

Proreact[®] Fixed Activation Temperature UL Linear Heat Detection Cable

F1070, F1071, F1072, F1073, F1069, F1132

With stainless steel braid

F1078, F1079, F1080, F1081, F1082, F1133

The Proreact Fixed Activation Temperature LHD system uses a heat sensitive cable with a specific activation temperature to monitor an area, critical equipment or the like, for an overheat or fire condition.

The resistance of the Proreact Fixed LHD cable decreases as the temperature around the cable increases. An abnormal change in resistance, due to an overheat condition, along the cable triggers either a Pre-Alarm or Alarm on the Proreact Fixed Composite Control Unit.



PRODUCTS		
Activation temperature	Part no.	Part no. (Stainless steel braid)
68°C (154°F)	F1070	F1078
78°C (172°F)	F1071	F1079
88°C (190°F)	F1072	F1080
105°C (221°F)	F1073	F1081
185°C (365°F)	F1069	F1082
230°C (446°F)	F1132	F1133

FEATURES
Designed for use in both indoor and outdoor installations
Wide coverage – up to 3,000 metres (9,840 ft) of Proreact Fixed Activation Temperature LHD cable per zone
The Proreact Fixed Activation Temperature Composite Control Unit can monitor up to two zones of Proreact Fixed Activation Temperature LHD cable
Improved testing and maintenance functionality with the Proreact Fixed Activation Temperature End Of Line Unit
Manufactured in the UK and short lead times ensuring quick delivery across Europe

APPLICATIONS
Cable trays
Car parks
Cold storage & industrial
Conveyor belts
Floating roof storage tanks
Mines
Oil and gas industries
Power generation industries
Tunnels
Warehousing

APPROVALS
Worldwide approvals to meet end user specifications certification. Visit our website for up-to-date approvals information.

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PRODUCT RANGE



Fixed Activation Temperature UL Linear Heat Detection Cable

Part number	F1070	F1071	F1072	F1073	F1069	F1132
Activation temperature	68°C (154°F)	78°C (172°F)	88°C (190°F)	105°C (221°F)	185°C (365°F)	UL: 218°C (424°F) FM: 235°C (455°F)

MECHANICAL SPECIFICATION

Material	Nylon	Nylon	Nylon	Nylon	Nylon	Silicone rubber
Colour	Black	Black	Black	Black	Black	Green
Diameter	4.5 mm (1/8")	4.5 mm (1/8")	4.5 mm (1/8")	4.5 mm (1/8")	4.5 mm (1/8")	5 mm (1/4")
Min. bend radius	50 mm (2")	50 mm (2")	50 mm (2")	50 mm (2")	50 mm (2")	63.5 mm (2.5")
Max. zone length	3,000 m (9,840 ft)	3,000 m (9,840 ft)	3,000 m (9,840 ft)	3,000 m (9,840 ft)	3,000 m (9,840 ft)	1,000 m (3,280 ft)
Net weights						
100m reel	2.64 kg (5¾ lb)	2.64 kg (5¾ lb)	2.66 kg (5⅞ lb)	2.56 kg (5⅝ lb)	1.79 kg (4 lb)	-
200m reel	5.28 kg (11⅝ lb)	5.28 kg (11⅝ lb)	5.31 kg (11¾ lb)	5.12 kg (11¼ lb)	3.59 kg (8 lb)	-
500m reel	13.21 kg (29⅞ lb)	13.21 kg (29⅞ lb)	13.28 kg (29¼ lb)	12.81 kg (28¼ lb)	8.97 kg (19¾ lb)	-
1000m reel	26.42 kg (58¼ lb)	26.42 kg (58¼ lb)	26.56 kg (58½ lb)	25.61 kg (56½ lb)	17.94 kg (39½ lb)	-
Gross weights						
100m reel	3.29 kg (7.25 lb)	3.29 kg (7.25 lb)	3.31 kg (7.30 lb)	3.21 kg (7.08 lb)	2.44 kg (5.38 lb)	-
200m reel	5.93 kg (13.07 lb)	5.93 kg (13.07 lb)	5.96 kg (13.14 lb)	5.77 kg (12.72 lb)	4.24 kg (9.34 lb)	-
500m reel	16.01 kg (35.30 lb)	16.01 kg (35.30 lb)	16.08 kg (35.45 lb)	15.61 kg (34.41 lb)	11.77 kg (25.95 lb)	-
1000m reel	29.56 kg (65.17 lb)	29.56 kg (65.17 lb)	29.70 kg (65.48 lb)	28.75 kg (63.21 lb)	21.08 kg (46.47 lb)	-

ENVIRONMENTAL SPECIFICATION

Max. amb. temp.	45°C (113°F)	45°C (113°F)	65°C (149°F)	65°C (149°F)	125°C (257°F)	170°C (338°F)
Min. amb. temp.	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)
Relative humidity	0-100% RH	0-100% RH	0-100% RH	0-100% RH	0-100% RH	-

ELECTRICAL SPECIFICATION

Max. voltage rating	30 Vac, 42 Vdc	30 Vac, 42 Vdc	30 Vac, 42 Vdc	30 Vac, 42 Vdc	30 Vac, 42 Vdc	-
Resistance	~100Ω/km (29Ω/kft) per leg	~100Ω/km (29Ω/kft) per leg	~100Ω/km (29Ω/kft) per leg	~100Ω/km (29Ω/kft) per leg	~100Ω/km (29Ω/kft) per leg	-
Capacitance	88 – 150 pF/m (26 – 45 pF/ft)	88 – 150 pF/m (26 – 45 pF/ft)	88 – 150 pF/m (26 – 45 pF/ft)	88 – 150 pF/m (26 – 45 pF/ft)	88 – 150 pF/m (26 – 45 pF/ft)	-
Inductance	540 – 1050 nH/m (165 – 320 nH/ft)	540 – 1050 nH/m (165 – 320 nH/ft)	540 – 1050 nH/m (165 – 320 nH/ft)	540 – 1050 nH/m (165 – 320 nH/ft)	540 – 1050 nH/m (165 – 320 nH/ft)	-

SPACING

UL	5 m (15 ft)	5 m (15 ft)	5 m (15 ft)	5 m (15 ft)	-	-
FM	9 m (30 ft)	9 m (30 ft)	9 m (30 ft)	7.5 m (25 ft)	-	-

CHEMICAL RESISTANCE SCALE 1-5 (1 = NOT RECOMMENDED, 5 = LITTLE TO NO IMPACT)

Ammonia, Liquid	3	3	3	3	3	3
Butane	5	5	5	5	5	2
Copper Nitrate	1	1	1	1	1	5
Fuel Oils	5	5	5	5	5	3
Gasoline	5	5	5	5	5	3
Hydrofluoric Acid	1	1	1	1	1	1
Kerosene	5	5	5	5	5	3
Diesel Fuel	5	5	5	5	5	3
Acetic Acid	1	1	1	1	1	4

Proreact® Fixed Activation Temperature UL Linear Heat Detection Cable with stainless steel braid

Datasheet

Part number	F1078	F1079	F1080	F1081	F1082	F1133
Activation temperature	68°C (154°F)	78°C (172°F)	88°C (190°F)	105°C (221°F)	185°C (365°F)	UL: 218°C (424°F) FM: 235°C (455°F)

MECHANICAL SPECIFICATION						
Material	PVC with stainless steel braid	PVC with stainless steel braid	PVC with stainless steel braid	PVC with stainless steel braid	PVC with stainless steel braid	Silicone rubber with stainless steel braid
Colour	Silver braid	Silver braid	Silver braid	Silver braid	Silver braid	Silver braid
Diameter	4.1 mm (1/8")	4.1 mm (1/8")	4.1 mm (1/8")	4.1 mm (1/8")	4.1 mm (1/8")	5.5 mm (1/4")
Min. bend radius	50 mm (2")	50 mm (2")	50 mm (2")	50 mm (2")	50 mm (2")	63.5 mm (2.5")
Max. zone length	3,000 m (9,840 ft)	3,000 m (9,840 ft)	3,000 m (9,840 ft)	3,000 m (9,840 ft)	3,000 m (9,840 ft)	1,000 m (3,280 ft)

ENVIRONMENTAL SPECIFICATION						
Max. amb. temp.	45°C (113°F)	45°C (113°F)	65°C (149°F)	65°C (149°F)	125°C (257°F)	170°C (338°F)
Min. amb. temp.	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)
Relative humidity	0-100% RH	0-100% RH	0-100% RH	0-100% RH	0-100% RH	-

ELECTRICAL SPECIFICATION						
Max. voltage rating	30 Vac, 42 Vdc	30 Vac, 42 Vdc	30 Vac, 42 Vdc	30 Vac, 42 Vdc	30 Vac, 42 Vdc	-
Resistance	~100Ω/km (29Ω/kft) per leg	~100Ω/km (29Ω/kft) per leg	~100Ω/km (29Ω/kft) per leg	~100Ω/km (29Ω/kft) per leg	~100Ω/km (29Ω/kft) per leg	-
Capacitance	88 – 150 pF/m (26 – 45 pF/ft)	88 – 150 pF/m (26 – 45 pF/ft)	88 – 150 pF/m (26 – 45 pF/ft)	88 – 150 pF/m (26 – 45 pF/ft)	88 – 150 pF/m (26 – 45 pF/ft)	-
Inductance	540 – 1050 nH/m (165 – 320 nH/ft)	540 – 1050 nH/m (165 – 320 nH/ft)	540 – 1050 nH/m (165 – 320 nH/ft)	540 – 1050 nH/m (165 – 320 nH/ft)	540 – 1050 nH/m (165 – 320 nH/ft)	-

SPACING						
UL	5 m (15 ft)	5 m (15 ft)	5 m (15 ft)	5 m (15 ft)	-	-
FM	9 m (30 ft)	9 m (30 ft)	9 m (30 ft)	7.5 m (25 ft)	-	-

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Butane	5	5	5	5	5	2
Copper Nitrate	1	1	1	1	1	5
Fuel Oils	5	5	5	5	5	3
Gasoline	5	5	5	5	5	3
Hydrofluoric Acid	1	1	1	1	1	1
Kerosene	5	5	5	5	5	3
Diesel Fuel	5	5	5	5	5	3
Acetic Acid	1	1	1	1	1	4



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