

PT-500 Submersible Liquid Level Transmitter



The PT-500 is a rugged submersible pressure transmitter designed for tank liquid level measurement, water and wastewater applications, well depth measurement, and offshore water depth measurement.

Features

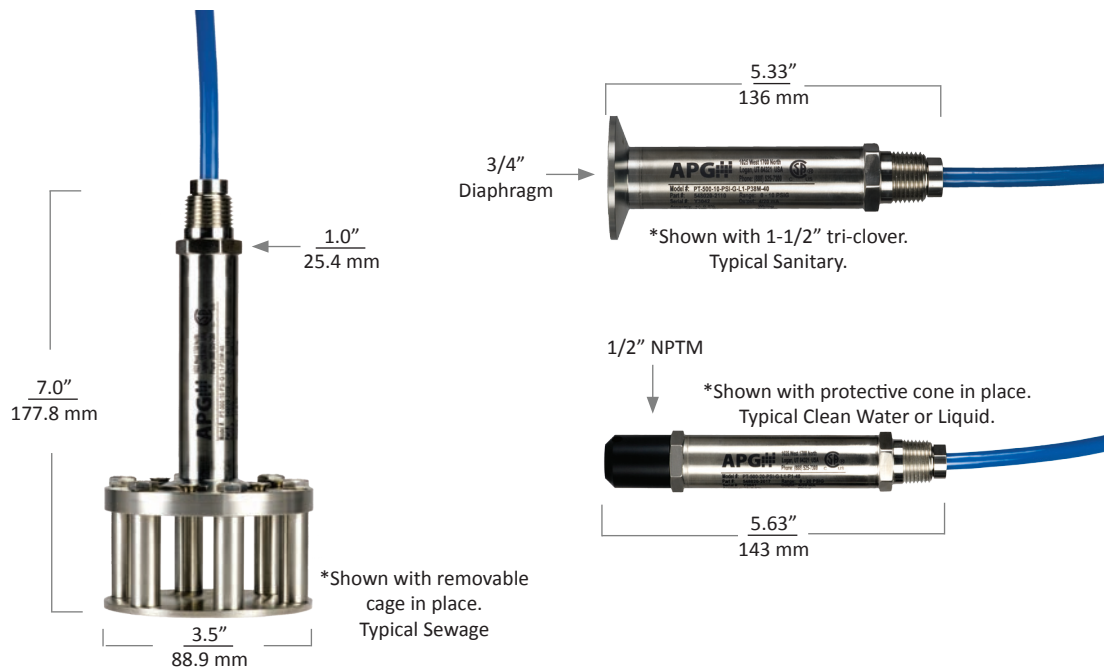
- Simple to install
- High precision, solid state signal: 4-20 mA or RS-485 Modbus/RTU
- Exclusive, removable and reusable cage
- 1/2" NPTM on cable end for use with conduit
- cCSAus hazardous location approved
- Durable transducer face

W. H. Cooke & Co., Inc. Manufacturer of thermocouples & RTD's Made in the USA
Supplier of industrial controls, heaters, and sensors since 1963

sales@whcooke.com

717-630-2222

PT-500 Specifications



Performance

- Accuracy (linearity, hysteresis, & repeatability): up to 0.10% of span (B.F.S.L.)
- 1 Year Stability: $\leq 0.75\%$ of span
- Temp Compensation Range: 32° - 122°F (0° - 50°C)
- Temp Effects on Zero & Span: $\leq 0.025\%$ FS/°F @ 70°
- Frequency Response: Less than 5mS

Connectivity

- Output: 4-20 mA 0-5V mV/V
Modbus/RTU (RS-485)- with temp. output

Environmental

- Maximum Depth: Submersible up to 462.2 ft. (300 psig)

Certification

- CSA Intrinsically Safe: (4-20 mA only)
Class 1, Division 1; Groups C & D
Ex ia IIB T4
Class 1, Zone 0, AEx ia IIB T4
Ambient: -40 - 85°C
- U.S. Patent No. 7,787,330

Electrical

- Supply Voltage: 10-28 VDC
- Electrical Connection:
 - Vented watertight cable w/free ends
 - Non-vented cable
 Up to 200 lbs tensile strength
- Electrical Protection: Lightning and Surge protection is built in. Protected against reverse polarity, surge per IEC 61000-4-5



Physical

- Housing: 316L SS
- Cable: Urethane PVC Hytrel
- Protective Cone: Delrin
- Overmolded Cable
- Removable or Permanent Anti-sag Cage

Options

PT-500 - - - - - - - -

A B C D E F G H

A. Cable Type

- ▲** Urethane - Blue (with vent tube)
- A** PVC - Black (no vent tube - sealed unit)
- B** Hytrel - Black (with vent tube)
- C** PVC - Black (with vent tube)

B. Pressure Range

- Specify range in desired unit of measure

_____ Max Water Depth
462.2 ft. (140.9 m), 300 psig

C. Standard Units of Measure

- PSI**
- FTH2O**
- INWC**
- INH2O**
- MMH2O**
- FWC**

D. Output

- L1▲** 4-20 mA, 2-wire
- L3** 0-5V, 3-wire (Approvals Pending)
- L9** mV/V, 4-wire (Approvals Pending)

Modbus

- L5** RS-485 (Modbus/RTU), 4-wire
Pressure reading only
(Approvals Pending)
- L31** RS-485 (Modbus/RTU), 4-wire
Level calculations, tank volume
(Approvals Pending)

E. Overmold

- E0▲** No overmold for 1/2" NPTM fitting for conduit
- E37** Pigtail with overmolded cable

F. Process Connection

- P1▲** 1/2" NPTM with removable plastic nose cone
- P5** 1/4" NPTF
- P37** Cage (anti-snag 1 piece fitting)
- P38** 1-1/2" tri-clover with 3/4" diaphragm
- P39** Cage (includes P38 fitting)

G. Cable Length

- (specify length of cable needed)

H. Accuracy

- N0▲** ±0.25%
- N1** ±0.25% with NIST certification
- N2** ±0.1% with NIST certification

Note: ▲ Indicates this option is standard.



*Shown with anti-snag cage.

PT-500 Accessories

Please order separately, by part number.

Description	Part Number
316L SS hex coupler, 1/2" NPTF to 1/2" NPTF	511414
Desiccant drying cartridge for breathing tube	122774-0028
Breathable Hydrophobic Vent Cap	511328
Vented Wiring Tee (used for daisy chain wiring)	125742-0003
Cage Assembly	548001-8888

W. H. Cooke & Co., Inc.

Manufacturer of thermocouples & RTD's Made in the USA
Supplier of industrial controls, heaters, and sensors since 1963

sales@whcooke.com

717-630-2222

PT-500 Submersible Pressure Transducer

Robust from Top to Bottom

Automation Products Group, Inc. brings you the highest quality submersible on the market.

The PT-500 is the only transducer that can be adjusted in the field, and the only one that offers a removable cage. The high quality build is simply unmatched.

Give us a call at (888) 525-7300 to learn more.



High Strength Cable

- Custom made to our spec
- High tensile strength with Kevlar®
- Safe transducer ventilation

1/2" NPT Fitting

- Mount to a conduit pipe
- Hang from a steel wire
- Saves cable from wear
- Avoid interference with pumps

CSA Class 1, Div 1

- Safe for operation around flammable gas

Field Adjustable

- Adjust zero point with simple magnet
- Magnet provided with the sensor
- Don't have to send to the manufacturer for simple adjustments

Durable Transducer Face

- Can be handled freely
- Will not be damaged from simple touch
- State-of-the-art MEMS transducer

Laser Welds

- Superior laser welds
- Extremely durable
- No cracks or leaks

Built-In Surge and Lightning Protection

- No surge-protector necessary
- Protection built right into the sensor
- IEC 61000-4-5 compliant

Automatic Temp. Compensation

- Embedded temperature sensor
- Automatic compensation

Patented Re-Usable Cage

- Only re-usable cage on the market
- Keeping the cage saves money on replacement sensors



*Kevlar® is a registered trademark of E.I. du Pont de Nemours and Company

W. H. Cooke & Co., Inc.

Manufacturer of thermocouples & RTD's Made in the USA
Supplier of industrial controls, heaters, and sensors since 1963

sales@whcooke.com

717-630-2222