

## Features

- High accuracy
- Excellent reliability
- Robust construction
- Harsh media compatible
- High stability
- Low power/pulsed power operation

## Applications

- Bore hole monitoring
- River level
- Tank level
- Tide and wave height
- Pump control
- Sand filter differential

# Depth/Level

## Druck Submersible Pressure Sensors Product Guide

Depth/Level Pressure Sensors are Druck products. Druck has joined other GE high-technology sensing businesses under a new name—GE Industrial, Sensing.



## Ground and Surface Water

One of the most efficient methods of measuring water level in wells, streams, rivers, canals and reservoirs is the submersible pressure sensor. It uses very little energy and provides an accurate long-term measuring system solution.

There are many thousands of submersible GE pressure sensors installed worldwide in a variety of applications where the high stability and reliability of the devices have clearly delivered the lowest “cost-of-ownership” of any method available.



**RTX 1930**  
*Rangeable submersible pressure transmitter*

- Ranges from 0.7 to 700 mH<sub>2</sub>O (1 to 1000 psi)
- Milliamp output
- Accuracy to 0.06% FS
- Body diameter 30 mm (1.2 in)
- All welded 316L stainless steel construction
- Vented polyurethane cable with Kevlar® anti-stretch construction
- Potable water certified
- 4:1 rangeability
- Free configuration software



**PDCR/PTX 1830**  
*High specification robust submersible pressure sensor*

- Ranges from 0.75 to 600 mH<sub>2</sub>O (1 to 900 psi)
- Millivolt or milliamp output
- Accuracy to ±0.06% FS
- Body diameter 17.5 mm (0.69 in)
- All-welded titanium construction
- Vented polyurethane cable with Kevlar® anti-stretch construction
- Potable water certified
- Hazardous area approvals
- Lightning protection



**PMP 317**  
*Low power submersible pressure sensor*

- Range 1 to 600 mH<sub>2</sub>O (1.5 to 900 psi)
- Voltage output
- Accuracy 0.15%
- Body diameter 25 mm (1 in)
- All welded Titanium or 316L stainless steel/Hastelloy construction
- Vented polyurethane cable with Kevlar® anti-stretch construction
- Supply current <2mA (at no load)



**PTX 317-3625**  
*Submersible differential pressure transmitter*

- Ranges from 1 to 350 mH<sub>2</sub>O (1.5 to 500 psi)
- mA output
- Accuracy ±0.15% FS
- All-welded 316L stainless steel with Hastelloy C276 diaphragm
- Molded polyurethane cable
- Demountable to allow access to zero and span adjustment



**PDCR/PTX 1730**  
*Low cost submersible pressure sensor*

- Ranges from 1.5 to 600 mH<sub>2</sub>O (2 to 900 psi)
- Millivolt or milliamp output
- Accuracy ±0.25%
- Body diameter 17.5 mm (0.69 in)
- All welded stainless steel 316L construction
- Vented polyurethane cable with Kevlar® anti-stretch construction
- Potable water certified



**PDCR 35/D**  
*Miniature submersible pressure transmitter*

- Ranges from 7 to 350 mH<sub>2</sub>O
- millivolt output
- Accuracy ±0.1% FS
- Body diameter 10 mm (0.39 in)
- Titanium body
- Vented polyurethane cable with Kevlar® anti-stretch construction

# GE Sensing

## Wastewater and Remediation

One of the most difficult applications in level measurement is sewage. Most methods suffer from clogging, high-humidity, interface from foaming or require line of sight.

GE has developed the PTX/PMP 1290 with its flush elastometric diaphragm and titanium body in order to provide an inexpensive way to ensure highly reliable level measurement in this harsh environment.

In groundwater remediation applications, undocumented chemicals may be encountered that could cause corrosion in stainless steel devices. All-welded titanium construction and robust Hytrel cable is insurance against premature failure.



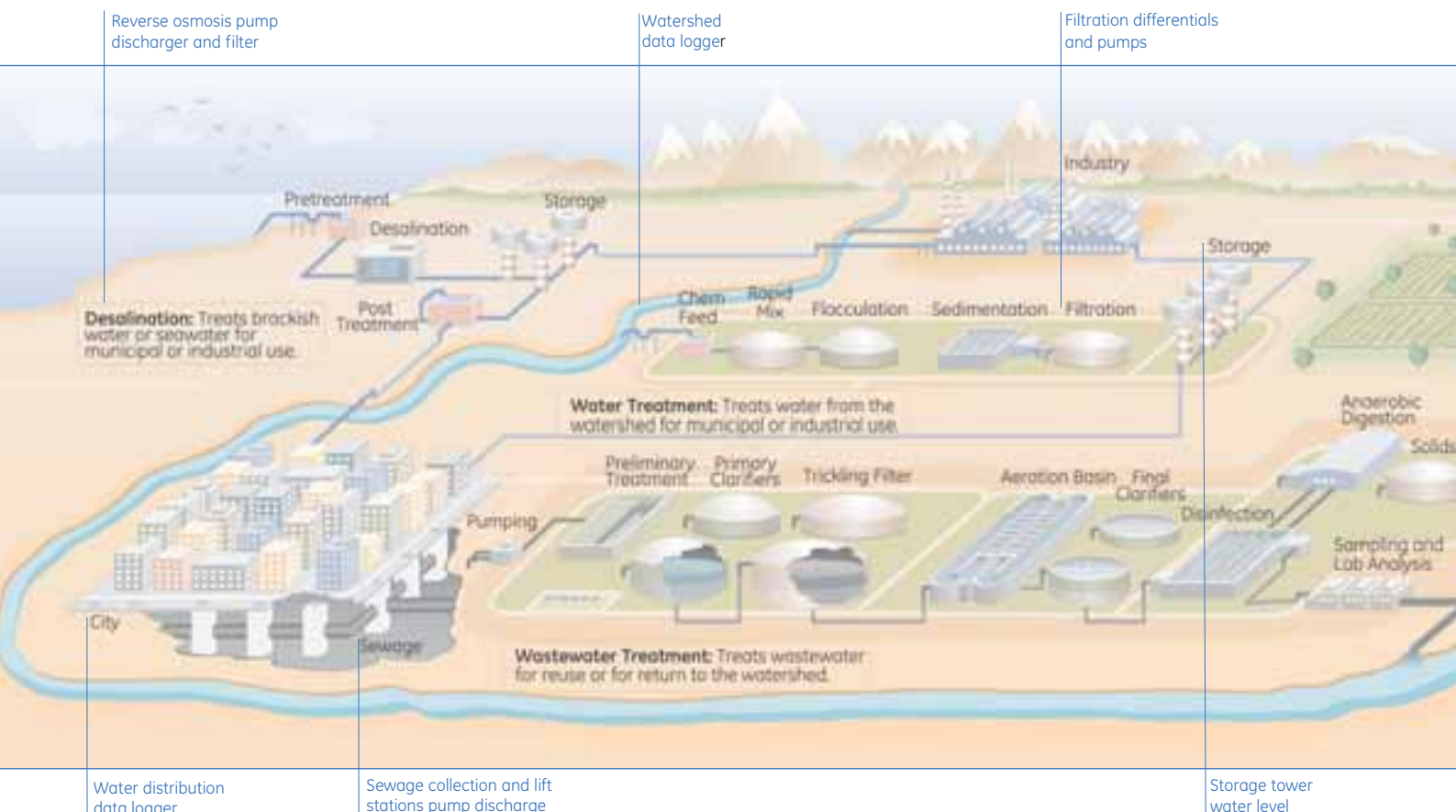
**PTX/PMP 1290**  
Wastewater submersible pressure transmitter/transducer

- Ranges from 0.175 to 35 bar (2.5 to 500 psi)
- Four times over-pressure
- Voltage or current output
- Accuracy  $\pm 0.25\%$  FS
- Body diameter 30 mm (1.2 in)
- All-welded titanium construction
- Polytetrafluoroethylene-coated elastometric flush diaphragm
- Hazardous area approvals



**PDCR/PTX 1840**  
High specification robust submersible pressure sensor

- Ranges from 0.75 to 600 mH<sub>2</sub>O (1 to 900 psi)
- Millivolt or milliamp output
- Accuracy to  $\pm 0.06\%$  FS
- Body diameter 17.5 mm (0.69 in)
- All-welded titanium construction
- Vented Hytrel® 6108 cable with Kevlar® anti-stretch construction
- Hazardous area approvals
- Lightning protection



# GE Sensing

## Tank level, marine and pipe pressure

A choice of metal and cable materials make it possible to select a sensor capable of withstanding most aggressive media stored in tanks. This allows simple installation into the tank by direct immersion. Wet areas can be serviced by the use of absolute or sealed gauge sensors and a barometric reference.

Features such as IP68 cable connections and snubbers enable the correct sensor to be selected from GE Sensing's standard industrial transmitters to enable robust stable and reliable measurement of pump and pipeline pressures.



**PDCR/PTX 1030**  
Robust OEM industrial level transmitter

- Ranges from 0.7 to 700 mH<sub>2</sub>O (1 to 1000 psi)
- Millivolt or milliamp output
- Accuracy to  $\pm 0.25\%$  FS
- Body diameter 30 mm (1.2 in) for PTX and 17.5 mm (0.69 in) for PDCR
- All-welded 316L and Hastelloy C276
- Vented Polyurethane or Hytre<sup>®</sup> cable with Kevlar<sup>®</sup> anti-stretch construction



**PDCR/PTX 1840**  
High specification robust submersible pressure sensor

- Ranges from 0.75 to 600 mH<sub>2</sub>O (1 to 900 psi)
- Millivolt or milliamp output
- Accuracy to  $\pm 0.06\%$  FS
- Body diameter 17.5 mm (0.69 in)
- All-welded titanium construction
- Vented Hytre<sup>®</sup> 6108 cable with Kevlar<sup>®</sup> anti-stretch construction
- Hazardous area approvals
- Lightning protection



**PDCR/PTX 1740**  
Low cost submersible pressure sensor

- Ranges from 1.5 to 600 mH<sub>2</sub>O (2 to 900 psi)
- Millivoltage or milliamp output
- Accuracy  $\pm 0.25\%$
- Body diameter 17.5 mm (0.69 in)
- All welded stainless steel 316L construction
- Vented Hytre<sup>®</sup> 6108 cable with Kevlar<sup>®</sup> anti-stretch construction



**RTX 1000**  
Process pressure transmitter

- Ranges from 100 mbar to 1400 bar
- HART<sup>®</sup> compatible and mA output
- Accuracy to  $\pm 0.075\%$  FS
- 316L stainless steel, Hastelloy, Inconel wetted parts
- Conduit connections
- Hazardous area approvals



**PTX 7500 Series**  
Industrial pressure transmitters

- Ranges from 100 mbar to 700 bar (1.5 to 10,000 psi)
- Milliamp output
- Accuracy  $\pm 0.15\%$  FS BSL
- Hastelloy 276/316L stainless steel wetted parts
- Choice of electrical connections
- Hazardous area approvals



# GE Sensing

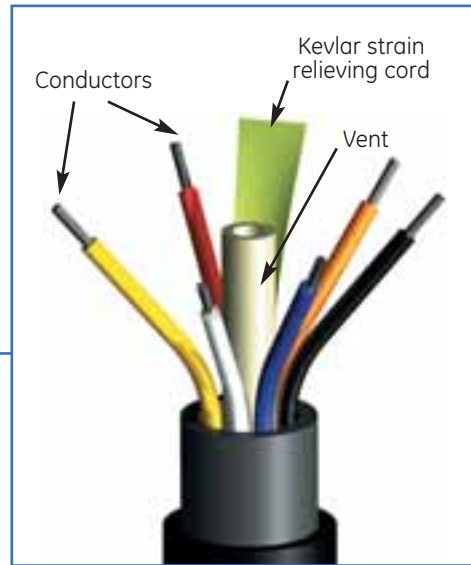
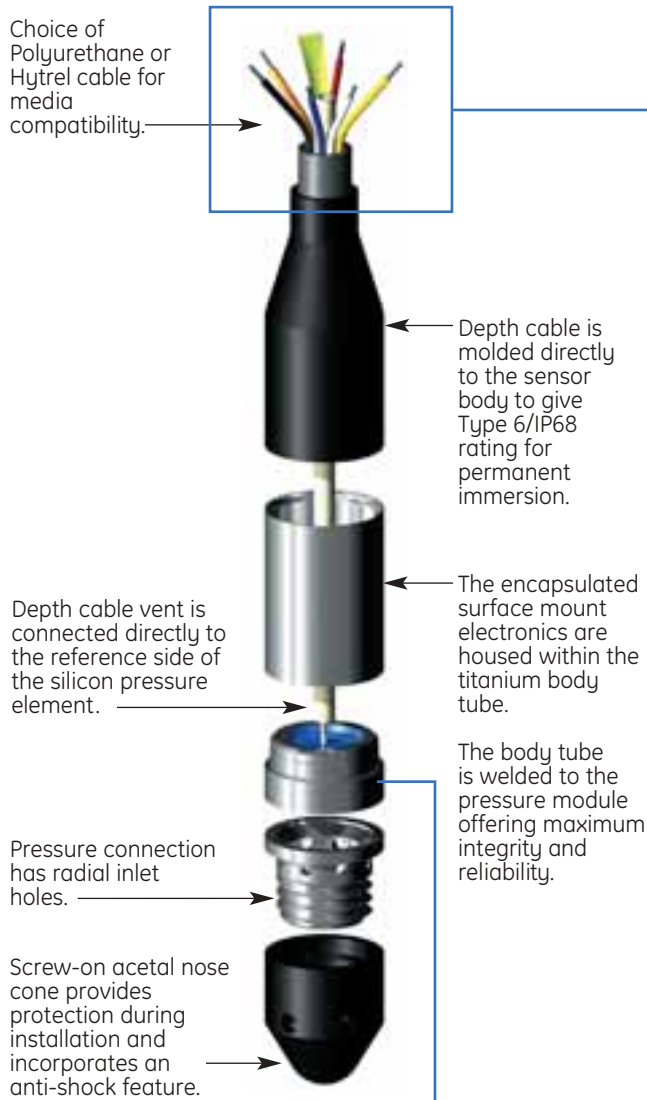
## The Latest Technology of Submersible Sensors

The GE Sensing range is the latest generation of fully submersible sensors that incorporate the most recent technological advances in depth and level measurement.

At the heart of the sensor is a high stability pressure element manufactured from micro-machined silicon developed within GE's own processing facility. The silicon sensing element is fully isolated from the media by an isolation diaphragm.

Surface mount electronics within the body tube minimise sensor size and improve reliability. The purpose-designed vented electrical cable results in a level sensor with the highest integrity and the lowest cost of ownership.

With a choice of millivolt, voltage or current outputs, small physical size and wide range of pressures, the sensor can be used in a variety of applications from the smallest diameter bore holes to canals, rivers and reservoirs. They are ideally suited for depth/level application in the oceanographic and remediation industries.



*Depth cable*



*Pressure module assembly*

## Accessories

A full range of accessories is available to enhance installation, operation and maintenance of the Druck submersible pressure sensors:



STE Moisture Proof Sensor Termination Enclosure



STE Desiccant Silica Gel Can



Cable Clamp Assembly



Descal Maintenance Kit



Short Sink Weight



Slim Line Sink Weight



Economic Direct Calibration adaptor



Rotatable Calibration Adaptors

## Related Products

GE Sensing manufactures a wide range of pressure transducers and transmitters, associated digital indicators, barometers and a complete range of precision process calibrators and controllers for the field, workshop and laboratory. A selection of these is shown below:



**RPT 410**  
Low cost barometer, high accuracy, surface mount

- 600 to 1100 mbar absolute
- 0.5 mbar accuracy over -10 to 50 °C
- High stability 100 ppm
- Operating temperature -40 to 60 °C
- Voltage or frequency outputs



**Druck DPI 800/610/615 Series**  
Portable pressure/temperature/electrical/ multi-function Battery Powered Calibrators

- Available in standard or intrinsically safe formats
- Compact, rugged, ergonomically designed universal tools
- Digital interface



**UPS III**  
Rugged, compact/pocket size loop calibrator

- Measure and source 0 to 24 mA
- Accuracy 0.01% of reading
- Dual mA and % readout, linear or flow
- Step, span check, value check, ramp
- 60 Vd.c. measurement and continuity



**DPI 280 Series**  
Digital pressure and process indicators

- Wide range of process measurements: pressure, load, strain, voltage, current and temperature
- Built-in alarms or relays
- RS232/485 and analog output options
- 17-point linearisation



**DF 868**  
Fixed-installation ultrasonic liquid flowmeter

- Low installation cost
- Wide variation in pipe size or material
- Low ownership cost
- Industry certification



**TransPort PT 878**  
Portable flowmeter

- Portable verification of installation
- Retrofit permanent meter
- No routine maintenance



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