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#### TH Series Digital Linear Temperature Sensing

#### Overview

- Low Cost and Fast Response
- FM Approved AND UL listed
- Conforms with EN54-28
- User Friendly- with all central alarm control panels
- Overheat Detection = Fire PREVENTION
- Incipient Fire Detection
- Continuous Monitoring -100% sensor cable length
- Not affected by RFI or EMC
- Installed length not restricted by high ambient temperatures
- ATEX certified zener barrier use in hazardous areas
- Continuous operation within -40C / 40F to + 125C /+257F
- Section Replacement after an alarm not total length
- On site In service alarm testing possible
- Maintenance Free



### Description

Provides "point of risk" ...not the most convenient roof /ceiling height... or "area detection" of overheat or incipient fire conditions within ALL environments....including dirty, dusty, damp and corrosive. No minimum length exposure is required in order to generate an alarm condition at a pre-determined temperature level! The combined cable and continuous detector monitors and detects adverse temperature rises at any and all points along its installed length...it's not more sensitive at specific points!

#### FREE from RFI and /or EMI Interference

On site post installation direct flame testing possible without need to replace installed linear sensor cable Most Economic U.K. / USA / EUROPEAN manufactured range of linear sensor cables. Not poorer quality non European manufacture.

"TH" digital linear temperature sensing cable is manufactured as 2 twisted and tensioned tin plated copper coated steel conductors, each covered by a temperature sensitive polymer. At its rated temperature, the insulation breaks down allowing the conductors to come together to produce an alarm signal. In the event of mechanical damage at temperatures below its alarm threshold the conductors extrusion is maintained resulting in an open circuit fault / trouble signal being generated. An outer extrusion of colour coded polymer is applied around the two insulated conductors to provide a 3.5 mm external diameter linear sensing cable. For particularly high corrosive or abrasive environments a RILSAN protective extrusion may also be incorporated. Its ability to operate without adversely affecting response times / operating sensitivity has been positively tested by Underwriters Laboratories (U.L.).



## Technical Specifications

External Diameter	3.5 mms (0.138 in)	
Dielectric Withstand	500Vdc – UL tested	
Conductors	Tin Plated Copper Covered Steel	
Electrical Rating	30Vac (42.4Vdc) 10A	
Conductor Resistance	92.1 ohms Maximum per 1,000 m	
Conductor Extrusion	Temperature Sensitive Polymer	
External Sheath	Colour Coded Polymer Lead & Cadmium free / UV resistant	
Tensile Strength	1,700min: (N/mm2) to BS EN 60811-1	
Optional Coverings	RILSAN corrosion & Abrasion resistant or 316 Stainless Steel	
Messenger Wire	Nylon covered S/S 1.05mm (0.04in)	
Capacitance	TH68: 150pF/m, TH88: 97pF/m, TH105: 88pF/m	
Inductance	TH68: 960n H /m, TH88: 540n H/m TH105: 1060n H/m	
Impedance	TH68: 80 ohms, TH88: 75 ohms, TH105: 110 ohms	
Minimum Bend Radius	100 mms (4.0 in)	
Shipping Weight	27 kgs (60 lbs)	
Alarm Rating	Approvals	Max: Spacing
68C /155F	FM, UL, ULC	10.67 m (35 ft)
88C /190F	FM, UL, ULC	10.67 m (35 ft)
105C /221F	FM, UL, ULC	10.67 m (35 ft)
185C /365F	UL, ULC	10.67 m (35 ft)

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