



Sensors



CAP320 - Optical Sensor



CAPT340 - Photo-Thermal Sensor



CAH330 - Heat Sensor

CAP320 - Optical Sensor / CAPT340 - Photo-Thermal / CAH330 - Heat Sensor

Overview

This range of intelligent addressable sensors have been specifically designed to operate with Cooper intelligent addressable fire systems.

All sensors are third party approved to the relevant section of EN54 (part 7 for smoke detectors & part 5 for heat detectors).

The optical sensor (CAP320) is suitable for most applications giving the fastest response to slow burning or smouldering fires which give rise to large visible smoke particles.

The photo-thermal sensor (CAPT340) will respond quickly to fast clean burning fires yet maintain the advantage of optical sensors when detecting smouldering fires. The thermal enhancement of this sensor allows a higher alarm threshold which provides a greater rejection of false alarms. The sensor will also raise an alarm at temperatures exceeding 60°C.

The heat sensor (CAH330) can be set to one of 3 modes 77°C / 92°C and rate of rise. These sensors are designed to be used in environments where the ambient conditions might cause false alarms if smoke detection were to be used, for example where there is a high level of dust, fumes, steam or smoke under normal conditions.

Features

- Soft addressed
- Integral short circuit isolator
- Single address
- Wide range of sensor types
- 360° visibility LED using lightpipe technology
- Drift compensation
- Removable detector chamber
- Aesthetically pleasing

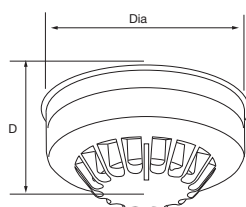
Benefits

- Quick and simple to install
- Single "multi-mode" heat sensor
- Wide viewing angle for increased LED visibility
- Common mounting base
- Positive "lock" indication
- Discreet design for incorporation into any decor
- Easy to maintain/service

Technical Specification

Code	CAP320	CAPT340	CAH330
Description	Optical Smoke Sensor	Photo-Thermal Sensor	Multi-Mode Heat Sensor
Standards	EN54 Pt7 2000 + A1:2002, EN54 Pt17	EN54 P5 & P7 2000 + A1:2002, EN54 Pt17	EN54 Pt5 2000 + A1:2002, EN54 Pt17
Operating voltage	18V dc to 30V dc	18V dc to 30V dc	18V dc to 30V dc
Standby Current	220µA (max)	220µA (max)	220µA (max)
Alarm Current	5mA (max)	5mA (max)	5mA (max)
Addressing Mode	Auto address	Auto address	Auto address
Specification			
Mounting Position	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas
Mounting Options	Surface mount with CAB300 base	Surface mount with CAB300 base	Surface mount with CAB300 base
Area Coverage	100m ² (subject to local standard)	100m ² (subject to local standard)	50m ² (subject to local standard)
System Wiring	Min. 1.5mm, 2 core loop or spur	Min. 1.5mm, 2 core loop or spur	Min. 1.5mm, 2 core loop or spur
Heat Class			
Rate of Rise	N/A	A1S	A1R
Fixed Heat 77°C	N/A	N/A	BS
Fixed Heat 90°C	N/A	N/A	CS
Alarm Temperature (static)			
AIR	N/A	60°C	60°C
BS	N/A	N/A	77°C
CS	N/A	N/A	90°C
Indication	360° visibility light pipe	360° visibility light pipe	360° visibility light pipe
Environmental			
Operating Temperature	-20°C to +60°C	-20°C to +50°C	-20°C to +60°C
Humidity (non condensing)	0 to 95% RH	0 to 95% RH	0 to 95% RH
Physical			
Construction	PC/ABS	PC/ABS	PC/ABS
Colour	White	White	White
Dimensions Excl Base (Dia x D)	101mm x 33mm	101mm x 43mm	101mm x 43mm
Dimensions Incl Base (Dia x D)	104mm x 45mm	104mm x 55mm	104mm x 55mm
Weight (without base)	76g	76g	76g
Compatibility			
Suitable for use with	Cooper Intelligent Addressable Fire Systems	Cooper Intelligent Addressable Fire Systems	Cooper Intelligent Addressable Fire Systems

Dimensions



Description	Dia (mm)	D (mm) (excl base)	D (mm) (incl base)
Optical	101	33	45
Photo-Thermal	101	43	55
Multi-Mode Heat	101	43	55

Installation

1. Sensors are fixed and wired via common mounting base.
2. Cable entry into base can be rear or side.
3. A locking facility is provided which can be activated if required to prevent unauthorised sensor removal without the use of a special tool.

Note: For wiring information please see CAB300 base.

User Interface

1. LED indicates detector status, can be set to flash to confirm communication with control panel, illuminates continuously under fire conditions.
2. All wiring connections are via a common mounting base (ordered separately).

Product Codes

Code	Description
CAP320	Intelligent Addressable Optical Smoke Sensor
CAPT340	Intelligent Addressable Photo/Thermal Sensor
CAH330	Intelligent Addressable Multi-Mode Heat Sensor
CAB300	Intelligent Addressable Standard Base
CIR301	Conventional Remote Indicator
MDP201	Duct Probe (requires detector and base)

Descriptions represent only particulars of the goods to which they apply and do not form part of any contract. The company reserves the right to change specification without prior notification or public announcement.