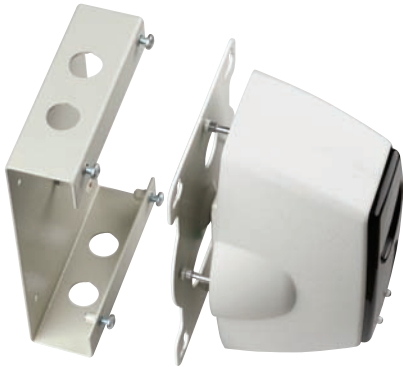
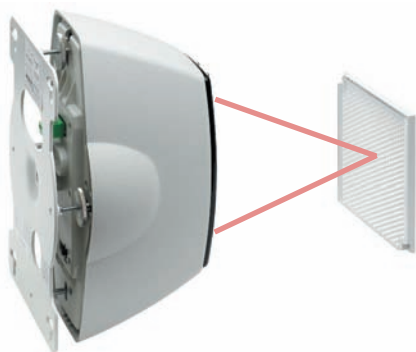
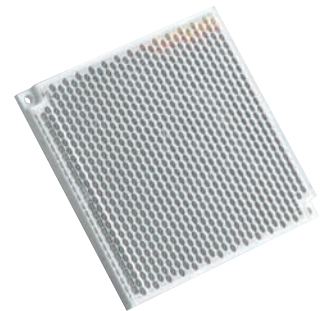


Reflective Beam Detectors MBD50R and MBD100R



optional mounting bracket with cable clamp facilities



combined transmitter and receiver for ease of installation

MBD50R and MBD100R reflective beam detectors

Overview

The Menvier range of zone powered reflective beam detectors are specifically designed to be compatible with the full range of conventional Menvier control panels.

Two versions are available, the MBD50R with a range of up to 50 metres, and the MBD100R 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 zone wiring so no additional interconnection is required.

In normal operation only one beam detector may be connected per zone, however special versions are available to work with external power supply if multiple beam detectors are required to be connected to a single zone.

Features

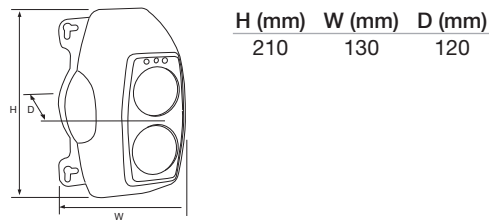
- Quick and simple to install
- Simple two wire connection
- No power supply required

Benefits

- Single device to install instead of numerous point detectors
- Single point of maintenance
- Wall mounted for ease of maintenance

Conventional Reflective Beam Detector - MBD50R and MBD100R

Dimensions

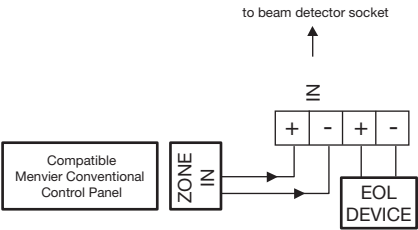


Technical Specification

Code	MBD50R	MBD100R
Description	Reflective beam detector	Reflective beam detector
Standards	EN54 Pt 12 2002	EN54 Pt 12 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	20 seconds (approx)	20 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 conventional fire systems	Menvier conventional fire systems

Standard Connection

MBD50R / MBD100R



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

Screen (Earth) must be continuous along entire length of zone.

Installation

1. Must be fixed to solid structure.
2. Recommended mounting height is 0.3 to 0.6 metres below the ceiling.
3. Only 1 conventional reflective beam allowed per control panel zone, if multiple beams per zone required, special externally powered version available.
4. Cables can be terminated into separate termination box (not supplied) or use purpose designed mounting bracket (MRBFP) ordered separately.
5. Mounting bracket has facilities for glanding of incoming cables plus simple fixing of beam detector.
6. 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 detector status LEDs
 - **Red LED**
constantly illuminated indicates fire condition.
 - **Flashing amber LED**
indicates fault condition.

Interface Options

1. Conventional beam detectors are connected directly to the Menvier conventional panel.

Product Codes

Code	Description
MBD50R	Conventional reflective beam detector, 50m range
MBD100R	Conventional reflective beam detector, 100m range
MRBFP	Mounting bracket