

Features

- Ranges from 7 to 600 mH₂O
- Accuracy $\pm 0.25\%$ full scale (FS) best straight line (BSL)
- Fully welded 17.5 mm 316 stainless steel construction
- Pulse power operation
- Polyurethane and hydrocarbon resistant cables
- Full range of installation accessories

The PTX 1730/1740 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 injection moulded cable assembly, which ensures sensor operation over an extended lifetime.

1730/1740 Series Druck Stainless Steel Level Pressure Sensors

1730/1740 is a Druck product.
Druck has joined other GE
high-technology sensing
businesses under a new
name— GE Sensing.



GE Sensing 1730/1740 Specifications

Pressure Measurement

Operating Pressure Ranges

PTX 1730/1740 (mA)

Any zero based FS from 7 mH₂O to 600 mH₂O gauge.

Other units may be specified e.g. ftH₂O, inH₂O, bar, mbar, kpa, kg/cm²

Overpressure

The operating FS pressure range can be exceeded by the following multiples with negligible effect on calibration.

- 2 x for ranges above 3.5 mH₂O

Pressure Containment

- 4 x for ranges up to 600 mH₂O (1400 mH₂O maximum)

Media Compatibility

Fluids compatible with 316 stainless steel (body), polyurethane or Hytrel® 6108 (cable) and EPDM (nose cone).

Excitation Voltage

PTX1730/1740 (mA)

9 to 30 VDC across terminals

For pulse power operation refer to technical note.

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

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

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

Output Signal

PTX 1730/1740

4 to 20 mA proportional, for zero to FS pressure

Performance Specification

Accuracy

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

Zero Offset & Span Setting

PTX 1730/1740

Maximum: ± 0.1 mA

Long-Term Stability

$\pm 0.2\%$ FS typical per annum

Operating Temperature Range

-20 to 60°C

Compensated Temperature Range

-2 to 30 °C

Temperature Effects

$\pm 0.5\%$ FS Temperature Error Band (TEB).

Shock and Vibration

MIL-STD-810E, method 514.4. Category 10 min. integrity. Figure 514.4-16

Product will withstand 20 g peak shock half sine wave 9 ms duration in all axes, also 2000 g peak shock 0.5 ms duration in all axes.

Insulation

Greater than 100 M Ω at 500 VDC

1730/1740 Specifications

Physical Specification

Pressure Connection

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

Electrical Connection

1730: Vented polyurethane cable with integral Kevlar® strain relief cord rated to 54 kg load. Water ingress protection IP68 to 700 mH₂O.

1740: Vented Hytrel® 6108 cable (hydrocarbon resistant) with integral Kevlar® strain relief cord rated to 54 kg load. Water ingress protection IP68 to 700 mH₂O.

Fixed Cable Lengths

2, 6, 10, 15, 20, 25, 30, 40, 60, 90, 120 m.

Variable cable lengths available from 120 to 600 m.

CE marking

CE marked for electromagnetic compatibility and pressure equipment directive.

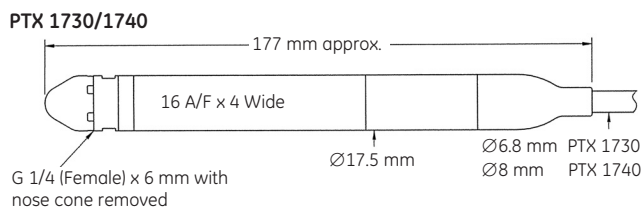
Documentation

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 1730/1740 Series as listed below:

- STE moistureproof sensor termination enclosure (202-034-01)
- 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)
 - 1/8 NPT (DA4112-4-01)
- Economical direct calibration adaptor to:
 - G1/8 (DA2536-1-01)
 - 1/8 NPT (DA2536-2-01)



PTX 1730 - Polyurethane cable
PTX 1740 - Hytrel 6108 cable

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

Ordering Information

Please state the following:

- (1) PTX 1730 (mA)
 - Polyurethane cable
- (2) PTX 1740 (mA)
 - Hytrel® 6108 cable
- (3) Pressure range and scale units
- (4) Cable length required
- (5) Accessories (order as separate items).
- (6) 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, nationally accredited calibration - both initially and at periodic intervals - extended warranty terms and even rental of portable or laboratory calibrators. Further details can be found in www.gesensing.com/productservices/service.htm



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