

DLFB-C & DLFB-R

Conventional and relay version interactive linear smoke beam detector

- **STANDARD EN54-12 / Full CE marking according to CPD**
- **Number of certification: 0333 CPD 075 016**

DLFB is the ideal detector for covering large areas like entrance halls and long distances like corridors. It is also suitable for high buildings, where fire smoke will not be reached by a point detector fixed on the ceiling. It can also substitute point detectors for aesthetic reasons, or simply to limit the number of detectors in an area. **Small and streamlined size** of the DLFB is really suitable for public buildings like museums, hospitals, and schools. The use of DLFB is the solution for most of the industry's needs, warehouses, factories, technical galleries or tunnels. Its exceptional coverage from **3m to 100m** puts it among the highest performance of the world-wide present market. **DLFB** is connected to a conventional line and **does not need any external power supply**. The relay version of DLFB reports its various states through NO/NC output relays; this version needs an external power supply



Main characteristics

- Standard EN54-12
- CE mark (according to CPD)
- 3m to 100m coverage
- Small and streamlined size
- Easy mounting and setting
- No external power supply needed for conventional version
- Visible ray to help alignment

Power supply specification

| | Conventional | Relay |
|---------------------------|----------------|-------|
| Main supply voltage | 12Vdc to 30Vdc | |
| Quiescent current (24Vdc) | 2,8mA | 15mA |
| Alarm current (24Vdc) | 26mA | 25mA |

Mechanical characteristics

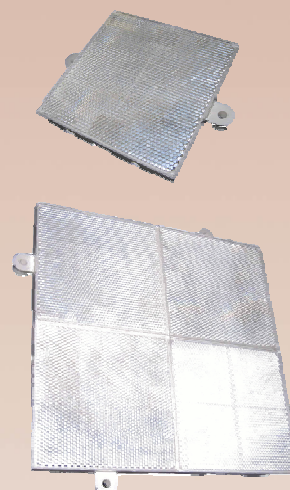
| | |
|-------------------------|------------------------------------------|
| Unit weight | 1,2Kg |
| Unit dimensions (in mm) | H:155 W:135 D:140 |
| Free area | 130mm (left) / 150mm (right) |
| Unit row material | ABS |
| Unit colour | White |
| IP rating | IP30 |
| Mounting mode | 3 button-head screws Ø5mm (not supplied) |
| Setting access | Cover removed (Level 2) |

Climatic characteristics

| | |
|-----------------------------|----------------------------|
| Operating temperature | -10°C to +55°C |
| Operating relative humidity | ≤ 95% without condensation |
| Storage relative humidity | ≤ 85% without condensation |

Optical characteristics

| | |
|--------------------------|---------------|
| Optical wavelength | 650nm |
| Operating range | 3m to 100m |
| Vertical setting range | ±10° |
| Horizontal setting range | ±10° |
| Red LED indicator | Fire alarm |
| Yellow LED indicator | Fault |
| Beam disalignment limits | ±0,5° at 100m |



Reflector

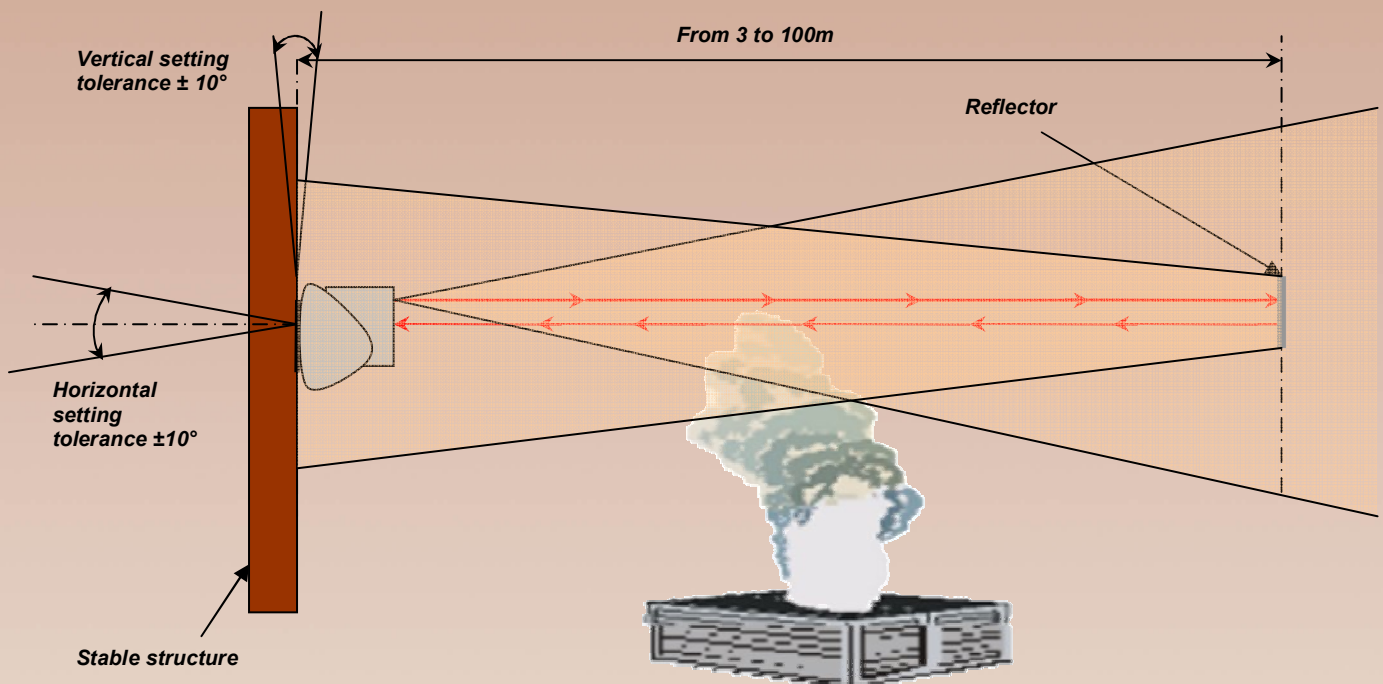
| Distance | Quantity of reflector | Total dimension |
|------------------|-----------------------|-----------------|
| From 3m to 70m | 1 | 100mm x 100mm |
| From 60m to 100m | 4 | 200mm x 200mm |

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CONNECTION

| | CONVENTIONAL | RELAY VERSION |
|---|------------------------------|--------------------------------------------------------------------|
| 1 | + Input line | + Power supply |
| 2 | - Input line | - Power supply |
| 3 | Test voltage output | Common fault relay contact or test voltage output |
| 4 | + Output line EOL side | NO or NC fault relay contact |
| 5 | - Output line EOL side | Common alarm relay contact or common alarm and fault relay contact |
| 6 | + Power supply (Opt. Module) | NO or NC fault relay contact |
| 7 | - Output line EOL side | + RS485 (opt. module) |
| 8 | - Output line EOL side | - RS485 (opt. module) |
| 9 | Shield | Shield |



General principle

At the inner part, in the optical block, an emitter sends a light signal that just beams on the reflector and a receptor measures the signal strength across two lenses. It is the only optical setting. Fire is easily detected because the light beam is subdued by the smoke. As a result, the DLFB transmits an alarm signal and puts on its red integral status indicator. The alarm stays memorized until reset. Basically the DLFB is very easy to fix. To help the user to align with an optimum way the optical block on the rear reflector, the DLFB is equipped with powerful and easy software tools.

| REFERENCE | DESCRIPTION |
|----------------|-------------------------------------------------------------------------------|
| DLFB-C | Conventional linear smoke beam detector from 3 to 100m (with full reflector) |
| DLFB-R | Relay version linear smoke beam detector from 3 to 100m (with full reflector) |
| OPTIONS | |
| BEAM-BR | Remote box for reset beam |