



## FIREPLUS-LHD DIGITAL LINEAR HEAT DETECTION CABLE

BY CONTEXT PLUS | EMAIL: SALES@CONTEXTPLUS.CO.UK

### PROTECT MORE FOR LESS

UL Listed  
Made in the UK  
Available in: 50m, 100m,  
500m and 1000m Reels



The Context Plus FirePlus-LHD range of digital linear heat detection cables and accessories are designed to monitor and trigger a response when a specific temperature is reached. If the temperature surrounding the cable reaches the activation temperature, the two cores quickly come into contact and trigger an alarm.

Every inch of the FirePlus-LHD Digital Linear Heat Detection cable acts as the sensor providing extensive and comprehensive detection over large areas. It is possible to connect 3,000 metres to any typical conventional or addressable fire alarm control panel or building management system providing greater protection than can be achieved using multiple discrete sensors.

Context Plus FirePlus-LHD Digital Linear Heat Detection cables have been designed to be simple to install and extremely reliable, thus providing guaranteed protection year after year. Since our cables only respond to an overheat situation they work well in noisy, dusty or hazardous environments where other types of detectors may trigger false alarms. Through design, our cables are compatible with any conventional or addressable fire alarm control panel or other building management system.

### FEATURES

UL 521 Approved.

CE Marked.

Up to 10,000ft (3000m) per zone.

Detection along the entire length of sensor cable.

**Optional additional** Nylon coating, offering UV protection and increased durability.

**Optional additional** Polypropylene coating for increased chemical protection.

**Optional additional** Stainless steel over-braiding for increased mechanical protection.





# THE CONTEXT PLUS FIREPLUS DIGITAL LINEAR HEAT DETECTION CABLE RANGE

Compatible with any conventional or addressable fire alarm control panels or other building management systems.

## BENEFITS

UL521 and RoHS compliant to meet end user specifications

Low cost for excellent fire protection

Cable based sensing allows detection at the point of risk

Quickly locate and respond to an incident with the **Context Plus FirePlus-LHD Digital Interface Unit**

Short manufacturing lead times assures product availability and speed to market

Compatible with a range of our accessories

Low installation, maintenance and repair costs reduce total cost of ownership

Reliability through design, approvals and 3-year warranty

## DETECTION TEMPERATURES

- 68°C (PVC Coated)
- 88°C (PVC Coated)
- 105°C (PVC Coated)
- 185°C (Nylon outer)

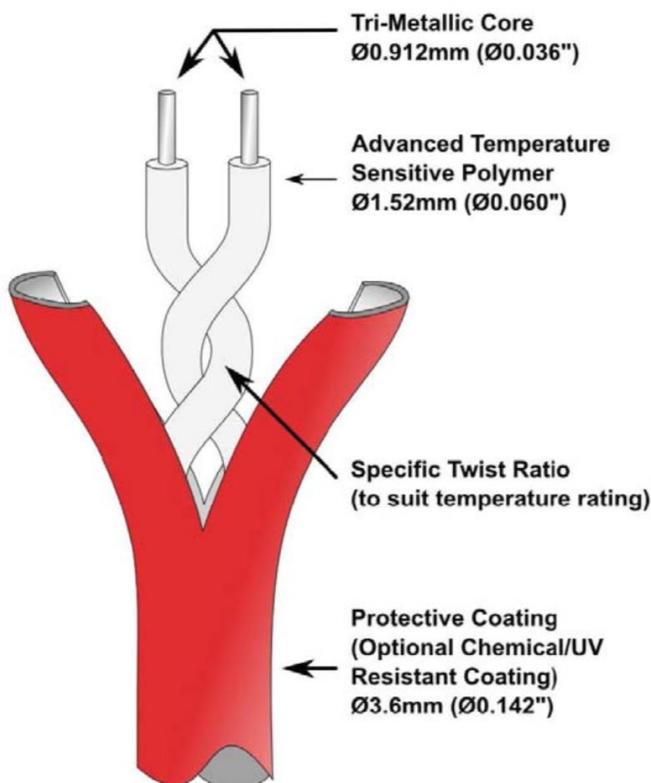
## ENVIRONMENTAL SPECIFICATIONS

*Maximum ambient temperatures for effective operations*

For the 68°C cable	45°C
For the 88°C cable	65°C
For the 105°C cable	65°C
For the 185°C cable	125°C

*Minimum ambient temperatures for effective operations*

All cables	-40°C
Humidity	0% to 100% RH





# TECHNICAL SPECIFICATIONS

## ORDER CODES

FirePlus-LHD cable 68°C PVC Coated	LHD-68-P/50m (50m reels)
	LHD-68-P/100m (100m reels)
	LHD-68-P/500m (500m reels)
	LHD-68-P/1000m (1000m reels)
FirePlus-LHD cable 88°C PVC Coated	LHD-88-P/50m (50m reels)
	LHD-88-P/100m (100m reels)
	LHD-88-P/500m (500m reels)
	LHD-88-P/1000m (1000m reels)
FirePlus-LHD cable 105°C PVC Coated	LHD-105-P/50m (50m reels)
	LHD-105-P/100m (100m reels)
	LHD-105-P/500m (500m reels)
	LHD-105-P/1000m (1000m reels)
FirePlus-LHD cable 185°C Nylon Outer Sheath	LHD-185-N/50m (50m reels)
	LHD-185-N/100m (100m reels)
	LHD-185-N/500m (500m reels)
	LHD-185-N/1000m (1000m reels)

## ELECTRICAL SPECIFICATIONS

Max Voltage	30Vac, 42Vdc
Resistance	~100Ω/km per leg
Velocity of Propagation	~55%
Capacitance	88 – 150 pF/m
Inductance	540 – 1050 nH/m
Minimum bend radius	50 mm

## TECHNICAL DATA

Insulation	1kV tested protective outer coat
Additional Insulation Options	Nylon, Polypropylene or Stainless-Steel braiding
Approvals	CE Marked, RoHS Compliant, UL
Maximum Zone Length	3,000m (10,000ft)
Wire Overall Diameter	3.60mm to 5.08mm
Minimum Band Radius	50mm
Ambient Temperature Range	-40°C - 125°C

## MECHANICAL SPECIFICATIONS

Material: Overall insulated, twisted pair of tri-metallic cores

Colour	
68°C	Red
88°C, 105°C	White
185°C	Red
<i>(additional nylon coating is always black) (additional polypropylene coating is transparent)</i>	





## POTENTIAL APPLICATIONS

### OVERHEAT SENSING IN TUNNELS

FirePlus-LHD cables can provide an excellent solution to overheat sensing in tunnels and roadways. Zoning the cable in separate lengths can provide discrete detection zones for additional detection clarity.

### OVERHEAT SENSING IN CABLE TRAYS

FirePlus-LHD cables are excellent for overheat sensing in cable trays. A single run of FirePlus-LHD cable can provide comprehensive overheat and fire protection for trays up to 0.6m wide. Multiple runs can be used for protecting larger trays and multi-tier trays

### OVERHEAT SENSING FOR ESCALATORS

Escalators are highly susceptible to overheating and catching fire because of their continuous operation over long periods. FirePlus-LHD cables can be installed at the point of risk thanks to their small size and flexibility, enabling the effective detection of overheating before a fire occurs. For this application, a stainless-steel braided cable is recommended to protect the detection cable from excessive wear.

### OVERHEAT SENSING IN CARPARKS

FirePlus-LHD cables are ideal for early detection of fires and overheating in car parks. Due to the ferocious nature of underground carpark fires increased coverage, high sensitivity and reliability are all of paramount importance in any carpark fire detection system. Our nylon coated cables provide an excellent low maintenance, long-life solution, undeterred by exhaust fumes and additional environmental factors.

### OVERHEAT SENSING FOR WAREHOUSE SHELVING

The FirePlus-LHD cable is suitable for detection at the point of risk of items stored on dense shelving. The nature of the cable, sensitive only to heat, makes it ideally suited noisy and dusty industrial applications. Our cables are also ideal for providing early warning of abnormal temperatures in freezer warehouses.

### OVERHEAT SENSING ON FIXED ROOF TANKS

The FirePlus-LHD cable can provide a high level of protection on fixed roof storage tanks when installed close to points of risk such as vents, flanges or gauging points. Combining the FirePlus-LHD cable with our fire suppression system produces a highly effective fire protection system.

### RIM-SEAL PROTECTION ON FLOATING ROOF TANKS

The FirePlus-LHD cable is ideal for early detection of fire due to a damaged or worn rim seal on a floating roof tank. The earlier a fire can be detected on a storage tank containing highly flammable contents, the better chance a suppression system has of preventing a catastrophe. The FirePlus-LHD cable is perfect for this application.

