

# GE Sensing

## Features

- Flush, PTFE-coated elastometric diaphragm
- All-titanium construction
- Accuracy:  $\pm 0.25\%$  full scale (FS) best straight line (BSL)
- Intrinsically safe approval
- Outputs: 4 to 20 mA
- Submersible with vented polyurethane cable

The PTX 1290 Series submersible/depth pressure transmitter is specifically designed for wastewater and pump/lift station applications. The all-titanium construction assures excellent life in the most hostile environments, including corrosive and hazardous chemical applications.

The PTX 1290 Series pressure transmitter technology is based on Druck's field proven submersible sensors with the exception of the pressure port which is equipped with a flush PTFE-coated elastometric diaphragm that reduces the likelihood of grease or biosolids buildup.

An advanced micro-machined silicon piezoresistive pressure sensor provides excellent performance and resistance to shock and vibration. A tough, polyurethane cable is moulded to the transducer body, providing a high integrity, waterproof assembly. The cable is strengthened with Kevlar® so that there is no measurable elongation when the cable is lowered into deep wells.

The fully isolated, all-titanium design ensures long term reliable measurements in water and wastewater management, industrial, process and marine applications.

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# PTX 1290 Series

## Druck Wastewater Submersible Pressure Transmitter

PTX 1290 Series is a Druck product. Druck has joined other GE high-technology sensing businesses under a new name—GE Industrial, Sensing.



# PTX1290 Specifications

## Pressure Measurement

### Operating Ranges

Any range from 1.75 mH<sub>2</sub>O to 15 mH<sub>2</sub>O

### Overpressure

The operating pressure range may be exceeded with negligible effect on calibration by  
4x FS for ranges ≤ 7 mH<sub>2</sub>O  
2x FS for ranges > 7 mH<sub>2</sub>O (28 mH<sub>2</sub>O Maximum)

### Pressure Media

Fluids compatible with Titanium, PTFE-coated nitrile rubber and Polyurethane

### Excitation Voltage

9 to 28 Vd.c.

The minimum supply voltage ( $V_{MIN}$ ) which must appear across the pressure transmitter is 9V and is given by the following equation:-

$$V_{MIN} = V_{SUP} - (0.02 \times R_{LOOP})$$

### Output Signal

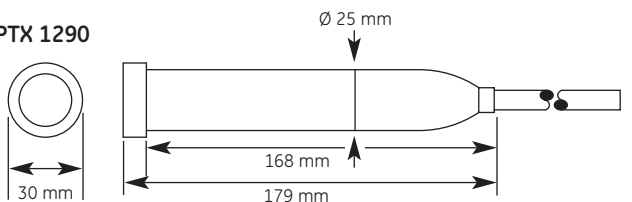
4 to 20 mA

## Performance

### Accuracy

Combined effects of non-linearity, hysteresis and repeatability ±0.25% FS BSL

### PTX 1290



#### Electrical Connection

Red\_\_Positive supply

Blue\_\_Negative supply

Shield\_\_Not connected to case

*Installation Drawings*

### Zero offset and Span Setting

Maximum ±0.1 mA

### Long Term Stability

Maximum 0.2% FS per annum

### Operating Temperature Range

-20 to 60 °C

### Compensated Temperature Range

-2 to 30 °C

### Temperature Effects

±1.5% FS for ranges above 7 mH<sub>2</sub>O increasing prorata for ranges below 7 mH<sub>2</sub>O

### Insulation

500 Va.c. ≤ 5 mA tested for 1 minute

### Intrinsically Safe

Certified (BAS 01ATEX1018X) for use with IS barrier systems to EEx ia IIC T4 (-40 ≤ T<sub>amb</sub> ≤ 80°C) for cable lengths to 300m maximum

### CE Marking

CE marked for electromagnetic compatibility, pressure equipment directive and potentially explosive atmospheres

## Physical

### Electrical Connection

Vented Polyurethane cable with integral Kevlar strain relief cord rated to 54 kg load. Water Ingress protection IP68 to 700 mH<sub>2</sub>O

### Cable Lengths

To be specified as required in 1 m increments

### Weight

140 g nominal (excluding cable)

### Caution

Do not remove the retaining ring that holds the elastomeric diaphragm in place. This will void the calibration and could result in loss of the silicone pressure transfer compound.

## Ordering Information

- 1) Model number
- 2) Pressure range
- 3) Cable length

*Please order accessories as separate items*



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