

# DIGITAL CABLE 105°C NYLON

## Fire detection systems Product Datasheet

### Features

- 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

### Description / Application

The AD105N-0001 is a Digital Linear Heat Detection (LHD) cable with a 105°C (221°F) fixed temperature activation rating. It has a Nylon outer sheath for UV protection and increased durability for external applications and is supplied in specified lengths (meters). The AD range of digital sensor cables provides a very simple fixed temperature heat detection system which can be used in many applications where other forms of detection are not suitable.

### Operation

The AD range of digital LHD cables contains 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.

### Location Control Unit

Additional to the LHD sensor cable, 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, is also available.



### Cable fixings for all applications

A range of 'edge', 'A', 'P', and 'T' clips allow the cable to be properly installed. The clips provide heat insulation as well as holding the cable at the correct distance from cable trays, steelworks, ceilings and walls.

Product Name	Part number	Description
AD105N-0001	116- AD105N-0001	Digital LHD Cable 105°C (221°F) Nylon (meters)
ADLCU	116-ADLCU	Linear Heat Detection, Digital LHD Control Unit

Technical specifications	
Outside diameter (Nominal)	4.44mm ± 0.12mm
Number of cores	2
Colour	Black
Weight	25.2kg
Operating voltage	0 to 30VAC, 0 to 42VDC
Conductor resistance	~100 ohms/km per leg (30.4 ohms/Kft)
Capacitance	88 to 150pF/m
Inductance	540 to 1050nH/m
Ambient temperature (max)	69°C (156°F)
Relative humidity	0% to 100%