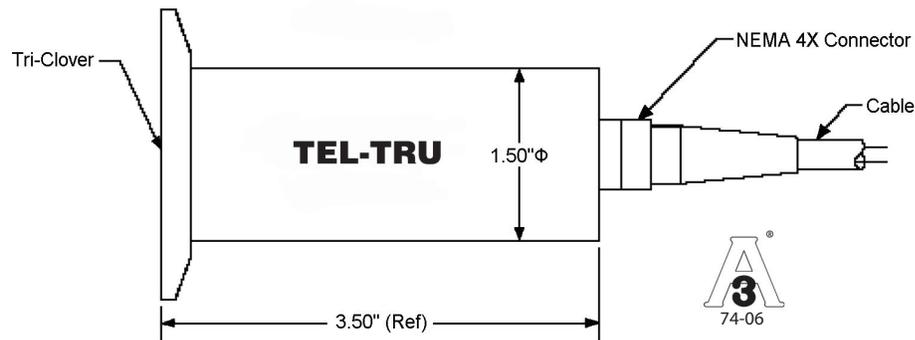
Performance

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

**Options Available*

Note: specifications are subject to change.

Outline



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TEL-TRU PRESSURE TRANSMITTERS

Sanitary Series Model P321

HOW TO ORDER EXAMPLE:

Sanitary, 4-20 mA, 0.25% Accuracy, -30" Hg to 15 psi, Gauge Pressure, 2" Tri-Clamp, 10 ft. Wire Pigtail (NEMA 4X), Zero and span controls

Example: P321 A 3 Z1A G - 28 A410 - E4



MODEL
P321

OUTPUT

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

ACCURACY

- 3** 0.25%
- 6** 0.1% (includes improved zero balance to 0.5%)

PRESSURE RANGE

Vacuum

V1K -30 to 0" Hg

Compound

- Z1A** -30" Hg to 15 psi
- Z2A** -30" Hg to 30 psi
- Z3A** -30" Hg to 60 psi
- Z4A** -30" Hg to 100 psi
- Z6A** -30" Hg to 200 psi
- Z7A** -30" Hg to 300 psi

Pressure

- A8A** 0 to 3 psi
- B1A** 0 to 5 psi
- B4A** 0 to 10 psi
- B7A** 0 to 15 psi
- C6A** 0 to 30 psi
- D6A** 0 to 60 psi
- D9A** 0 to 100 psi
- E3A** 0 to 150 psi
- E5A** 0 to 200 psi
- E7A** 0 to 250 psi
- E8A** 0 to 300 psi
- F3A** 0 to 500 psi
- F4A** 0 to 600 psi
- F6A** 0 to 750 psi
- F8A** 0 to 1,000 psi

OPTIONS

- E4** Zero and span controls
- E6** 100% shunt cal resistor

ELECTRICAL CONNECTION

- A410** 10' wire pigtail (NEMA 4X)
- A420** 20' wire pigtail (NEMA 4X)
- A430** 30' wire pigtail (NEMA 4X)
- *A450** 50' wire pigtail (NEMA 4X)

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- 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
 - *A650** 1/2" NPT (M) conduit w/50' wire pigtail
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- B100** Bendix 4-pin connector
- B200** Bendix 6-pin connector
- D100** Mini DIN 43650C connector w/mate

* NOTE: Request quote for more than 50' wire

PROCESS CONNECTION

- 26** 1" Tri-Clamp
- 27** 1-1/2" Tri-Clamp
- 28** 2" Tri-Clamp
- 29** 2-1/2" Tri-Clamp
- 30** 3" Tri-Clamp
- 31** 2" Cherry Burrell

MODE

- G** Gauge Pressure Ref.
- A** Absolute Pressure Ref.
- V** Vacuum Range
- C** Compound Range

PRICES INCLUDE:

- Certificate of Calibration (directly traceable to NIST)

IMPORTANT NOTE:

Available Upon Request--Additional Options (consult factory):

- Process Connections
- Electrical Connections and more than 50' wire
- Pressure Ranges/Unit of Measure

