

# HTM

## PP420 PRESSURE TRANSDUCER

### **INTRODUCTION**

HTM PP420 is a versatile, low cost and compact Piezoresistive pressure transducer suitable for measuring pressure of water & any other non-corrosive liquids. The unit is housed in a fully enclosed stainless steel enclosure to IP65 or submersible type to IP68. It has a built-in lightning surge arrestor and is fully tropicalised for reliable operations and options of integral or remote LCD indicator.

### **PRINCIPLE OF OPERATION**

HTM PP420 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 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 arrestor**

HTM PP420 has a built in lightning surge arrestor 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 PP420 Pressure transducers are available in IP65 or IP68 enclosures for application under difficult environments.

#### **Integral or remote indicator**

PP420 can either be furnished with integral or remotely mounted LCD indicator for monitoring of process signal.



#### **Two wire operation**

HTM PP420 is a two wire Pressure transducer which is loop powered. This enables low power consumption and minimize field cabling cost.

#### **Low cost & repairable**

HTM PP420 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 PP420 Pressure Transducer are heavily coated with anti-humidity coatings. This eliminates the risk of electronic failure due to Humidity.

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

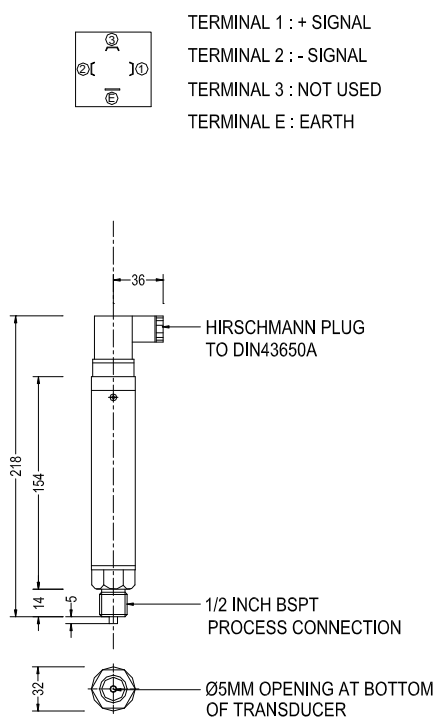
The Zero & Span adjustment and Electronic components of the PP420 Pressure Transducer can be easily accessed by open up the locking screws of the sensor body. Calibration and repairs can be carried out without any hassles.

## **SPECIFICATIONS**

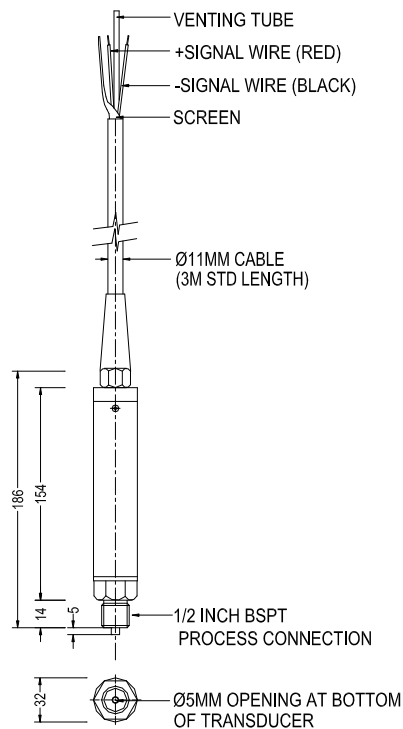
Power supply: 12 to 36Vdc  
Accuracy : +/- 0.2% FS  
Linearity & Repeatability : +/-0.2% FS  
Long term stability : +/-0.2% FS  
Transient protection : 10kV, 10kA@8/20 $\mu$ S  
Ranges : 5, 10 Bar std, other ranges optional  
Max. over pressure : 200%  
Output : 4-20mA, max 600 Ohms@24Vdc  
Materials of construction:  
Body : Stainless steel SS316L  
Diaphragm : Stainless steel SS316L  
Connector : Glass-Fibre Reinforced Polyamid (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  
Temperature : -20 to +70°C  
Process connection : 1/2" BSPT  
Weight : 650g (IP65)  
1050g (IP68)  
Weight of cable : 95g/M  
Options : Integral or remote LCD indicator  
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**



IP65 ENCLOSURE



IP68 ENCLOSURE

Manufactured by :

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