

AUTROFLAME IR FLAME DETECTOR BG-201

Interactive fire detection systems
Product Datasheet

Features

- Interactive
- Different sensitivity settings possible
- Short circuit isolator in each detector
- Comprises a built-in alarm indicator (LED)
- Automatic addressing
- Solar resistant
- Very fast fire detection
- Not blinded by oil film on window
- High degree of immunity to false alarm sources
- EN54-10, EN54-17 approved
- Designed to meet the requirement of the major maritime classification societies

Description / Application

BG-201 is a point flame detector for detection of fires involving combustion of carbonaceous materials.

The detector has a high IP rating making it suitable for the harshest environments.

Performance class can be configured by the AutoSafe/Autroprime system according to table 1.

The advanced signal processing and DYFI+ intelligence ensure that the detector has a high immunity to any nuisance alarm source combined with fast detection of real fires. This makes the BG-201 detector the obvious choice for demanding applications such as a ship's engine room.

Note:

Accumulation of water, ice, snow or other pollution on the sensor window may affect the sensitivity of the detector. In order to maintain the detection range (table 1) the glass must be cleaned regularly.

Principle



Two infrared sensors detect the infrared spectrum from a fire. The sensors evaluate different parts of the infrared spectrum using this information to verify that the signals correspond to the characteristics of a real flame.



| Technical specifications | |
|--|--|
| Weight | 210 g |
| Materials | Polycarbonate, sapphire glass |
| Colour | Transparent / light grey |
| Sensitivity | Ref. Table 1 |
| Field of view | Horizontal=+/-45°, Vertical=+30°/ -45° (see the Field of view diagram below for additional EN 54-10 information) |
| Voltage | Supplied from detector loop |
| Current consumption: Stand by Current consumption: Alarm LED on | 90 µA 2,1 mA |
| CPD certificate | 0832-CPD-1999 |
| Degree of protection | IP66 and 67 |
| Working temperature | -40 to +70°C |
| Storage temperature | -50 to +70°C |
| Humidity | 0-96 % rh, can withstand 100% condensing humidity for short periods of time |
| Maintenance | Cleaning of window |
| Service | Replace if faulty |
| Cable size | Maximum cable 2,5 mm ² / AWG14 |
| Approvals | See website |

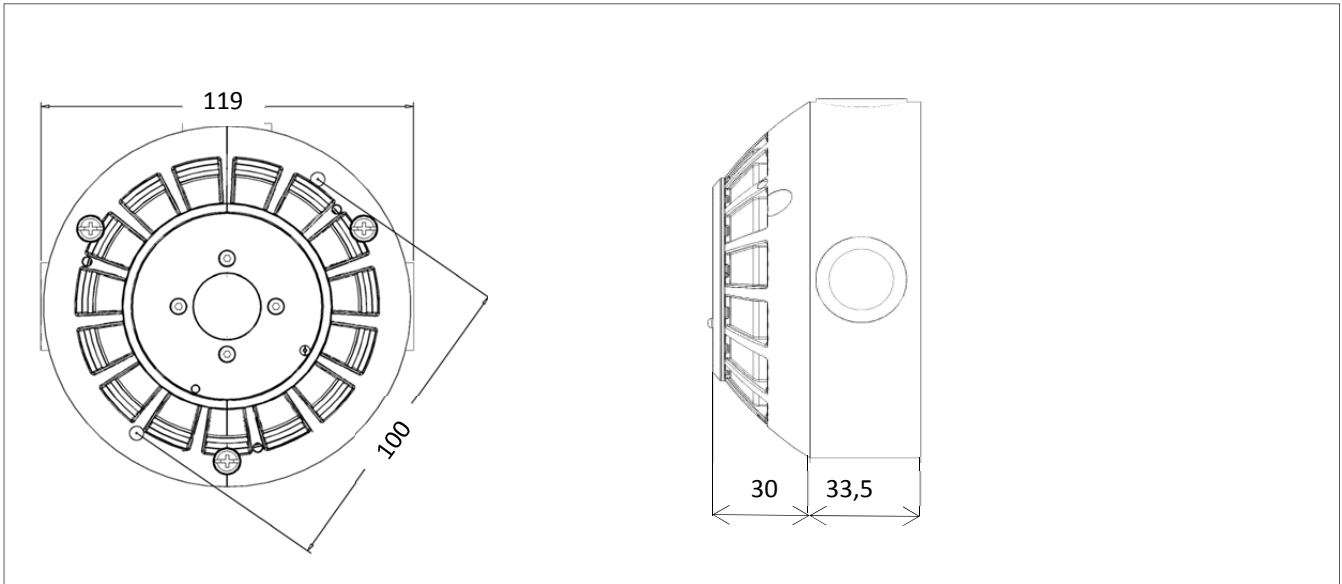
| Table 1 - Performance classes (EN 54/10) | |
|--|------------|
| Performance class | Range |
| Class 1 | Up to 25 m |
| Class 2* | Up to 17 m |
| Class 3 | Up to 12 m |

*In Legacy mode only class 2 is available

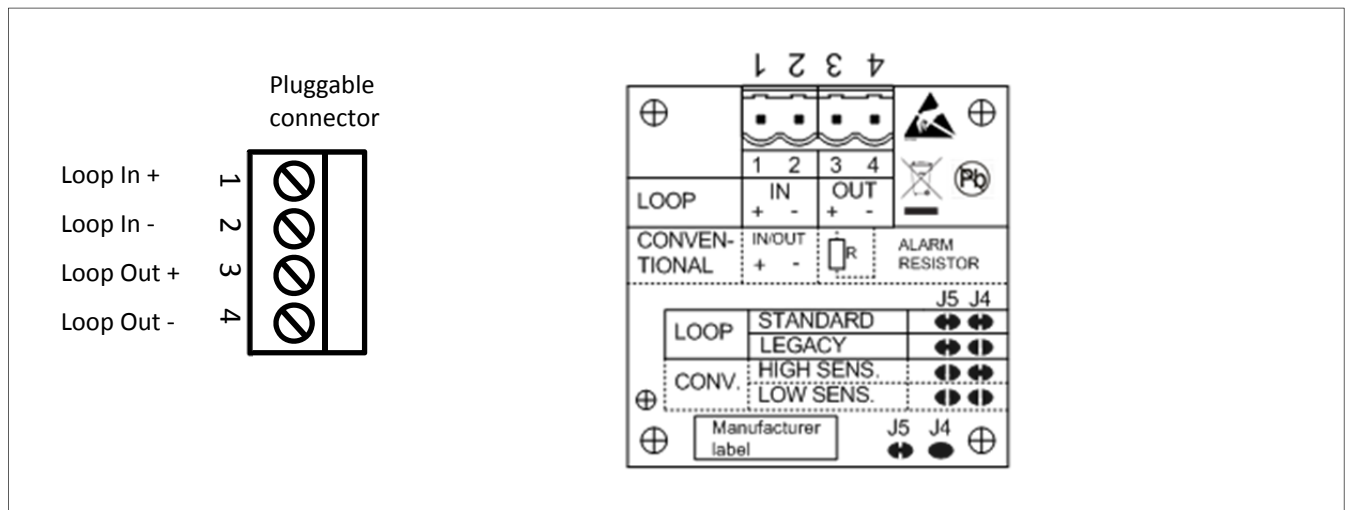
| Table 2 – Mode selection | |
|---|---|
| Mode selection, cutting of jumper J4 on PCB | J4 |
| STANDARD: AutroSafe / Autroprime mode |  |
| LEGACY: FDI compatible mode |  |

| Product Name | Part number | Description |
|--------------|------------------|------------------------------|
| BG-201 | 116-BG-201 | AutroFlame IR flame detector |
| BG-201F | 116-KITD-BG-201F | Facade security BG-201 |

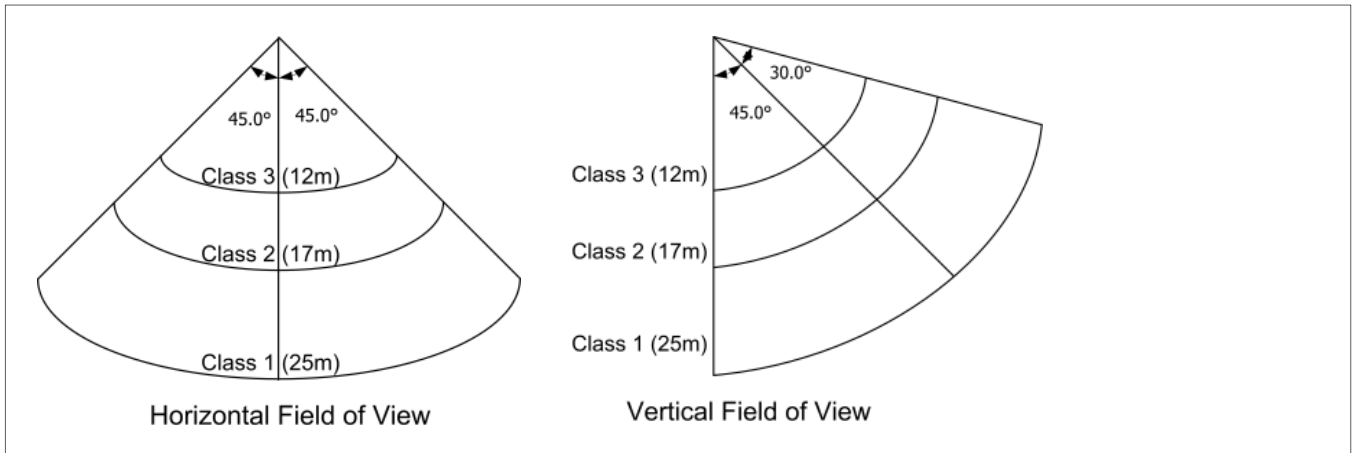
Dimension Drawing (mm)



Connection AI_Com loop



Field of view



To comply with the directional dependence requirements for EN 54-10:2002 an angle of $\pm 30^\circ$ from 0° (0° = Orientation of detector in same axes as flame source) should not be exceeded, based on lab testing at a distance of approximately 5.0 ft (1.5 m).