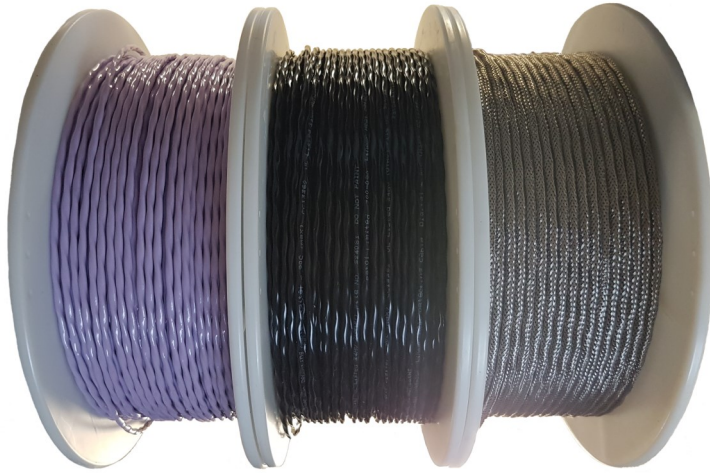


# Non-Resettable Digital Linear Heat Detection Cable



The Patol Non-Resettable Digital Linear Heat Detection Cable (LHDC) is designed to provide early detection of fire conditions and overheating in circumstances where other forms of detection would not be viable, either due to an inability to sustain the environment requirements or through prohibitive costs.

Extensive single zonal lengths of the Non-Resettable Digital LHDC may be installed with the ability to trigger alarms for hot spots occurring on very small sections of the overall cable, with the ability to identify the distance in metres when connected to a Digital Interface with Distance Location Display.

The Non-Resettable Digital LHDC may be employed in a wide variety of applications but is particularly suited where there are harsh environmental conditions, a physical or hazardous maintenance access constraint to protect the area, and / or a requirement to cost effectively install detection in close proximity to the risk(s).

The primary mechanism of Non-Resettable Digital LHDC is that the inner cores insulating polymers are specially formulated such that the polymers plasticize at a specific temperature, causing the inner cores to make contact and send a signal to the controller.

## Features

**SIL 2 Approved** when used with Digital Interface Modules:

LDM-519-DIM-28

LDM-621-DDL

LDM-519-DIM (Legacy)

LDM-519-DDL (Legacy)

**UL Listed.**

**UV and Chemical Resistant.**

Early Detection of hazards at temperatures well below flame point.

Rugged construction - Stainless Steel outer armour available.

Fixed Alarm Trigger Temperature.

Compatible with many existing zone monitors / Control Equipment.

Intrinsic Safety Configurable for Hazardous Areas.

## Applications

Cable Tunnels, Ducts & Mezzanines

Escalators & Moving Walkways

Petro-Chemical Storage Tanks / Rim Seal Protection

Paint Shops, Spray Booths & Climate Chambers

Conveyors - Coal, Wood, Sulphur. etc

Ceiling Voids & Attic Spaces

Road & Rail Tunnel Carriageways

Nuclear Reactor Plant Areas

Refrigerated Stores & Cold Rooms

Electrical Control & Switchgear Cabinets

Warehouse High Rise Pallet Racking

Oil Rigs & Off Shore Platforms

Fume Cupboards & Glove Boxes

Grain Silos & Agricultural Storage

Road / Rail Vehicle Engine Compartments

Steam Pipe Leaks & Trace Heating Faults

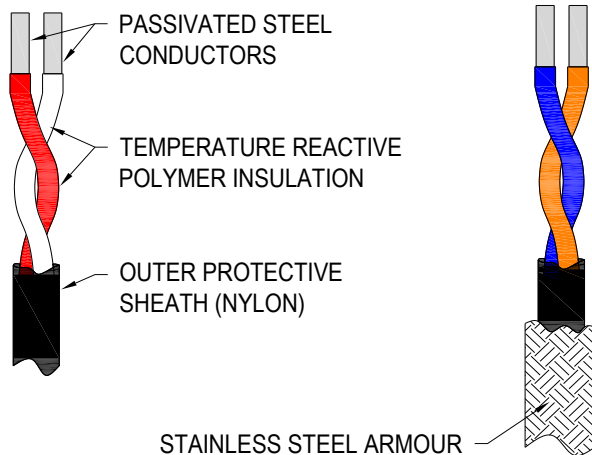
Product Lines - Flanges, Valves & Pumps

Computer Room under Floor Cable Voids

# Non-Resettable Digital Linear Heat Detection Cable

## Cable Construction

The Patol Non-Resettable Digital LHDC comprises of a twisted pair twin core cable. Each core is of tinned copper coated spring steel and has a special heat reactive polymer insulation.



700-090 Shown

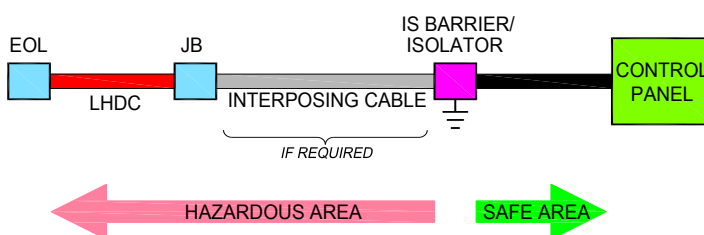
700-071 Shown

Non-resettable Digital LHDC may be used as a simple switch to operate a relay etc. However in most installations the minimum requirement is that the LHDC circuit is monitored for disconnections (Open Circuit) by means of an EOL functional unit and an appropriate Fire Alarm channel or Address Loop Interface unit.

## Temperature Specifications

Part Number	Alarm Temperature	Maximum Ambient	Minimum Operating	Minimum Installation
700-070	70°C	45°C	-65°C	-40°C
700-071				
700-090	90°C	70°C	-65°C	-40°C
700-091				
700-180	180°C	150°C	-65°C	-40°C
700-181				

## Intrinsic Safety Configuration



## Specification

<b>No. of Cores:</b>	2
<b>Voltage Rating:</b>	150Vdc (Dielectric Test 500Vdc)
<b>Outer Diameter:</b>	4.0mm ± 0.3mm
<b>(Max)</b>	S.S. Armour 4.5 ± 0.3mm
<b>Weight:</b>	
Standard cable	1km reel 21kg
Armoured cable	500m reel 19kg
<b>Approval:</b>	UL Listed (180°C not certified)

## Ordering Information

Description	Part Number
<b>Cable- UL Listed</b>	
Nylon 70°C (outer sheath black)	700-070
Nylon S.S* 70°C	700-071
Nylon 90°C (outer sheath black)	700-090
Nylon S.S* 90°C	700-091
Nylon 180°C (outer sheath violet)	700-180 **
Nylon S.S* 180°C	700-181 **
*Stainless Steel Armour	
** Not UL listed	

## Controllers

LDM-519-DDLX (10K)	700-471
LDM-519-DIM-28	700-442(SIL2)
LDM-621-DDL	700-453
LDM-621-DDL-G	700-453(G)
LDM-621-DDL-Z	700-453(Z)
LDM-519-DDL (Legacy)	700-451(SIL2)
LDM-519-DDL-G (Legacy)	700-451(G)(SIL2)
LDM-519-DDL-Z (Legacy)	700-451(Z)(SIL2)
<b>700-451(G) suitable only for use with Galvanic Isolator</b>	
<b>700-453(G) suitable only for use with Galvanic Isolator</b>	
<b>700-451(Z) suitable only for use with Zener Barrier</b>	
<b>700-453(Z) suitable only for use with Zener Barrier</b>	

EN54-28 certified options available

See Information sheets

D1453, D1476 & D1477 for further information

EOLs & Junction Boxes refer to D1210