



PROLINE Digital PVC/Polypropylene Cable (TH68P-TH105P-100/200/500/1000)

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 overheating 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.

The standard coating used on Digital cables is made from PVC and is suitable for most environments. However, PVC should not be used when the cables are directly exposed to UV (sunlight) or hazardous chemicals (eg. hydrocarbons) for long periods, or for applications where they may be exposed to regular mechanical abrasion. Where the cable is to be used in caustic environments the additional Polypropylene coating provides additional protection.

KEY FEATURES

- UL 521 approved File No S36573*
- Detection at any point along the cable
- Low installation and maintenance costs
- Reliable solution for hazardous areas
- Cost effective point of risk detection.

TECHNICAL SPECIFICATION

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:	3.60mm ± 0.12mm (0.142" ± 0.005")
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 POLY	PROLINE PVC	PROLINE NYLON	PROLINE SILICONE
Ammonia Liquid	•••••	••••	•••	•••
Butane	•	•••••	•••••	•••
Diesel Fuel	•••••	•••••	•••••	•••
Ethanol	•••••	••••	•••••	•••••
Fuel Oils	•••••	•••••	•••••	•••
Gasoline Unleaded	•••	•••	•••••	•••
Hydrofluoric Acid	•••••	•	•	•
Jet Fuel	•••••	••••	••••	•••
Kerosene	••••	•••••	•••••	•••
Lubricants	•••••	••••	•••••	•••
Methanol	•••••	••••	••••	•••••
Natural Gas	•••••	•••••	•••••	•••••
Sea Water	•••••	•••••	•••••	•••••
Sodium Peroxide	••••	•••	•••••	••

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
TH68P-100	Digital LHD Cable, PVC Red Polypropylene, 68°C Alarm Temp, UL, 100m
TH68P-200	Digital LHD Cable, PVC Red Polypropylene, 68°C Alarm Temp, UL, 200m
TH68P-500	Digital LHD Cable, PVC Red Polypropylene, 68°C Alarm Temp, UL, 500m
TH68P-1000	Digital LHD Cable, PVC Red Polypropylene, 68°C Alarm Temp, UL, 1000m
TH78P-100	Digital LHD Cable, PVC Red Polypropylene, 78°C Alarm Temp, UL, 100m
TH78P-200	Digital LHD Cable, PVC Red Polypropylene, 78°C Alarm Temp, UL, 200m
TH78P-500	Digital LHD Cable, PVC Red Polypropylene 78°C Alarm Temp, UL, 500m
TH78P-1000	Digital LHD Cable, PVC Red Polypropylene, 78°C Alarm Temp, UL, 1000m
TH88P-100	Digital LHD Cable, PVC White, Polypropylene, 88°C Alarm Temp, UL, 100m
TH88P-200	Digital LHD Cable, PVC White, Polypropylene, 88°C Alarm Temp, UL, 200m
TH88P-500	Digital LHD Cable, PVC White, Polypropylene, 88°C Alarm Temp, UL, 500m
TH88P-1000	Digital LHD Cable, PVC White, Polypropylene, 88°C Alarm Temp, UL, 1000m
TH105P-100	Digital LHD Cable, PVC White, Polypropylene, 105°C Alarm Temp, UL, 100m
TH105P-200	Digital LHD Cable, PVC White, Polypropylene, 105°C Alarm Temp, UL, 200m
TH105P-500	Digital LHD Cable, PVC White, Polypropylene, 105°C Alarm Temp, UL, 500m
TH105P-1000	Digital LHD Cable, PVC White, Polypropylene, 105°C Alarm Temp, UL, 1000m

*UL approval only applies to the base cable, additional polypropylene coating not UL approved

