

# **PTX/PMP 1290**

Wastewater Submersible Pressure Transmitters/Transducers

> All-titanium construction backed by 5 year corrosion warranty

- Accuracy: <±0.25% FS BSL</p>
- Flush teflon-coated elastomeric diaphragm
- Intrinsically safe approved
- Outputs: 4-20mA, 1-5 Vdc
- Submersible with vented polyurethane cable

The 1290 Series submersible/depth pressure transducers are specifically designed for the wastewater, pump/lift station application. The all-titanium construction assures excellent life in the most hostile environments, including corrosive and hazardous chemical applications. Druck backs its **titanium construction** with a **5 year corrosion warranty**. Standard vented cable is polyurethane.

The 1290 Series pressure transmitter is similar to Druck's field proven submersible sensors with the exception of the pressure port. It is equipped with a flush teflon-coated elastomeric diaphragm that reduces the likelihood of grease or biosolids buildup. The pressure transfer medium is a silicone grease that maintains its elasticity between -40 and +250°F.

An advanced micro-machined silicon piezoresistive pressure sensor provides excellent performance and resistance to shock and vibration. A tough, polyurethane cable is molded 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.

#### STANDARD SPECIFICATION

#### **Operating Ranges**

Any range from 6 Ft H2O to 46 Ft H2O with elastomeric diaphragm. Higher ranges to 500 psi g available with plastic screen in place of elastomeric diaphragm.

Overpressure 4X minimum

**Pressure Media** Fluids compatible with Titanium and polyurethane

Transduction Principle Piezoresistive-micromachined silicon strain gauge

Combined Non-linearity, Hysteresis and Repeatability <±0.25% FS BSL

**Temperature Effects** ±1.5% FSTEB 10 psig and up Ranges 5 psig and below prorated

Resolution

Insulation Resistance 100 megOhms @ 500 Vdc

Relative Humidity 0 to 100%

**Operating Temperature Range** -5°F to +140°F

Compensated Temperature Range 30°F to 86°F

**INSTALLATION DRAWINGS:** Dimensions in inches

# **Electrical Characteristics**

PTX 1290 2-wire, 4-20mA 9-32 Vdc excitation

#### PMP 1290

3-wire, 1-5 Vdc 8-30 Vdc excitation <2 mA current @80°F

# **Mechanical Characteristics**

Sensor Body Titanium

Measurement Diaphragm Internal-Titanium External-Teflon coated Nitrile Rubber

**Pressure Connection** Flush elastomeric diaphragm with titanium retaining ring

Electrical Connection Vented polyurethane cable (specify length)

Diameter 1.20" max O.D.

Weight 5 oz. nominal (excluding cable)

**Compatible Fluids** Any fluids compatible with titanium, polyurethane and teflon coated nitrile rubber

Safety Classification UL, cUL, intrinsically safe; Class I, Div 1 Groups A, B, C and D Class II, Groups E, F and G Class III

Ingress Protection NEMA 6 (IP68)

# Caution

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

# ASSOCIATED PRODUCTS

1230 Series	Submersible sensor
DPI 280	Digital display w/ alarms
STE 110	Sensor termination
	enclosure w/ desiccant
Lightning Arrestor	S
0 0	MDK-24 2 wire
	MDK-LV 3 wire
	MDK-LC 4 wire
SCU-220	Din rail mountable sensor
	termination enclosure
	w/ desiccant and 4-20mA
	electronics
DPI 610	Portable pressure
	calibrator
TRX II	Portable temperature and
	pressure calibrator

# ORDERING INFORMATION

Please state the following: (1) Type number (2) Pressure range (3) Cable length

For non-standard requirements please specify in detail.

Shipping, Storage and Handling

Each transmitter is purged with clean dry nitrogen and shipped with desiccant to prevent moisture ingress during transit.

Continuing development sometimes necessitates specification changes without notice.

Druck is an ISO 9001 registered company.





#### PMP 1290

Electrical Connection	
Red	Positive Supply
Nhite	Negative Supply
/ellow	Positive Output
Shield	Connected to Case

# PTX 1290

Electrical ConnectionRedPositive SupplyBlackNegative SupplyShieldConnected to Case



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Representative