

Features

- Ranges from 3.5 to 100 mH₂O
- Accuracy $\pm 0.25\%$ full scale (FS) best straight line (BSL)
- Fully welded 316 stainless steel construction
- Pulse power operation
- Polyurethane cable
- Full range of installation accessories

The PDCR 1030 transducer (mV output) and PTX 1030 transmitter (4 to 20 mA output) are the latest generation of fully submersible, 316 stainless steel, high performance sensors for measurement of hydrostatic liquid levels.

Application specific features include a Kevlar® strain relieved vented cable, internal condensation protection and an IP68 compliant injection moulded cable assembly, which ensures sensor operation over an extended lifetime.

1030 Series

Druck Stainless Steel Level Pressure Sensors

1030 is a Druck product. Druck has joined other GE high-technology sensing businesses under a new name—GE Sensing.



1030 Specifications

Pressure Measurement

Operating Pressure Ranges

PDCR 1030 (mV)

3.5, 7, 10, 35, 70, 100 mH₂O gauge

PTX 1030 (mA)

3.5, 7, 10, 35, 70, 100 mH₂O gauge.

Overpressure

The operating FS pressure range can be exceeded by 2 x F.S. with negligible effect on calibration.

Pressure Containment

3 x for ranges

Media Compatibility

Fluids compatible with 316 stainless steel (body), polyurethane (cable) and Delrin (nose cone).

Excitation Voltage

PDCR 1030 (mV)

10 V at 5 mA nominal

Output is fully ratiometric to supply within 2.5 V to 12 V limits.

PTX1030 (mA)

9 to 30 Vdc across terminals

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

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

Where V_{SUP} is supply voltage in Volts, R_{LOOP} is total loop resistance in Ohms

Output Signal

PDCR 1030

100 mV for all ranges

PTX 1030

4 to 20 mA proportional, for zero to FS pressure

Common Mode Voltage - PDCR 1030

Nominally 50% of excitation voltage

Output Impedance - PDCR 1030

2 k Ω nominal

Performance Specification

Accuracy

Combined effects of Non-linearity, Hysteresis and Repeatability: $\pm 0.25\%$ FS BSL max

Zero Offset & Span Setting

PDCR 1030

Maximum: ± 3 mV

PTX 1030

Maximum: ± 0.1 mA

Long-Term Stability

$\pm 0.2\%$ FS typical per annum

Operating Temperature Range

-20°C to 60°C

Compensated Temperature Range

0°C to 50°C

Temperature Effects

$\pm 2\%$ Typical FS Temperature Error Band (TEB).

Insulation

Greater than 10 M Ω at 500 VDC

1030 Specifications

Physical Specification

Pressure Connection

G1/4 (female) with recessed open face diaphragm, fitted with protective Delrin nose cone.

Electrical Connection

Vented polyurethane cable with integral Kevlar® strain relief cord rated to 54 kg load. Water ingress protection IP68 to 700 mH₂O.

Fixed Cable Lengths

Variable cable lengths available from 1 to 600 m.

CE Compliance

CE marked for electromagnetic compatibility and pressure equipment directive.

Documentation

Statement of conformity and installation notes supplied as standard.

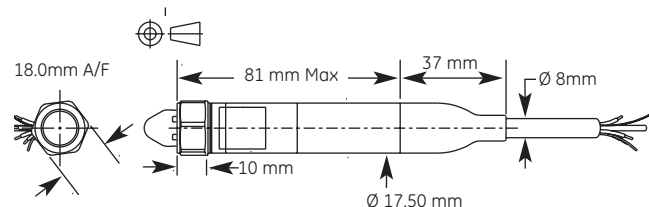
Accessories

A full range of accessories is available to enhance installation, operation and maintenance of the 1030 Series as listed below:

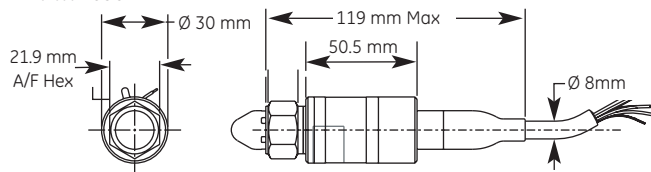
- STE moistureproof sensor termination enclosure (202-034-02)
- Slimline sink weight Ø17.5 mm (222-116-01)
- Short sink weight Ø25 mm (222-117-01)
- Cable clamp system (192-373-01)
- 360° rotatable calibration adaptor to:
 - G1/8 (DA4112-3-01)
- Economical direct calibration adaptor to:
 - G1/8 (DA2536-1-01)

Dimensions (Nominal)

PDCR 1030



PTX 1030



Electrical Connections

PDCR 1030 - Polyurethane cable

Red: Supply positive
White: Supply negative
Yellow: Output positive
Blue: Output negative
Screen wire connected to case
Remaining cores not connected

PTX 1030 - Polyurethane cable

Red: Supply positive
Blue: Supply negative
Screen wire connected to case
Remaining cores not connected

Ordering Information

Please state the following:

- (1) Model PDCR 1030 (mV) or PTX 1030 (mA)
- (2) Pressure range and scale units
- (3) Cable length required
- (4) Accessories (order as separate items)
- (5) Supporting Services (order as separate items)

Supporting Services

Our highly trained staff can support you, no matter where you are in the world. We can provide training, extended warranty terms and rental of portable or laboratory calibrators. Further details can be found in www.gesensing.com/productservices/service.htm



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