SaeVu
BY SPACE AGE ELECTRONICS

SafeCable LHD™
Linear Heat Detection Cable
• *Addressable or Conventional*
• *Use with Any Listed Panel*

Features

• **Up to 15,000 linear feet (3,048m) of SafeCable per zone**

• **Approved for up to 35' (10.7m) spacing**

• **.05 ohms/ft (.164 ohms/m) 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**

• **Use with addressable contact monitor modules**

• **Multiple alarm Temperatures: 155°F(68°C),172°F(78°C), 190°F(88°C),220°F(105°C) 365ºF(185°C), 455ºF(235°C)**

• **Single, Multiple and cross zoned 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**

• **Custom lengths available**

Applications

Use where other types of detection are not practical or where the location of an overheating condition must be known. SafeCable 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, in-cabinet, motors, pumps, generators, tunnels, bridges, parking decks and engine bays.
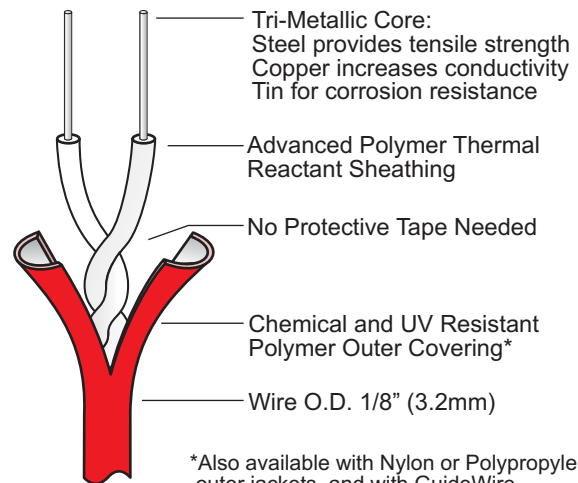
Description

SafeCable digital linear heat detection (LHD) cable is a combination of advanced polymer and digital technologies that can detect heat anywhere along its entire length. SafeCable is also compatible with any listed addressable or conventional panel.

At the core of SafeCable is a twisted pair of extremely low resistance (.05 ohm/ft. [.164 ohms/m] 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 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 SafeCable is chemically inert and UV protected. This allows for SafeCable to be used in an extremely wide variety of installations and hazards.

The cables TC155, TC172, and TC365 are red. TC190 and TC220 are white. If the cable has a nylon jacket then it is black, except for TC365. Polypropylene jackets are clear. The text on the cable reads: Safe Fire Detection Inc.- (Part#) - "Heat Actuated Device for Special Applications" - UL Listed - C-UL - 27EE - (Temp.) deg. F - UTHV - Date - Do Not Paint.

SafeCable Technology

Tri-Metallic Core:
Steel provides tensile strength
Copper increases conductivity
Tin for corrosion resistance

Advanced Polymer Thermal Reactant Sheathing

No Protective Tape Needed

Chemical and UV Resistant Polymer Outer Covering*

Wire O.D. 1/8" (3.2mm)

*Also available with Nylon or Polypropylene outer jackets, and with GuideWire.

UL   c UL us   FM APPROVED   CSFM

MEA
ISO 9001 Registered

Maximum Listed Spacing

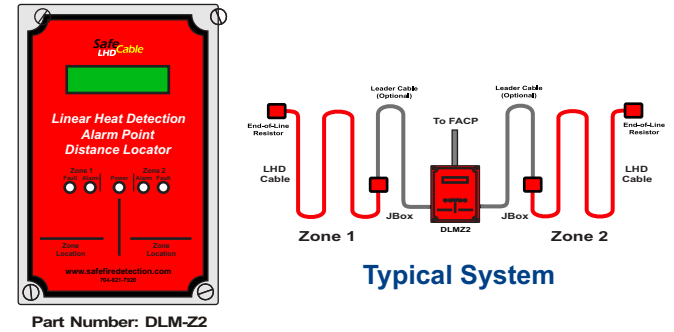| Temperature Rating	C-UL-US	FM
155°F (68°C)	35 ft. (10.7m)	30 ft. (9m)
172°F (78°C)	35 ft. (10.7m)	30 ft. (9m)
190°F (88°C)	35 ft. (10.7m)	30 ft. (9m)
220°F (104°C)	35 ft. (10.7m)	25 ft. (7.6m)
365°F (185°C)	35 ft. (10.7m)	25 ft. (7.6m)

Maximum Ambient Temperatures

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
Up to 305°F (152°C)	365°F (185°C)	TC365N

Specifications - SafeCable

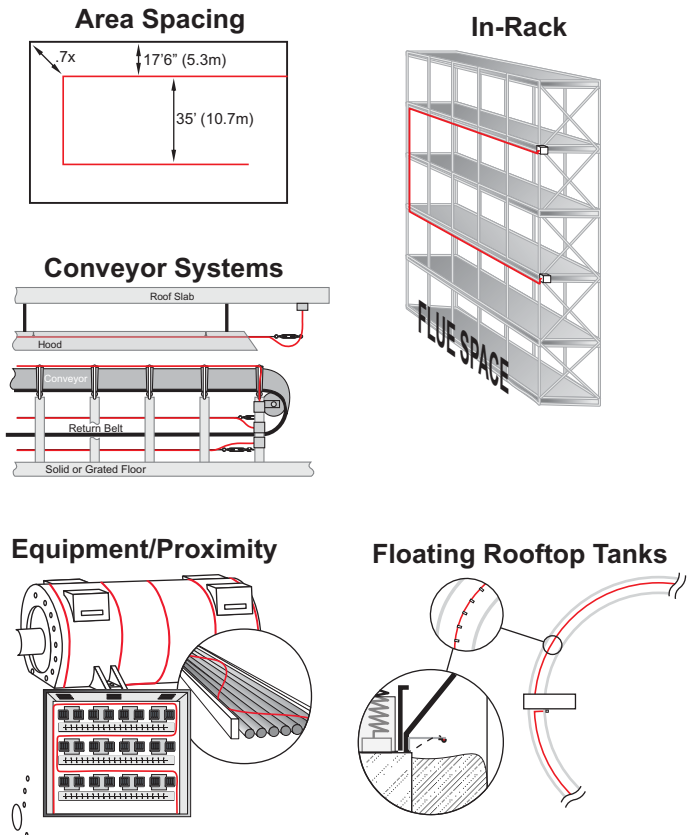|	
Diameter:	1/8" (3.2mm)
Weight:	Nominal 15 lbs./1000 ft. (6.8kg/305m)
Bend Radius:	3" (76.2mm)
Max. Voltage Rating:	30 VAC, 42 VDC
Resistance:	.05 ohms/ft. (.164 ohms/m)
Temperature Ratings (°F):	155°, 172°, 190°, 220°, 365º
Temperature Ratings (°C):	68°, 78°, 88°, 105°, 185º
Sheathing Options:	**PVC:** Multipurpose flame retardant outer jacket resistant to common chemicals while maintaining the best flexibility at low temperatures.
	NXT Nylon: Is an excellent choice for industrial environments that need a second layer of heavy duty abrasion resistance. In addition is has high UV resistance making it excellent for outdoor applications.
	Polypropylene: Polypropylene is a the absolute best choice for harsh chemical environments such as chemical plants as it wont react to water, detergents, acids or bases.
	GuideWire: GuideWire is a stainless steel cable wound around SafeCable used to support SafeCable over long spans where there is nothing to support the cable from. GuideWire can be used on any temperature cable or coating.
Optional Guidewire:	Minimal support -15 ft (4.6m) intervals
Operating Temp.:	-75°F(-60°C) to Alarm Temperature

Optional Distance Locating

Now single zone, two zones or cross zoned distance locating is available from a single optional distance locating module. This new optional feature can be added to any system and gives you the ability to locate where the fire or overheating has occurred anywhere on the linear heat detection cable. In cross zone mode, it can send a signal to the FACP only when both zones are in alarm offering you additional safety before alarming by having both zones verifying the overheat before sending the alarm signal.

Part Number: DLM-Z2

Typical System

Installation Examples

For more details, please refer to the Safe Line Heat Detection Handbook.

Area Spacing

In-Rack

Conveyor Systems

Equipment/Proximity

Floating Rooftop Tanks

Note: Please refer to all federal, state and local codes, and manufacturer's recommendations prior to design or installation.