

GE

Measurement & Control

PTX 1290 Series

Druck Wastewater Submersible Pressure Transmitter



Features

- Flush, PTFE-coated elastomeric 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 elastomeric 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.



GE imagination at work

PTX 1290 Specifications

Pressure Measurement

Operating Ranges

Any range from 2.5 psi g to 20 psi g

Overpressure

The operating pressure range may be exceeded with negligible effect on calibration by
4x FS for ranges ≤10 psi g
2x FS for ranges >10 psi g

Pressure Media

Fluids compatible with Titanium, PTFE-coated synthetic rubber and Polyurethane.

Excitation Voltage

9 to 30 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

4-20 mA

Performance

Accuracy

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

Zero offset and Span Setting

Maximum ±0.1 mA

Long Term Stability

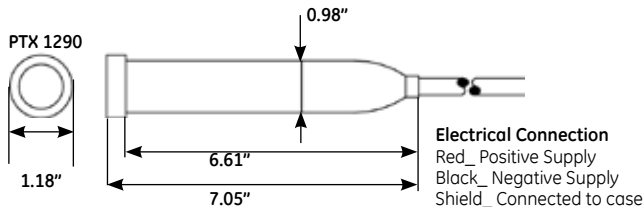
Maximum 0.2% FS per annum

Operating Temperature Range

-5 to 140 °F

Compensated Temperature Range

-28 to 86 °F



Temperature Effects

±1.5% FS TEB for ranges above 10 psi increasing prorata for ranges below 10 psi

Isolation

500 Va.c. ≤ 5 mA tested for 1 minute

Insulation Resistance

100 MΩ @ 500 Vdc

Hazardous Area Approvals

UL, cUL Intrinsically Safe (supplied as standard)

Class I, Division 1, Groups A, B, C, D
Class II, Groups E, F, G
T3C (40°C max)

CSA Intrinsically Safe (optional)

Class I, Division 1, Groups A, B, C, D
Class II, Division 1, Groups E, F, G
Class III, Division 1
T4 (80°C max)

FM Intrinsically Safe (optional)

Class I, Division 1, Groups A, B, C, D
Class II, Division 1, Groups E, F, G
Class III, Division 1
T4 (80°C max)

Physical

Electrical Connection

Vented Polyurethane cable with integral Kevlar strain relief cord rated to 54 kg load. Water ingress protection IP68 to 1000 psi

Cable Lengths

To be specified as required in 3 ft increments

Weight

5 oz 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. See our Depth and Level brochure.

www.ge-mcs.com

920-104D