

#### ■ Type of Detection

ThermoCable™ digital linear heat detection (LHD) cable is a combination of advanced polymer and digital technologies that can detect heat anywhere along its entire length.

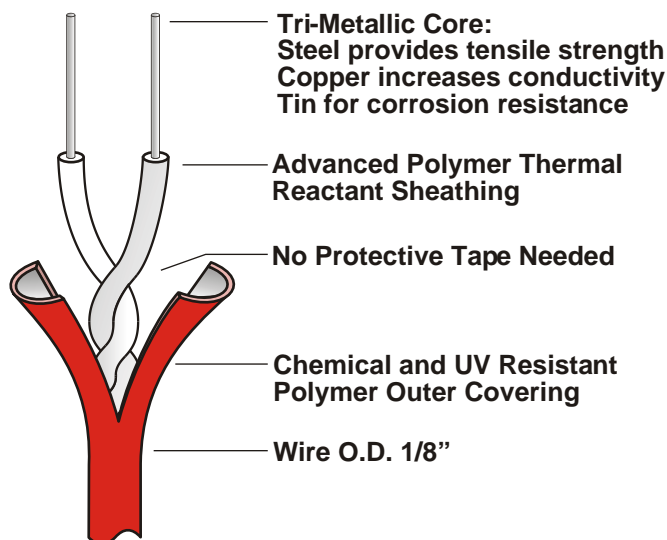
#### ■ Product Description

At the core of ThermoCable™ is a twisted pair of extremely low resistance (.05 ohm/ft. of twisted cable) tri-metallic conductors, sheathed in new advanced thermal polymers. These polymers are chemically engineered to break down at specific fixed temperatures allowing the twisted conductors to make contact and initiate an alarm at the control panel without any calibration for changes in the ambient temperature. The distance locating option allows the control panel to identify and display the exact location, in feet or meters from the panel, where the heat source interacted with the detection cable.

The polymer used for the protective outer coating of ThermoCable™ is chemically inert and UV protected. This allows for ThermoCable™ to be used in an extremely wide variety of installations and hazards.

ThermoCable™ is compatible with any panel by using monitor modules to relay a fire or fault condition to the fire alarm panel.

#### ■ ThermoCable Details



ThermoCable™ - Digital Linear Heat Detection Cable (LHD)

#### ■ Features

- Up to 10,000 linear feet of ThermoCable per zone
- Approved for up to 35' spacing
- .05 ohms/ft resistance for twisted pair wire, lower than any other type of linear heat detection wire
- Lower cost than other types of linear heat detection wire
- Compatible with ALL Fire Alarm Control / Releasing Panels  
(Maximum length determined by resistance allowed by panel)
- Multiple alarm temperatures: 155°F, 172°F, 190°F, 220°F
- Distance locating available
- Can detect anywhere along the entire length of wire
- Multiple alarm temperatures can be mixed on the same zone
- Total zone length replacement unnecessary after alarm
- Longer standard spool lengths means less splicing

#### ■ Applications

Use where other types of detection are not practical or where exact location of the overheating condition must be known. ThermoCable™ is ideal for aircraft hangars, switchgear, in-rack freezer and cooler storage, archive and warehouse storage, elevator shafts, cooling towers, conveyors, cable trays, cable spreading rooms, terminal rooms, Bus ducts, in-cabinet, motors, pumps, generators, tunnels, bridges, parking decks and engine bays.

**Note:** Please refer to federal and local codes, and manufacturers recommendations prior to design or installation. All systems must meet NFPA requirements and be designed using the appropriate calculation software.



MEA

ISO 9001 Registered

## Specifications

Diameter:	1/8"
Weight:	Nominal 15 lbs./1000 ft.
Bend Radius:	3"
Max. Voltage Rating:	30 VAC, 42 VDC
Resistance:	.05 ohms/ft.
Temperature Ratings (°F):	155°, 172°, 190°, 220°
Sheathing:	Corrosive and UV resistant

### Maximum Listed Spacing:

Temperature Rating	UL/ULC	FM
155°	35 ft. (10.7 m)	30 ft. (9 m)
172°	35 ft. (10.7 m)	30 ft. (9 m)
190°	35 ft. (10.7 m)	30 ft. (9 m)
220°	35 ft. (10.7 m)	25 ft. (7.6 m)

Maximum Ambient Install Temperature	Alarm Temp.	Part Number
Up to 113°F (45°C)	155°F (68°C)	TC155
Up to 122°F (50°C)	172°F (78°C)	TC172
Up to 158°F (70°C)	190°F (88°C)	TC190
Up to 158°F (70°C)	220°F (104°C)	TC220

## Installation Notes

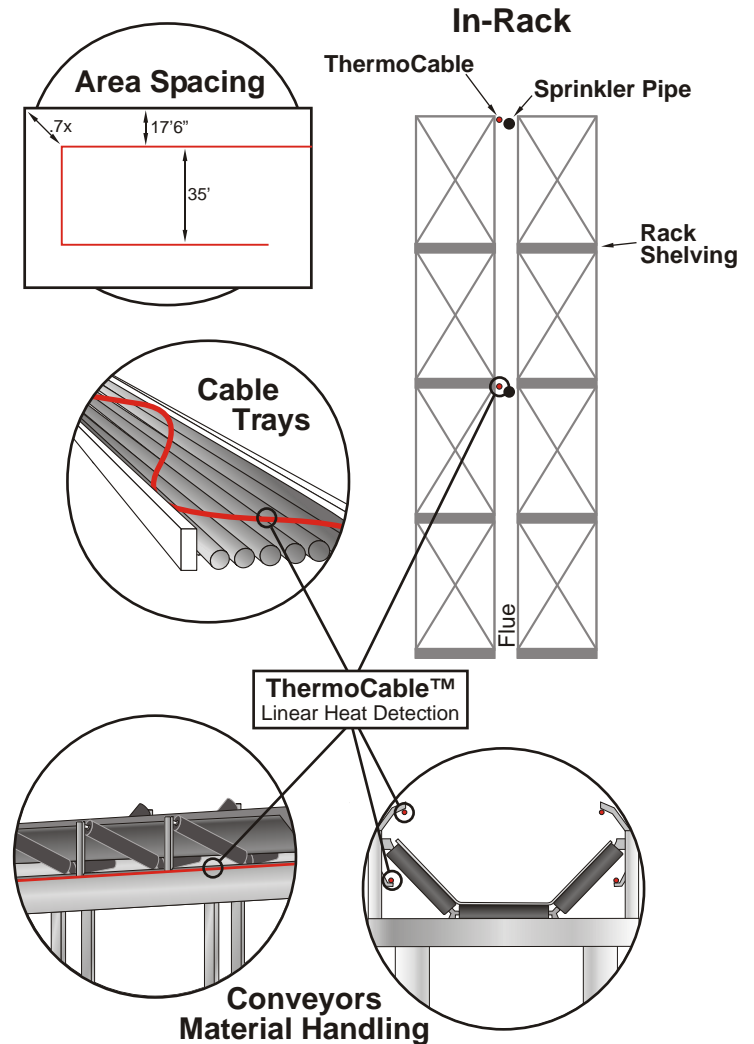
ThermoCable™ Linear Heat Detection (LHD) is approved as a heat actuated device for use on a supervised fire alarm releasing panel and is available in multiple temperature sensitivities. Please refer to our temperature rating chart for assistance in choosing the best wire for your environment. ThermoCable™ must be installed in continuous runs (no T-Taps or branch lines). All systems must be installed per NFPA 70, NFPA 72, Fire Alarm Code Handbook, National Electrical Code, Factory Mutual and the authority having jurisdiction. ThermoCable™ can be installed for both area protection and local applications (close to the hazard) for faster response.

ThermoCable™ requires less splicing than other systems and allows for multiple temperatures on the same zone.

16 AWG copper leader wires (in conduit) are normally run from the panel to the ThermoCable™ junction box at the start of the detection zone.

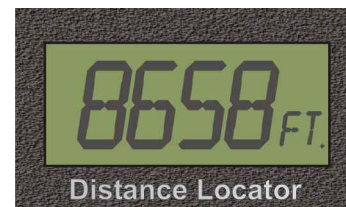
## Installation Specifications

For more details, please refer to the ThermoCable™ installation manual.



## Distance Locating

The Distance Locating option available for SAFE Fire Detection's ThermoCable™ system allows for identifying exactly where the overheating condition occurred anywhere on the total length of cable in a particular zone.



SAFE Fire Detection, Inc.  
5915 Stockbridge Drive  
Monroe, NC 28110  
Phone: 704-821-7920  
Fax: 704-821-4327

Satellite Offices in:

- Chicago, Illinois
- Hammond, Indiana
- Houston, Texas
- Los Angeles, California
- Toronto, Canada

E-mail: [staff@safefiredetection.com](mailto:staff@safefiredetection.com) • [www.safefiredetection.com](http://www.safefiredetection.com)