Heat Trace and Surface Temperature Sensors

The Vulcan Electric Heat Trace and Surface Temperature Sensors are designed to measure the surface temperature of process pipes, tanks, vessels, and containers. These units incorporate sensor contact pads configured for direct contact to the pipe or other surface for optimum heat transfer and quick response. Vulcan Heat Trace sensors are an ideal choice for liquid or gas pipe distribution systems and surface related measurements. Integrated Temperature Probe and Transmitters (ITPT models) incorporate RTD sensing and employ a patented construction with the transmitter encapsulated inside the body of the sensing tube. The RTD sensor with integral 4 to 20 mA transmitter provides superior accuracy, repeatability and response time, all in one compact unit. The ITPT units are fully programmable. They can be factory calibrated to your precise requirements or with the optional ITPT PKIT-2 programming module and PC based software, recalibration can be done in the field within your specific application.

**Benefits**
- Outperforms Conventional Designs
- Robust Sensing Probe Tube Configurations
- High Accuracy and Repeatability
- Moisture and Dust Resistant Construction
- Integrated Transmitter Design Fits into Limited Space
- Ideal for a Wide Range of Contact Sensing Applications

**Features**
- Designed for Optimum Heat Transfer and Response Time
- Curved Heat Transfer Contact Pads Matches Pipe Radius
- Compact Integrated Transmitter (option on RTD models)
- Integrated Transmitter is Tamper Proof
- ITPT Models are Factory Calibrated - Field Program Option
- Standard or Customized Contact Pad Constructions

**Typical Construction**
- RTD Sensing Element 100 or 1000 Ohm Class A or B
- Thermocouple Types J, K, T, & E (non transmitter models)
- ITPT Models Include Integrated 4 to 20 mA Transmitter
- RTD Probes Available With or Without Transmitter
- Flat or Curved Heat Transfer Contact Pad to Match Surface
- Terminations Such as M12 Receptacle or Leads

**Application Examples**
- Semiconductor Gas Supply Line Distribution
- Energy Management Delivery Systems
- Pharmaceutical and Medical Gas and Fluids Processes
- Hydraulic Systems Temperature and Viscosity Control
- Skid Mounted Piping Systems
- Concentrated Solar Power (CSP) Production Systems