

Digital Linear Heat Detection | Data Sheet



PRODUCT FEATURES & BENEFITS

- Cable and Detector combined.
- Range of Alarm temperatures to meet different application/ risk requirements.
- Alarm response times: LESS than 8 seconds.
- Suitable for installation within a wide range of adverse environments.
- No site calibration required.
- Corrosion and Abrasion resistant outer extrusions.
- Suitable for Installation within Ambient Temperatures to + 70C (+ 158F).
- Minimum continuous exposure temperature: UL tested to -30C (-22F).
- Compatible with ALL standard Fire Alarm Indicator Panels.
- Interconnected to analogue addressable systems via dedicated interface unit.
- Underwriters Laboratory (U.L.) and (C-UL) Listed - File No: S 9029.
- Factory Mutual (F.M.) approved ref. 3023073.
- Easily site tested – flame or overheat temperature.
- Positive price advantage over competitive products.

TYPICAL APPLICATIONS

- Cable Tunnel & tray protection
- Conveyors
- Power distribution apparatus
- Warehouses- Bulk and Rack storage
- Refrigerated cold storage
- Cooling towers
- Road/Rail Tunnels
- Rail Stations (under platform edge, tunnels, escalators)
- Rolling Stock (Rail)
- Multi-storey Car Parks
- Escalators
- Elevators/Lifts
- Fuel Storage Tanks, pumps and pipelines
- Off shore Rigs
- On and Off Road Vehicle Engine Bays
- Marine Leisure Craft – Fuel Lines
- Container ship holds
- Commercial shipping – car decks
- Inaccessible roof spaces
- Bridges, piers, marine vessels
- Listed Buildings – Museums, Palaces etc
- Security Fences



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INTRODUCTION

"DIGITAL" Linear Heat Detection has a well established record of effective protection of life and capital investment throughout an increasing number of International Markets. Repeatedly illustrating to end user and designer alike, its ability to operate within areas of limited access and surveillance and within environmental conditions that would render other forms of detection, inoperable or subject to high levels of costly maintenance or false alarms. For an explanation and comparison between the features and benefits of the different linear detection system operating concepts, please visit www.firebuys.com.au

DESCRIPTION

The TH linear heat detection system, adopts a 3.5mm external diameter single pair (two conductors) heat sensitive cable as the basis for its overheat/fire detection system. At a pre-selected temperature, the thermal sensitive polymer that is extruded around BOTH the sensor cables inner tin plated copper coated steel conductors - twisted together to form a spring like pressure between them- softens, allowing the signaling cores/conductors to move into contact with each other - producing an alarm signal. If conductor continuity is broken - with inner insulation maintained (ie non alarm state) an open circuit fault condition will be signaled. The outer extrusion is colour coded for ease of alarm temperature rating identification - in strict accordance with Industrial standards - including UL521 Table 53.1 "Heat Detectors for Fire Protective Signaling Systems". As fixed temperature digital sensor cables, it is not necessary to expose any specific minimum sensor length to the alarm rated temperature before a signal is generated.

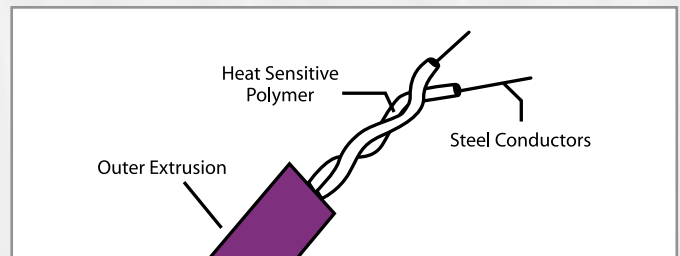
INSTALLATION ACCESSORIES

We offer an assortment of heat sensor cable fixing devices for ALL product applications. In order to ensure uninterrupted operation of the linear heat detection system, fixings manufactured or recommended by Fire Buys should be used. Full details are available upon request.

The information provided on this data sheet is accurate at time of going to print.

In the interest of improving quality and design we reserve the right to amend specifications without prior notice.

CONSTRUCTION



ELECTRICAL AND MECHANICAL

External Diameter: 3.5mm (0.138 in).

Dielectric Voltage Withstand: 500VDC - UL tested

Conductors: Tin plated copper coated steel (x2 per sensor cable) - 0.912mm dia:

Electrical Rating: 30VAC (42.2Vdc) 10A.

Conductor Resistance: 90 ohms/km (88.1 ohms min/ 92.1 ohms max)

Inner Extrusion : "Hybrid" temperature sensitive polymer - 0.294mm(0.011in) per conductor

External Extrusion: Colour coded Class 43 pvc based polymer UTS

Tensile Strength: 1700 minimum (N/mm²) tested to BS EN 60811-1

Minimum Sensor Cable bend radius: recommended 100mm **WARNING: Linear Heat Sensor Cables must NEVER be connected to electrical mains voltage supply.**

Note: Additional variations are available as a special customer requirement or to suit a special application eg. Stainless Steel braiding.



ORDERING INFORMATION

Linear heat detection cable - **68°C** Alarm temperature
TH68 Fire Buys **Part No 1701**. Max Ambient 45°C

Linear heat detection cable - **88°C** Alarm temperature
TH88 Fire Buys **Part No 1702**. Max Ambient 60°C

Linear heat detection cable - **105°C** Alarm temperature
TH105 Fire Buys **Part No 1703**. Max Ambient 70°C

Available from: Fire Buys Sales

Telephone 1300 761 747 Facsimile (08) 9209 1690