

P421



Submersible Pressure Transmitter

*Precision Grade--
Clog Free in Waste Water/ Sludge/ Slurry Applications*

Designed for clog free operation in slurry applications

Tel-Tru's P421 submersible pressure transmitter is designed for the OEM and end-users where continuous submersion in sludge/slurry applications is required.

The P421's key feature is its clog free design of the sensing diaphragm, which improves reliability and lowers maintenance.

Manufactured for reliability in harsh well environments

The P421 is manufactured to perform over time in harsh well environments. An internal network of MOV's and dual gas discharge tubes protect against lightning, while dual sealing techniques ensure the integrity of the waterproof seal. 100% of P421 transmitters are submerged at our factory for at least 24 hours.

"Backed-up" sensing diaphragm

The P421 all welded sensing diaphragm is "backed-up" with a solid piece of stainless steel and can withstand the most abrasive / cyclical applications.

Certification

Every P421 is shipped with a NIST traceable calibration certificate.

CE

Conforms to EN50081-2 and EN50082-2

*MOV & Dual Gas Discharge Tube
Lightning Protection Network*



*Internal EMI/RFI
Filtering*

Standard Features

*Flush-clog free sensor
Internal protection from lightning and EMI/RFI
=±0.5% FSO Static Accuracy*

Available Options

*=±0.25% FSO Static Accuracy
Tefzel® Cable
Low Power Consumption*

Note: specifications are subject to change.



Tel-Tru Manufacturing Co.
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P421 Pressure Transmitter



Submersible Level for Sludge/Slurry Applications

0-10 ft H₂O through 0-500 ft H₂O

Product Specifications

Electrical

| | |
|-------------------------|-------------------------------|
| Excitation | 8-38 Vdc* |
| Output | |
| P421A | 4-20 mA |
| P421B | 0-5 Vdc* |
| Zero Balance | = ±1% FSO |
| FSO Setting | = ±1% FSO |
| Resolution | Infinite (±.001% FSO usable) |
| Response Time | < 5 mS |
| Insulation Resistance | 1000 MO @ 50 Vdc |
| Reverse Polarity | Protected |
| Warm-up | < 10 mS |
| Power Supply Effect | = ±.002% FSO per V input |
| EMI/RFI | Internal Filtering |
| Lightning Protected | MOV & dual gas discharge tube |
| Short Circuit Protected | Up to 40 Vdc |

Mechanical

| | |
|----------------------|--|
| Pressure Ranges | 0-5 through 0-300 psi (Customer may specify any range/eng. unit FOC) |
| Proof Pressure | 2X Full Scale* |
| Burst Pressure | 5X Full Scale* |
| Materials | 316L SST plus cable* |
| Pressure Port | Flush mount per outline below* |
| Electrical Connector | ½"-NPT Male submersible conduit fitting with 10ft of polyurethane cable* |
| Dimensions | per outline below |
| Weight | nominal 20 oz |

Environmental

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

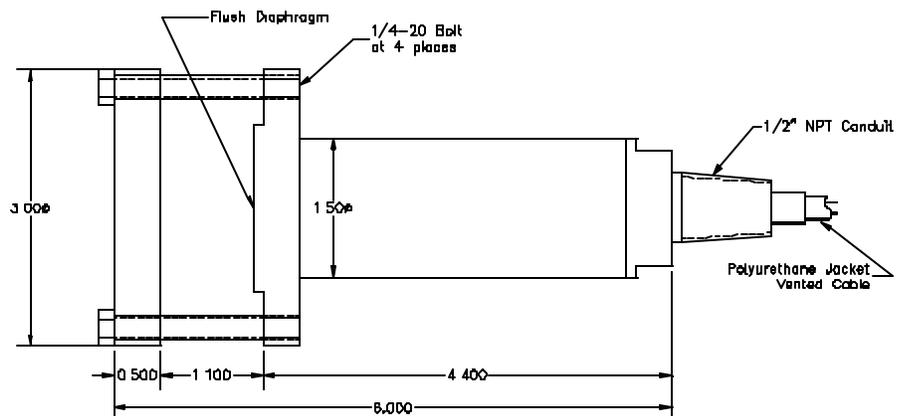
Performance

| | |
|---------------------|--|
| Static Accuracy | = ±0.5% 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

Outline

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TEL-TRU PRESSURE TRANSMITTERS

Submersible Series Model P421

HOW TO ORDER EXAMPLE:

Precision Grade Submersible, 4-20 mA, 0.25% Accuracy, 0 to 100 psi, Gauge Pressure, Flush Clog-Free Sensor, 1/2" NPT (M) conduit w/40' submersible vented polyurethane cable.

Example: P421 A 3 D9A G - 36 G140



MODEL

P421

OUTPUT

- A 4-20 mA (2-wire)
- B 0-5 Vdc (3-wire)
- J .5 - 4.5 Vdc output (5 Vdc in)
- N Hart Protocol

ACCURACY

- 2 0.50%
- 3 0.25%

PRESSURE RANGE

Pressure

- 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
- E8A 0 to 300 psi
- F3A 0 to 500 psi
- F6A 0 to 750 psi
- B4S 0 to 10 ft. WC
- D4S 0 to 50 ft. WC
- D9S 0 to 100 ft. WC
- E7S 0 to 250 ft. WC
- F3S 0 to 500 ft. WC

ELECTRICAL CONNECTION

- G140 Submersible 1/2" NPT (M) conduit with 40' vented polyurethane cable
- *G150 Submersible 1/2" NPT (M) conduit with 50' vented polyurethane cable

G210 Submersible 1/2" NPT (M) conduit with 10' vented Tefzel cable

G230 Submersible 1/2" NPT (M) conduit with 30' vented Tefzel cable

*G250 Submersible 1/2" NPT (M) conduit with 50' vented Tefzel cable

* NOTE: Request quote for more than 50' cable

PROCESS CONNECTION

36 Flush Clog-Free Sensor (w/3" x 1" standoff)

MODE

G Gauge Pressure Ref.

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' cable
- Pressure Ranges/Unit of Measure

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



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