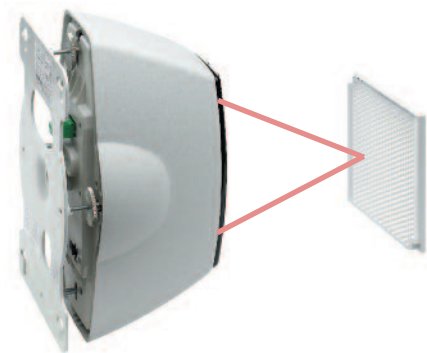


Reflective Beam Detectors



Optional Mounting Bracket with cable clamp facilities



Combined transmitter and receiver for ease of installation



MAB50R / MAB100R - Reflective Beam Detector

MAB50R / MAB100R - Reflective Beam Detectors

Overview

Two versions of the intelligent addressable loop powered reflective beam detectors are available in this range, the (MAB50R) with a range of up to 50 metres and the (MAB100R) with a range of 50 to 100 meters.

Both the (MAB50R) and the (MAB100R) are compatible with the Cooper range of intelligent addressable fire systems.

These intelligent addressable loop powered reflective beam detectors are extremely simple to install, they require no separate power supply, operate on a reflective principle and have a simple set up mode to enable easy and quick alignment during installation.

These units are designed to replace individual point detectors in large open areas such as warehouses.

Fire and fault conditions are signalled to the control panel using standard loop wiring so no additional interconnection required.

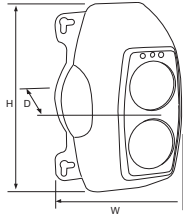
Features

- Loop connected
- Soft addressed
- Integral short circuit isolator
- Single address
- Reflective beam detection
- Two ranges available
 - up to 50m
 - 50m to 100m

Benefits

- Quick and simple to setup
- Saves on both time and installation costs
- No power supply required
- Single device to install instead of numerous point detectors
- Single point of maintenance
- Wall mounted for ease of maintenance, especially in warehouses with racking

Dimensions



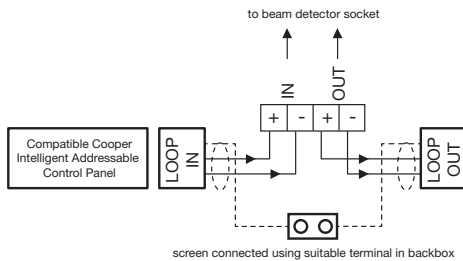
| H (mm) | W (mm) | D (mm) |
|--------|--------|--------|
| 210 | 130 | 120 |

Technical Specification

| Code | MAB50R | MAB100R |
|---------------------------|--|--|
| Description | Reflective Beam Detector | Reflective Beam Detector |
| Standards | EN54 Pt12 & Pt17 2002 | EN54 Pt12 & Pt17 2002 |
| Specification | | |
| Operating Voltage | 18V dc to 30V dc | 18V dc to 30V dc |
| Quiescent Current | < 5mA (no LED's illuminated) | < 5mA (no LED's illuminated) |
| Alarm Current | < 9mA | < 9mA |
| Alignment Current | < 18mA | < 18mA |
| Power up Time | 10 seconds (approx) | 10 seconds (approx) |
| Operating Range | 5 to 50 metres | 50 to 100 metres |
| Tolerance to Beam | | |
| Misalignment at 35% | Detector $\pm 0.8^\circ$, Prism $\pm 5.0^\circ$ | Detector $\pm 0.8^\circ$, Prism $\pm 5.0^\circ$ |
| Fire Alarm Thresholds | 2.50dB (25%) 3.74dB (35%) 6.02dB (50%) | 2.50dB (25%) 3.74dB (35%) 6.02dB (50%) |
| Optical Wavelength | 880nm | 880nm |
| Environmental | | |
| Operating Temperature | -10°C to +55°C | -10°C to +55°C |
| Humidity (Non Condensing) | 0 to 93% RH | 0 to 93% RH |
| Physical | | |
| Construction | PC/ABS | PC/ABS |
| Colour | White | White |
| Dimensions (H x W x D) | 210mm 130mm x 120mm | 210mm 130mm x 120mm |
| Weight | 0.8kg | 0.8kg |
| Ingress Protection | IP40 | IP40 |
| Compatibility | | |
| Suitable for use with | Cooper Intelligent Addressable Fire Systems | Cooper Intelligent Addressable Fire Systems |

Standard Connection

MAB50R / MAB100R



WARNING:
Do NOT use high voltage testers if ANY equipment is connected to the system.

Screen (Earth) must be continuous along entire length of loop

Installation

1. Must be fixed to solid structure.
2. Recommended mounting height is 0.3 to 0.6 metres below the ceiling.
3. Cables can be terminated into separate termination box (not supplied) or use purpose designed mounting bracket (MRBFP) ordered separately.
4. Mounting bracket has facilities for glanding of incoming cables plus simple fixing of beam detector.
5. Test filter is supplied with detector to simulate required smoke obscuration level and confirm correct operation.

User Interface

1. Beam detectors status LEDs
 - Red LED constantly illuminated indicates fire condition.
 - Flashing amber LED indicates fault condition.

System Functionality

1. Beam detectors have 3 modes
 - **Prism targeting mode**
designed to provide simple initial alignment of beam and reflector assembly.
 - **Alignment mode**
Enables accurate fine tuning of beam alignment without the need for additional calibration equipment or a second operator.
 - **Normal running mode**

Product Codes

| Code | Description |
|---------|---|
| MAB50R | Intelligent Addressable Reflective Beam Detector (50m range) |
| MAB100R | Intelligent Addressable Reflective Beam Detector (100m range) |
| MRBFP | Mounting Bracket |

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.

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