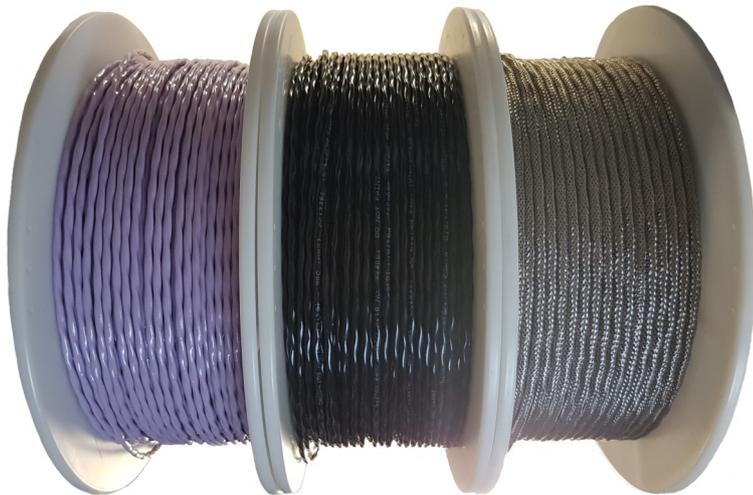


Digital

## Linear Heat Detection Cable LHDC



The Patol Digital Linear Heat Detection Cable 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 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 meters.

The LHDC may be employed in a wide variety of applications but is particularly suited where there is harsh environmental condition, 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 LHDC is that the inner cores insulating polymers are specially formulated such that the polymers will 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 LDM-519-DIM or LDM-519-DDL module.

**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.

Intrinsically Safe 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

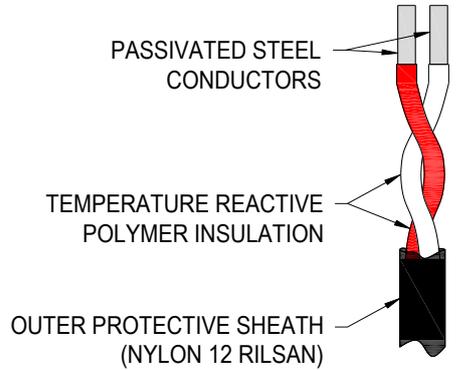
Steam pipe Leaks & Trace Heating Faults

Product Lines - Flanges, Valves & Pumps

Computer Room under Floor Cable Voids

### Cable Construction

The Patol 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

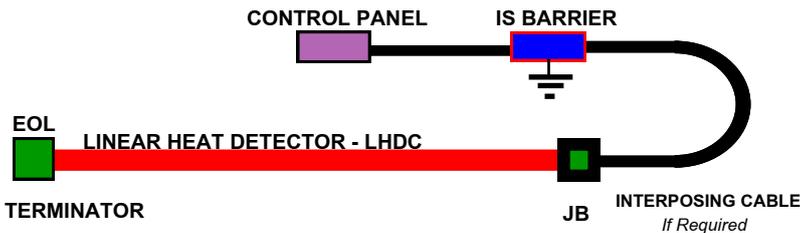


LHDC Digital may be used as a simple switch to operate a relay etc. However in most installations the minimum requirement is that the LHDC circuit is monitored for disconnections (Open Circuit) by means of an EOL device and an appropriate fire alarm channel or address loop interface unit.

STAINLESS STEEL ARMOUR

700-071 Shown

### Intrinsically Safe Configuration



### Specification

<b>No. of Cores:</b>	2
<b>Alarm Temperature:</b>	700-070 = 70°C 700-090 = 90°C 700-180 = 180°C
<b>Max Ambient Temperature:</b>	700-070 = 45°C 700-090 = 70°C 700-180 = 150°C
<b>Min Operating Temperature:</b>	-65°C
<b>Min Installation Temp:</b>	-40°C
<b>Outer Sheath:</b>	Nylon (70°C & 90°C - Black)* Hytrek (180°C - Violet)* Stainless Steel Armour Option* * UV & Chemical Resistant
<b>Voltage Rating:</b>	150Vdc (Dielectric Test 500Vdc)
<b>Outer Diameter: (Maximum)</b>	4.0mm ± 0.3mm Stainless Steel 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 Pending)

### Ordering Information

Description	Part Number
Nylon 70°C	700-070
Nylon S.S* 70°C	700-071
Nylon 90°C	700-090
Nylon S.S* 90°C	700-091
Nylon 180°C	700-180
Nylon S.S* 180°C	700-181

\*Stainless Steel Armour

**Controllers and Termination boxes used with the above Digital cables:**

LDM-519-DDL	700-451	(SIL 2 Approved)
LDM-519-DDL-G	700-451(G)	(SIL 2 Approved)
LDM-519-DDL-Z	700-451(Z)	(SIL 2 Approved)
LDM-519-DDLX	700-471	
LDM-519-DIM	700-441	(SIL 2 Approved)
EOL & Through box	refer to D1210	

700-451(G) suitable only for use with Galvanic Isolator

700-451(Z) suitable only for use with Zenner Barrier