



## Submersible Level Pressure Transmitter PTX-1730

**\* ±0.25% Accuracy    \* Fully Welded Stainless Steel Construction**

Function: The PTX-1730 has been developed as a general purpose hydrostatic liquid level sensor, designed to work in low powered, arduous applications, including surface water, ground water and tank contents. It features high performance micro-machined silicon technology, packaged in a fully welded 316 stainless steel assembly. Features include a Kevlar strain relieved vented cable, internal condensation protection and in IP68 injection moulded cable assembly, which guarantees sensor operation over an extended lifetime. The PTX-1730 is available with fixed cable lengths for quick delivery and a range of OEM specific variants including digital performance characterisation and temperature measurement capability for data logger manufacturers.

### SPECIFICATIONS INPUTS:

**Operating Pressure Ranges**  
Any zero based full scale (FS) from 1.5 mH<sub>2</sub>O through to 600 mH<sub>2</sub>O gauge can be specified

Other specifiable units include: ftH<sub>2</sub>O, bar, mbar, psi, inH<sub>2</sub>O, Kpa, kg/cm<sup>2</sup>

#### Overpressure

The operating pressure range can be exceeded by the following multiples with negligible effect on calibration:  
6 x for 1.5 mH<sub>2</sub>O range  
4 x for ranges up to 3.5 mH<sub>2</sub>O  
2 x for ranges up to 600 mH<sub>2</sub>O

#### Pressure Containment

10 x for ranges up to 3.5 mH<sub>2</sub>O  
4 x for ranges up to 600 mH<sub>2</sub>O (1400 mH<sub>2</sub>O maximum)

#### Pressure Media

Fluids compatible with 316 stainless steel, Polyurethane (cable) and EPDM (nose cone)

### OUTPUTS:

**Current**  
4 to 20mA (2 wire)  
proportional for zero to full scale pressure

**Loading (Ohms)**  
 $R_{L\text{MAX}} = 50 \times (V_{\text{SUPPLY}} - 9)$

### PERFORMANCE:

**Accuracy**  
Combined effects of Non-linearity, Hysteresis and Repeatability: ±0.25% F.S.  
Best Straight Line max

**Zero Offset and Span Setting**  
Maximum: ±0.1mA

**Long Term Stability**  
± 0.2% F.S. typically per annum

### SUPPLY:

**Power Supply Voltage**  
9 to 30 Volt DC at the transmitter terminals

**Insulation Resistance**  
> 100 Mohms @ 500V DC (@20°C)

### PHYSICAL:

**Electrical Connection**  
6-core vented polyurethane cable supplied with Kevlar strain relieving cord in fixed lengths. Maximum cable assembly load 50Kg.

**Fixed Cable Lengths**  
2, 6, 10, 15, 20, 25, 30, 40, 60, 90, 120 metres. Variable cable lengths available from 120 to 600 metres

**Process Connection**  
G<sup>1</sup>/<sub>4</sub>" female with recessed open face diaphragm, fitted with protective EPDM nose cone.

### GENERAL:

**Operating Temperature**  
-20 to +60°C

**Temperature Effects**  
±0.5% F.S. Total Error Band (TEB) over -2° to +30°C  
For 1.5 mH<sub>2</sub>O range multiply by 2

**Protection Level**  
Water ingress protection to IP68 to 700 mH<sub>2</sub>O.

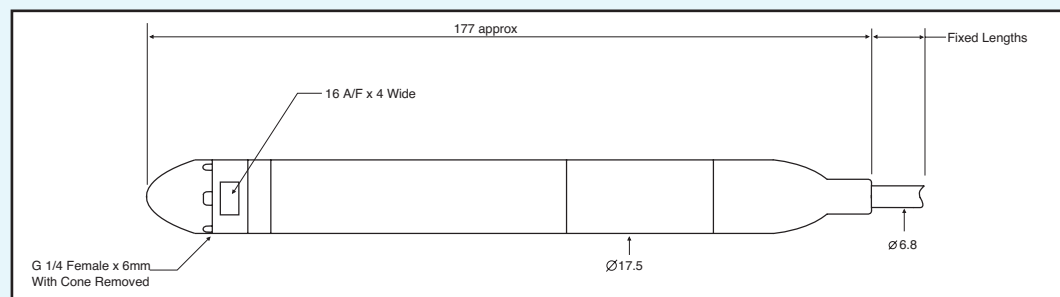
**Surge Protection**  
Units will withstand a 600V voltage spike applied between all excitation lines and case. Spike test conforms to EN61000-4-5:1995

**Mechanical Shock**  
20g peak 1ms half sine pulse in each of 3 mutually perpendicular axes will not affect performance

**CE Conformity**  
EMC Emissions: EN50081-2,  
EMC Immunity: EN50082-2

**Weight**  
131 gms with 1m of cable

## MECHANICAL DETAILS



### Electrical Connections

Red: Supply +ve  
Blue: Supply -ve  
Screen wire connected to case with the remaining cores not connected

### ORDERING DETAILS

- Give identification code, i.e. PTX-1730
- Give details of pressure range and pressure units, i.e. 0 to 100 mH<sub>2</sub>O gauge
- Give required cable length
- Give details of any accessories required - see opposite

### ACCESSORIES

- STE Sensor Termination Enclosure
- 17.5mm Slimline Sink Weight
- Cable Clamp System
- G<sup>1</sup>/<sub>8</sub> Calibrator Adaptor  
for accessory details refer to Lee-Dickens internal sales desk