TEMPCON
MEASUREMENT • CONTROL • DATALOGGING SOLUTIONS

Probes & Sensors

Pt100/Pt1000 Pipe Clamp Platinum Resistance Thermometer Sensor with Lead

Product Code **PRTPC**

Special Platinum Resistance Thermometer

The Jubilee clip style Platinum Resistance Thermometer Sensor (PRT) has been designed to allow for the temperature of pipes or cylinders to be monitored. They are available in a number of sizes to suit your diameter of pipe or cylinder. The assembly includes a protection sheath that is secured to the clamp which is then utilised for housing the Platinum Resistance Detector (RTD) for both improved speed of response and accuracy. The Sensor can be supplied in 2, 3 or 4-wire options and in single or duplex channels. This style of Platinum Resistance Thermometer sensor is supplied using a Grade A tolerance detector for improved accuracy though other grades of detector are available.

For enhancing the sensing performance we recommend that you lag the sensor after attaching to the pipe. The lead is secured to the housing by a crimp and an additional heat shrink for strain relief.

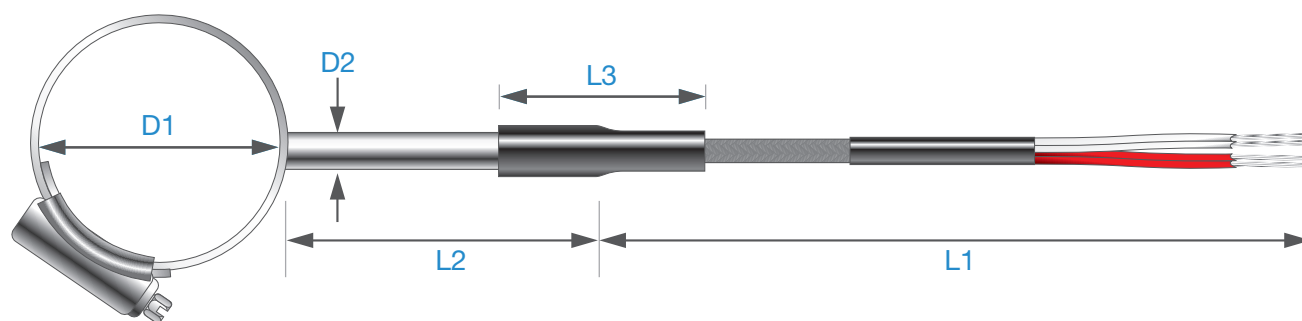Note: 4 Wire Configuration Shown for illustration only

Various cable options are available and the operating temperature of the assembly is determined by the temperature rating of the extension cable Insulation used. These cables are typically constructed of multi strands of 7/0.2mm in either PFA insulated or Glassfibre insulated with stainless steel overbraid as standard however other alternatives are available. The PFA insulated lead will offer an element of protection where moisture could be present and Glassfibre with stainless overbraid for higher temperature applications or where greater mechanical protection maybe required. The sensor lead is terminated to tails though other options are available.

A wide range of instrumentation or accessories including extension cables, connectors, are available for this product.

• Designed to clamp from 14mm diameter and above • Colour Coded Tails and Accuracy of element to BS EN60751 – IEC751
• Grade A Detector   • Pt100/Pt1000 Detector Options • 2, 3 or 4-Wire Configuration • Single or Duplex Channel Options
• Suitable for use up to 300°C   • Bespoke designs available upon request • Stocked versions available to order

Sensor Specifications

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Sensor Style	**Pt100/Pt1000 Pipe Clamp Platinum Resistance Thermometer Sensor with Lead**
Detector Type	Pt100 & Pt1000
Detector Elements	Single (1 Channel) Duplex (2 Channel)
Wire Configuration	2, 3 or 4 Wire
Grade Of Element	Grade Accuracy at 0°C Accuracy at 100°C A ±0.15°C ±0.35°C Note: Accuracies stated are for the element only and not the completed sensor assembly
Maximum Temperature Of Sensor	300°C
Pipe Clamp Material	Stainless Steel
Sensor Sheath Material	Stainless Steel
Sensor Protection Sheath Length (L2)	50mm
Heat Shrink Strain Relief (L3)	PVC 20mm (+110°C)
Sensor Sheath Diameter: (D2)	4.76mm
Clamp Diameter (D1)	As required in millimetres
Extension Cable Length (L1)	As required in metres
Extension Cable Insulation	PFA Insulated & Screened,7/0.2mm Ø Conductors, (-75°C to +260°C) Glassfiber Insulated & Stainless Steel Overbraid, 7/0.2mm Ø Conductors, (-60°C to +350°C)
Termination	Tails, Spade Terminals, Miniature 2-Pin PRT Plug , Miniature 3-Pin PRT Plug, Standard 2 Pin PRT Plug, Standard 3-Pin PRT Plug or Lemo Connector

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