

# JOWA USA

## Submersible Pressure Transmitter / PT700 Series



### • FEATURES

- Custom Level Ranges up to 700 ft (210 m) H<sub>2</sub>O
- Accuracy of up to  $\pm 0.05\%$  FS Available
- Analog 4-20mA Output
- 316SS or Titanium Construction
- Intrinsic Safety Approved: Class I, Div. 1
- Optional Temperature Measurement Output
- Absolute and Gauge versions are available
- Integral electronics provide power supply regulation, reverse polarity, overvoltage and EMC protection.

The PT700 Series pressure transmitters are designed for use in down-hole well monitoring and other submersible level gauging applications. All the Transducers utilize a highly accurate pressure sensor assembly specifically designed for hostile fluids and gases.

The attached electrical cable is custom manufactured to specifications that includes Kevlar® members to prevent errors due to cable elongation as well as a unique water block feature that self-seals in the event of accidental cuts to the cable. The assembly is integrated with supporting electronics in a durable housing constructed of 316SS or Titanium that have IP 68 and NEMA 6P ratings.

These units are designed for installation in a Class I, Division 1, Groups A, B, C, and D, hazardous location when connected to intrinsic safety barriers. The PT700 Series transducers are type approved by the American Bureau of Shipping (ABS) and are UL, FM, and CSA approved. They are CE compliant to EN 61000-6-4:2001 and EN 61000-6-2:2001.

# Submersible Pressure Transmitter / PT700 Series

## Technical Data:

### Operating Ranges:

Gauge: 5 - 700' (1.5 - 210M) H<sub>2</sub>O  
 Sealed Gauge: 10 - 700' (3 - 210M) H<sub>2</sub>O  
 Absolute: 35 - 700' (10 - 210M)

**Excitation:** 9 - 30 VDC

**Pressure Containment:** Proof 1.5 X full scale, Burst 2.0 X full scale.

**Pressure Media:** Fluids compatible with 316 stainless steel or Titanium and Delrin® polyurethane or Viton®.

**Output Current:** 4-20mA (two-wire configuration).

**Zero Offset:** ±0.20mA.

### Combined Non-linearity, Hysteresis and Repeatability (FS BSL maximum):

PT735: ±0.05%  
 PT730: ±0.10%  
 PT720: ±0.25%  
 PT710: ±0.50%  
 PT700: ±01.0%

### Temperature Limits:

Compensated: 32° to +122°F (0° to 50°C)  
 Operating: -4° to +140°F (-20° to 60°C)

**Temperature Effects:** ±0.05% FSO/°C worst case

**Nose Cap Options:** Open Faced, Closed Face, or 1/4" NPT male.

**Ingress Protection:** IP 68 and NE 6P housing protection rating..

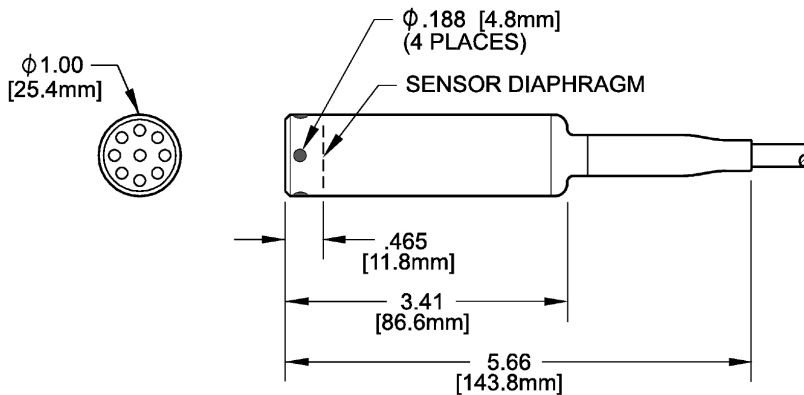
**Safety Classifications:** These units are designed for installation in a Class I, Division 1, Groups A, B, C, and D, Class II, Division 1, Groups E, F and G, Class III, Division 1 hazardous location when connected to appropriate intrinsic safety barriers.

The transducers are type approved by the American Bureau of Shipping (ABS) and are UL, FM, and CSA approved. They are CE compliant to EN 61000-6-4:2001 and EN 61000-6-2:2001.

### Temperature Measurement Output Option:

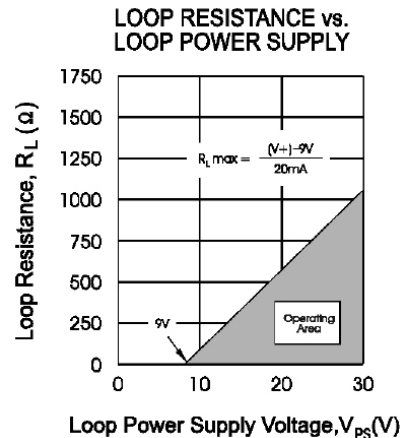
A precision silicon temperature sensor can be installed within the transducer to provide a separate 4-20mA temperature measurement output over the range of 32° to +122°F (0 to 50°C) or -4° to +140°F (-20 to 60°C). The accuracy of the temperature measurement is ±4°C.

## Dimensions: Inches (mm)



### Electrical Connection:

Red Positive Supply  
 Black Negative Supply  
 Shield Connected to Case



### Disclaimer:

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