

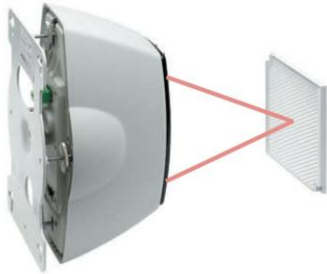
Reflective Beam Detectors MAB50R and MAB100R



optional mounting bracket with cable clamp facilities



MAB50R and MAB100R reflective beam detectors



combined transmitter and receiver for ease of installation

Overview

The Menvier loop powered reflective beam detectors are specifically designed to function with the latest intelligent addressable Menvier control panels.

Two versions are available, the MAB50R with a range of up to 50 metres, and the MAB100R with a range of 50 - 100 metres.

Both of these units 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.

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

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

Features

- Quick and simple to install
- IP40 protection
- Simple loop connection
- No power supply required

Benefits

- Saves time and installation costs
- Single device to install instead of numerous point detectors
- Single point of maintenance
- Wall mounted for ease of maintenance, especially in warehouses with racking

Intelligent Addressable Reflective Beam Detectors - MAB50R and MAB100R

Dimensions



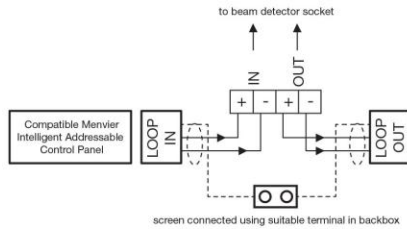
| H (mm) | W (mm) | D (mm) |
|--------|--------|--------|
| 210 | 130 | 120 |

Technical Specification

| Code | MAB50R | MAB100R |
|---------------------------------------|--|--|
| Description | Reflective beam detector | Reflective beam detector |
| Standards | EN54 Pt 12 & 17 2002 | EN54 Pt 12 & 17 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 | Menvier intelligent addressable fire systems | Menvier 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.

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**

User Interface

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

Product Codes

| Code | Description |
|---------|---|
| MAB50R | Intelligent addressable reflective beam detector 50m range |
| MAB100R | Intelligent addressable reflective beam detector 100m range |
| MRBFP | Mounting bracket |