

# HTM

# PP420LCD PRESSURE TRANSDUCER

## **INTRODUCTION**

HTM PP420LCD is a versatile, low cost and compact piezoresistive pressure transducer with integral LCD display that is suitable for measuring pressure of water & any other non-corrosive liquids. The unit is housed in a fully enclosed stainless steel sensor enclosure with ABS indicator housing to IP65 or submersible type to IP68 with remote indicator. It has built-in lightning surge arrester and is fully tropicalised for reliable operations.

## **PRINCIPLE OF OPERATION**

HTM PP420LCD consists of a pressure sensor which senses the hydrostatic force of the liquid for which it is measuring. The pressure sensor consists of a precision piezoresistive sensor which converts the pressure exerted on the sensor diaphragm into electrical signal. This signal is then scaled & conditioned into 4-20mA current output for local indication & instrumentation purpose. The internal pressure of the sensor is vented to the atmosphere through a venting tube embedded in the connector or the signal cable.

## **FEATURES**

### **Built-in lightning surge arrester**

HTM PP420LCD pressure transducer is truly designed for tropical environment where lightning surge is a major destructive factor in instrumentation systems. The PP420LCD has built in lightning surge arrester which protect the electronic circuit in the event of lightning surge. This effectively reduced the risk of pressure transducer damage and hence down time of the instrument.

### **Built for tough environments**

HTM PP420LCD pressure transducers are available in IP65 or IP68 enclosures for application under difficult environments



### **Two wire operation**

HTM PP420LCD is a two wire pressure transducer which is loop powered. This enables low power consumption and minimize field cabling cost.

### **Low cost & repairable**

HTM PP420LCD pressure transducers are low cost & yet reliable instrument designed to be repairable in the event of failure. Complete sensor replacement due to component failure is eliminated.

### **Humidity/Dew Immunity**

The major electronic components of PP420LCD pressure transducer are heavily coated with anti-humidity coatings. This eliminates the risk of electronic failure due to humidity.

### **Ease of calibration & Repair**

The zero & span adjustment and electronic components of the PP420LCD pressure transducer can be easily accessed by open up the indicator housing or locking screws of the sensor body. Calibration and repairs can be carried out without any hassles.

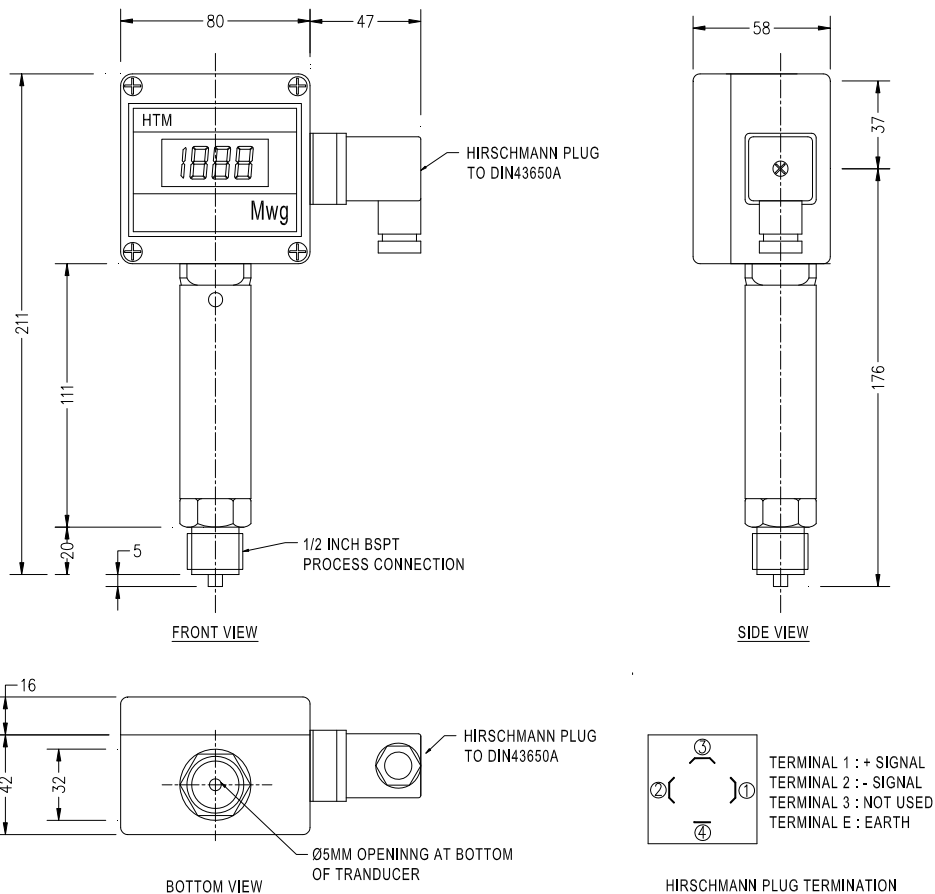
## SPECIFICATIONS

Power supply: 12 to 36Vdc  
 Accuracy : +/- 0.2% FS  
 Display : 3 ½ digit LCD  
 Display size : 12.7mm  
 Linearity & Repeatability : +/-0.2% FS  
 Long term stability : +/-0.2% FS  
 Transient protection : 10kV, 10kA@8/20µS  
 Ranges : 5, 10 Bar std, other ranges optional  
 Max.Over pressure : 200%  
 Outputs : 4-20mA, max 600 Ohms@24Vdc  
 Materials of construction:

Body : Stainless steel SS316L  
 Display : Grey ABS  
 Diaphragm : Stainless steel SS316L  
 Connector : Glass-Fibre reinforced  
 Popolyamid (IP65)  
 Cable : PVC (IP68)

Connector : Hirschmann plug to DIN43650A  
 Cable type : screened 4 wire, 2 wires used  
 Diameter of cable : 11mm  
 Cable length : 3M std, longer length optional  
 Enclosure : IP65 or IP68 (Remote indicator for IP68 only)  
 Temperature : -20 to +70°C  
 Process connection : ½" BSPT  
 Weight : 650g (IP65)  
 1050g (IP68)  
 Weight of cable : 95g/M  
 Compliance: EN61326-1:2006,  
 EN55011:1998 +A1:1999 +A2:2002,  
 EN61000-4-2:1995+A1:1998+A2:2001,  
 EN61000-4-3:2006, EN61000-4-4:2004,  
 EN61000-4-5:2006, EN61000-4-6:2007  
 Conformance: CE, EC Directive 2004/108/EC

## DIMENSIONS



Manufactured by:

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