## Overview

JBE-2111 is an addressable optical smoke detector designed to operate on a loop of intelligent fire detection and alarm devices with the JBE loop protocol.

This detector responds to varied kinds of smoke from the early stages of fire while featuring advanced algorithms to prevent false alarms. It also incorporates a pollution compensation feature which extends its service life, while preventing false alarms resulting from dust accumulation.

The detector will send fire alarm signals to the fire panel when the detected smoke value reaches the preset alarm threshold.

## Technical Data

| | |
|---|---|
| Category | EN 54-7 |
| Working voltage | DC 16 - 30 V (JBE protocol pulse amplitude) |
| Connection | 2-wire JBE communication bus, no polarity |
| Wiring | Twisted pair, max. wiring gauge 2.5 $mm^2$ |
| Quiescent current | ≤0.3mA @24V |
| Activation current | ≤1mA @24 V (plus <8 mA to remote indicator) |
| Working temp. | -10~+60℃ |
| Storage temp. | -30~+70℃ |
| Environment | ≤ 95% RH (40±2℃) (no condensation nor icing) |
| Addressing method | Soft addressing with tool JBE-AT1, non-volatile |
| Address range | 1-200 |
| Protection area | 60~80$m^2$ (subject to local codes) |
| Red LED indication | Flashes when polling. Constant on when alarms. |
| Dimension | Ø100 mm × 46 mm |
| Weight | 0.1 kg |
| IP rating | IP40 |
| Compatible bases | JBE-2160 for installation without remote indicator<br>JBE-2165 for installation with remote indicator |

## Sensitivity levels

The detector will always report alarm levels 1, 2 and 3 to the fire panel without any need of pre-configuration. Select in the fire panel the detection profile(s) most appropriate for your application. The programming of the fire panel allows the change of the profile automatically at different times of the day or the week.

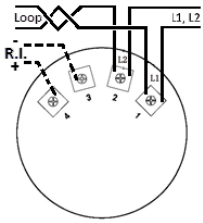
| | |
|---|---|
| Profile 1 | EN54-7, earliest detection |
| Profile 2 | EN54-7, standard sensitivity |
| Profile 3 | EN54-7, strong false alarm rejection |

The three profiles are compliant to En54-7 requirements.

## Installation

Always observe local fire and electric installation regulations.

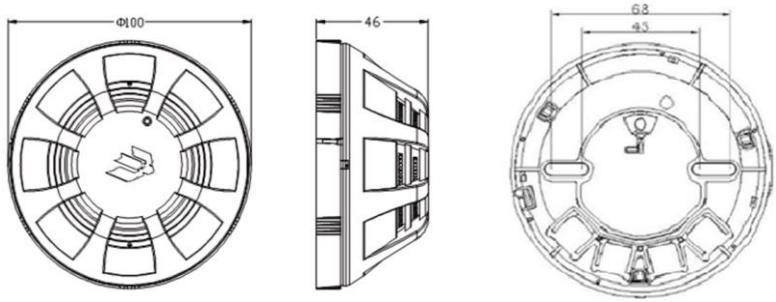
1. Secure the base to the ceiling. The nominal spacing of drills is 60 mm
2. Connect the wiring to the base as per the following diagram:




| Terminals | Connection |
|---|---|
| 1 & 2 | Signal loop L1, L2 (no polarity) |
| 3 | Remote indicator negative (optional) |
| 4 | Remote indicator positive (optional) |

3. Program an unused loop address (1 to 200) to the detector head using the JBE-AT1 tool.
4. Mount the detector onto its base and turn it clockwise to secure.
5. Register the detector into the fire panel's configuration. Select the sensitivity profile most appropriate for your application.
6. Test each detector and wiring integrity after installation.

## Mechanical dimensions




all dimensions in mm

## Maintenance

Alarm test should be conducted regularly, recommending every 6 months.

The dust cover can protect the detector from noxious dust accumulation during construction works, but the detector won't be able to detect smoke while the dust cover is on!

## Regulatory information

CE

**0370**

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**20**
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**EN 54-7:2018**

JBE-2111

*Addressable optical smoke detector*

*Intended for use in fire detection and fire alarm systems installed in and around buildings*

Technical file: see TF-JBE-2111-10 held by the manufacturer.

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