LINEAR HEAT DETECTION CABLE (LHD)

DURÁN-SAFE

DURAN® electrónica

LHD cable is a detection system, once is connected to a fire control unit, that can detect a temperature increase along its length.

It is a twisted pair of 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.

LHD cable can be connected to any kind of conventional panel or addressable, using a conventional module.

The thermal cable can be connected to a DL distance locator to identify the exact point of alarm along its entire length. Up to 3.000 meters.

TEMPERATURE RANGE AND COVERS

There are 4 different types of LHD cable depending on the chosen temperature alarm: 68ºC, 78ºC, 88ºC and 105ºC.

STANDARD	POLYPROPYLENE	NYLON	Max. ambient temperature*	Alarm temperature**
CDSFTC68	CDSFTC68P	CDSFTC68N	45ºC/113ºF	68ºC/155ºF
CDSFTC78	CDSFTC78P	CDSFTC78N	50ºC/122ºF	78ºC/172ºF
CDSFTC88	CDSFTC88P	CDSFTC88N	70ºC/158ºF	88ºC/190ºF
CDSFTC105	CDSFTC105P	CDSFTC105N	70ºC/158ºF	105ºC/220ºF

* Maximum recommended temperature considering fluctuations in ambience temperature.
** Alarm temperature not dependant of zone length.

It is available with different cover depending on the application:

• Standard: For any installation. It is protected against UV rays.
• Polypropylene: Specially designed for installations in environments with corrosive chemical substances.
• Nylon: Covered with nylon, specially designed for installations with mechanical damage risk.

ADVANTAGES

• Cable and detector combined
• Compatible with any fire detection control unit.
• Alarm temperature is not dependant on the cable length
• Not the whole cable length has to be replaced after an alarm. Only the cable surrounding the alarm point needs to be substituted.
• Alarm response time lower than 8 s – UL listed –
• Detection at "exact point of alarm" when installed with DL distance locator.
• Multiple alarm temperatures per single zone by series connection of different alarm temperature rated sensor cables.
• No calibration required
• Easily site tested
• Standard junction boxes and accessories
• Full product traceability

DURÁN-SAFE LHD CABLE IS CERTIFIED BY FM AND UL

LINEAR HEAT DETECTION CABLE

TECHNICAL CHARACTERISTICS

Material:	Steel, tin and cupper alley. Corrosive and tensile resistant. Improves the conductivity.
External diameter:	0,912mm
Conductor diameter:	0,294mm
Conductor resistance:	164 ohms/km
Electric range:	30V AC – 42V DC
Minimum temperature of exposure:	–40ºC –UL tested –
Alarm temperature accuracy:	+/– 3% of the indicated temperature
Covered area:	10,7m –UL verified–
Diameter:	3.2mm
Minimum sensor cable bend radius:	76.2 mm

Standard cable is avalilable in 100m, 200m, 500m and 1000m reels. (Other covers, please consult).

INSTALLATION AND GUARANTEE

See installation manual

APPLICATIONS

Train and road tunnels, escalators, electrical cupboards, cable trays, conveyor belts, warehouses, machinery, transformers, generators, and in general, installations at environmental extreme conditions.

CERTIFICATIONS

Factory Mutual (FM) Approvals: 3023073
Underwriters Laboratories (UL): (US & CAN): S24018
CSFM Approved: California State Certification Fire Marshall: 7270–1686:100