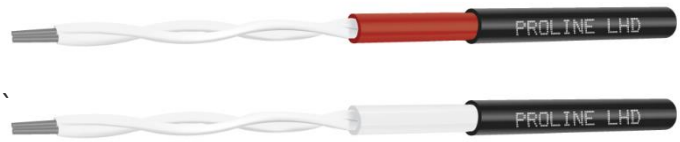
PROLINE Digital Nylon Cable Data Sheet



Key Features

- UL 521 approved File No S3657
- Detection at any point along the cable
- Low installation and maintenance costs
- Reliable solution for hazardous areas
- Highly UV, Chemical and Abrasion Resistant

Proline Digital Linear Heat Detection Cable uses fixed temperature detection technology to provide an easy method for sensing changes in temperature levels. The cable can offer alternative overheat protection in a vast range of applications and environments, from tunnels, cable trays, warehousing to sensing changes in temperature within escalators and other applications where many risks of fire are hidden from view.

The digital linear heat detection cable can be directly connected to a single zone of a conventional fire alarm control panel, or, using an addressable zone/switch monitor, the digital linear heat detection cable can easily be interfaced to an addressable loop.

Digital linear heat detection cable is comprised of a pair of twisted low resistance, tri-metallic conductors, sheathed in advanced temperature sensitive polymers. When the cable reaches the required temperature the two twisted cores will fuse together, with a fire triggering resistor attached to the input interface and a single core of linear heat cable to activate an alarm at the main fire panel.

A Nylon coated cable is the common choice when hazardous hydrocarbons such as fuel oils, diesel, kerosene etc. are present. Nylon cables are coloured black and provide suitable UV protection when used in direct sunlight. Nylon is much tougher than PVC and therefore provides superior mechanical and chemical protection.

Technical Data

Construction:	Overall insulated, twisted pair of tri-metallic cores
Insulation:	1kV tested protective outer coat
Approvals:	CE Marked, RoHS Compliant, UL 521 approved File No S36573
Maximum Zone Length:	3,000m (10,000ft)
Wire Overall Diameter:	-40°C to 65°C (-40°F to 149°F)
Minimum bend radius:	50 mm (2")
Ambient Temperature Range: (Dependent upon activation temperature)	-40°C to 65°C (-40°F to 149°F)

Technical Data: Electrical

Max Voltage Rating:	30Vac, 42Vdc
Resistance:	~1000/km (290/kft) per leg
Velocity of Propagation:	~55%
Capacitance:	88 -150 pF/m (26-45 pF/ft)
Inductance:	540-1050 nH/m (165 -320 nH/ft)

Chemical Resistance Data (other coatings for comparison)

Chemical	PROLINE NYLON	PROLINE PVC	PROLINE SILICONE
Butane	●●●●●	●●●●●	●●●
Diesel Fuel	●●●●●	●●●●●	●●●
Ethanol	●●●●●	●●●●	●●●●
Fuel Oils	●●●●●	●●●●●	●●●
Gasoline Unleaded	●●●●●	●●●	●●●
Jet Fuel	●●●●	●●●●	●●●
Kerosene	●●●●●	●●●●●	●●●
Lubricants	●●●●●	●●●●	●●●
Methanol	●●●●	●●●●	●●●●●
Natural Gas	●●●●●	●●●●●	●●●●●
Sea Water	●●●●●	●●●●●	●●●●●
Sodium Peroxide	●●●●●	●●●	●●

Ordering Information

Part Number	Description
TH68N-100	Digital LHD Cable, Nylon, 68°C Alarm Temp, UL, 100m
TH68N-200	Digital LHD Cable, Nylon, 68°C Alarm Temp, UL, 200m
TH68N-500	Digital LHD Cable, Nylon, 68°C Alarm Temp, UL, 500m
TH68N-1000	Digital LHD Cable, Nylon, 68°C Alarm Temp, UL, 1000m
TH78N-100	Digital LHD Cable, Nylon, 78°C Alarm Temp, UL, 100m
TH78N-200	Digital LHD Cable, Nylon, 78°C Alarm Temp, UL, 200m
TH78N-500	Digital LHD Cable, Nylon, 78°C Alarm Temp, UL, 500m
TH78N-1000	Digital LHD Cable, Nylon, 78°C Alarm Temp, UL, 1000m
TH88N-100	Digital LHD Cable, Nylon, 88°C Alarm Temp, UL, 100m
TH88N-200	Digital LHD Cable, Nylon, 88°C Alarm Temp, UL, 200m
TH88N-500	Digital LHD Cable, Nylon, 88°C Alarm Temp, UL, 500m
TH88N-1000	Digital LHD Cable, Nylon, 88°C Alarm Temp, UL, 1000m
TH105N-100	Digital LHD Cable, Nylon, 105°C Alarm Temp, UL, 100m
TH105N-200	Digital LHD Cable, Nylon, 105°C Alarm Temp, UL, 200m
TH105N-500	Digital LHD Cable, Nylon, 105°C Alarm Temp, UL, 500m
TH105N-1000	Digital LHD Cable, Nylon, 105°C Alarm Temp, UL, 1000m