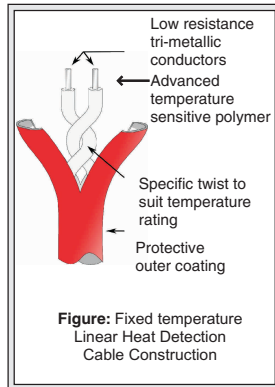


# Digital Linear Heat Sensing Cables



System Sensor Fixed Temperature Linear Heat Detection Cable range consists of a twisted pair of extremely low resistance (.05 Ohm/ft. of twisted pair) tri-metallic conductors, sheathed in new advanced thermal polymers. These polymers are chemically engineered to breakdown 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 ambient temperatures.

The factor in determining which detection temperature wire to use is the maximum ambient temperature of the hazard area or equipment to be protected. The proper temperature model must be selected to provide the fastest alarm response to a potential fire condition without creating false alarm conditions. In the selection process its critical to consider the hazard areas highest potential ambient temperature.

It is a co-axial cable which exerts a defined change in electrical resistance of internal polymers when subjected to changes in surface temperatures. System monitoring through an associated electronic interface unit provides fault indication of open and short circuit conditions on the sensor cable.

System Sensor LHS range is UL/FM approved.

## Specifications

Model No	Description
SS-LD-68-155	Digital Linear Heat Detector(68°C), UL/FM approved
SS-LD-78-172	Digital Linear Heat Detector(78°C), UL/FM approved
SS-LD-88-190	Digital Linear Heat Detector(88°C), UL/FM approved
SS-LD-105-221	Digital Linear Heat Detector(105°C), UL/FM approved
SS-LDN-68-155	Digital Linear Heat Detector(68°C), with Nylon Extrusion, UL/FM approved
SS-LDN-78-172	Digital Linear Heat Detector(78°C), with Nylon Extrusion, UL/FM approved
SS-LDN-88-190	Digital Linear Heat Detector(88°C), with Nylon Extrusion, UL/FM approved
SS-LDN-105-221	Digital Linear Heat Detector(105°C), with Nylon Extrusion, UL/FM approved
SS-LDS-68-155	Digital Linear Heat Detector(68°C), with Stainless Steel Extrusion, UL/FM approved
SS-LDS-78-172	Digital Linear Heat Detector(78°C), with Stainless Steel Extrusion, UL/FM approved
SS-LDS-88-190	Digital Linear Heat Detector(88°C), with Stainless Steel Extrusion, UL/FM approved
SS-LDS-105-221	Digital Linear Heat Detector(105°C), with Stainless Steel Extrusion, UL/FM approved
SS-APDL	Alarm Point Distance Locator, FM Listed
887/EOL	End Of Line Box
887/M	Modulator - Junction Box

## Specifications General

Construction:	Overall insulated, twisted pair of tri-metallic cores
Insulation:	1kV tested protective outer coat
Additional Insulation Options:	Nylon or Polypropylene
Approvals:	CE Marked, RoHS Compliant, FM, UL
Maximum Zone Length:	3,000m (10,000ft)
Wire Overall Diameter:	3.60mm ± 0.12mm (0.142" ± 0.005")
(Nylon/Polypropylene coated Dia.):	4.50mm ± 0.12mm (0.177" ± 0.005")
Minimum bend radius:	50 mm (2")
Ambient Temperature Range:	-40°C – 121°C (-40°F – 250°F)
(dependant upon action temperature)	

## Electrical

Max Voltage Rating:	30Vac, 42Vdc
Resistance:	~100/km (29/kft) per leg
Velocity of Propagation:	~55%
Capacitance:	88 – 150 pF/m (26 – 45 pF/ft)
Inductance:	540 – 1050 nH/m (165 – 320 nH/m)

## Before Installing

- 1) Install the linear heat detection cable accordingly to meet local and country installation requirements.
- 2) Linear heat detection cable must be installed in accordance with NFPA 70 & 72, NEC 760 (National Electric Code) and Authorities Having Jurisdiction.
- 3) Support the detection cable at 1m (3ft) to 1.5m (5ft) intervals.
- 4) Test the detection cable before installation using a multimeter.
- 5) Ensure the maximum ambient temperature rating of the detection cable will not be exceeded during storage or normal operating conditions.
- 6) Ensure the detection cable is spaced at less than or equal to the maximum approved spacing.
- 7) Ensure the detection cable is not in contact with any material which may conduct heat into the cable directly. A neoprene insulator or equivalent should be placed between the fixing clip and heat sensing cable.
- 8) Ensure any cable glands used are tightened to form a secure and moisture proof seal around the detection cable.
- 9) Avoid allowing the detection cable to come in contact with any material which acts as a heat sink. This may delay the activation of the cable in alarm situations.
- 10) Do not exceed the maximum operating voltage of the detection cable (48Vdc).
- 11) Do not connect two lengths of detection cable which have different action temperatures.
- 12) Do not connect lengths of fixed temperature cable in 'T' connections or spurs.
- 13) Do not paint the detection cable.
- 14) Do not place the detection cable under excessive tension.
- 15) Do not bend the detection cable at right angles. The minimum bend radius is 2" or 50mm.

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