

# ALARMLINE II

## Digital Linear Heat Detection

- cUL/UL 521 approved
- FM approved (Class 3210)
- Up to 3000m (10,000ft per zone)
- Detection along total cable length
- Optional extrusions for different environments
- Simple maintenance free installation
- Suitable for use in hazardous areas



Alarmline II Digital sensor cables provide a very simple fixed temperature heat detection system which can be used in many applications where other forms of detection are not suitable.

Alarmline II Digital cables contain a pair of twisted low resistance, tri-metallic conductors sheathed with advanced temperature sensitive polymers. The cable operates by softening the insulation of the conductors, the tension of the twisted conductors then causes the two cores to fuse together. The sensor cable provides a simple switch operation which when used with a combination of End of Line (EOL) monitoring and alarm trigger resistors can signal an alarm to any fire monitoring equipment through any monitored input i.e. conventional detection zone or addressable interface unit.

A range of 4 cables provide selectable alarm temperatures to suit the application:

AD068 Digital cable 68°C (155°F)  
AD088 Digital cable 88°C (190°F)  
AD105 Digital cable 105°C (221°F)  
AD185 Digital cable 185°C (365°F)

A range of outer sheaths are available for each of the cables providing various levels of protection dependent on the installed environment:

#### Standard PVC outer sheath

Suitable for internal applications

#### Nylon outer sheath

UV protection and increased durability for external applications

#### Polypropylene outer sheath

Increased chemical protection in caustic environments

#### Stainless steel over PVC outer sheath

Increased mechanical protection

#### Stainless steel over Nylon outer sheath

UV and mechanical protection

The range of temperatures and outer sheaths allows the digital sensor cable in many different applications.

#### Typical applications

- Cable trays and tunnels
- Escalators and conveyors
- Car parks
- Floating roof tanks
- Storage racking
- Cold storage

Additional to the sensor cable there is also an optional Digital Location Control unit which monitors the sensor cable and can identify along the length of the sensor cable where an alarm condition has occurred.

Provisional release datasheet

### Mechanical specifications

#### Colour

68°C, 78°C	Red
88°C, 105°C	White
185°C	Red

Note: Nylon outer sheath is always black and Polypropylene outer sheath is transparent.

#### Diameter (All)

PVC outer sheath	3.6mm +/-0.12mm
Nylon outer sheath	4.44mm +/- 0.12mm
Polypropylene outer sheath	4.5mm +/-0.12mm
Stainless over PVC	4.10mm +/-0.12mm
Stainless steel over Nylon	5.0mm +/-0.12mm

#### Weight

68, 88, 105°C	
PVC outer sheath	20g per m
Nylon outer sheath	25.2g per m
Polypropylene outer sheath	27.2g per m
Stainless steel over PVC	29.2g per m
185°C	
Nylon outer sheath	17.8g per m
Stainless steel over nylon	27.0g per m

#### Electrical specification

Operating voltage range	0-30Vac, 0-42Vdc
Conductor resistance	Approx. 100 ohms/Km per leg (30.4 ohms/Kft)
Capacitance	88-150pF/m
Inductance	540 – 1050nH/m

#### Environmental specification

##### Maximum ambient temp.

68, 88°C	45°C (113°F)
105°C	69°C (156°F)
185°C	125°C (257°F)

Humidity	0 to 100% Relative Humidity
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### Ordering information

#### Important:

Sensor cable is supplied in reels of 100, 500 or 1000m, the following suffixes should be added to the part number to signify the reel size

Suffix	Reel size
-001	100m reel
-005	500m reel
-100	1000m reel

i.e. AD68-001 is a 100m reel of the 68°C sensor cable

Part No.	Description
AD68	Digital cable 68°C PVC outer sheath
AD68N	Digital cable 68°C Nylon outer sheath
AD68P	Digital cable 68°C Polypropylene sheath
AD68SS	Digital cable 68°C Stainless steel over PVC
AD88	Digital cable 88°C PVC outer sheath
AD88N	Digital cable 88°C Nylon outer sheath
AD88P	Digital cable 88°C Polypropylene sheath
AD88SS	Digital cable 88°C Stainless steel over PVC
AD105	Digital cable 105°C PVC outer sheath
AD105N	Digital cable 105°C Nylon outer sheath
AD105P	Digital cable 105°C Polypropylene sheath
AD105SS	Digital cable 105°C Stainless steel over PVC
AD185N	Digital cable 185°C Nylon outer sheath
AD185SS	Digital cable 185°C Stainless steel over Nylon