JADE BIRD
FIRE ALARM SYSTEMS

JBE-2112

Conventional Optical Smoke Detector

Key Features

- Low Profile design
- Remote indicator output (requires JBE-2165 base)
- Three certified Smoke sensitivities (including alarm rejection)
- Configurable by means of JBE-AT1 tool
- EN 54-7 certificate

JBE-2112 is a conventional optical smoke detector designed to operate on a zone line of intelligent fire detection and alarm devices. This smoke detector sends fire alarm signals to the fire panel when the detected smoke value reaches the preset alarm thresholds defined in the European norm EN 54-7.

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 features three (3) sensitivity profiles. The JBE-AT1 Programmer allows selecting which threshold to apply to the detector.

Sensitivity levels

The detector will always report alarm to the fire panel according with the pre-configuration selected. Select the configuration or the profile(s) most appropriate for your application.

Profile 1	EN 54-7, earliest detection
Profile 2	EN 54-7, standard sensitivity
Profile 3	EN 54-7, strong false alarm rejection

TECHNICAL DATA

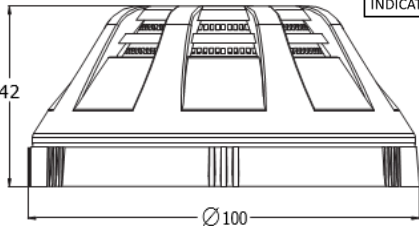|	
Category	Optical Smoke Detector EN 54-7
Working voltage	16 - 30 VDC (JBE protocol pulse amplitude)
Connection	2-wire n bus, no polarity
Wiring	Twisted pair, max. wiring gauge 2.5 mm^2
Quiescent current	≤0.1 mA @24 V
Activation current	≥25mA @24 V (remote indicator current <15 mA)
Working temp.	-10 ~ +60°C
Storage temp.	-20 ~ +60°C
Environment humidity	≤ 95% RH (40 ±2°C) (no condensation nor icing)
Configuration	Soft configuration with tool JBE-AT1, non-volatile
Protection area	60 ~ 80 m^2 (subject to local codes)
Red LED indication	Standby: Flashing
	Alarm: Steady on when in alarm
Dimension (ØxH)	100 mm × 46 mm
Weight	0.1 kg
IP rating	IP40
Compatible bases	JBE-2165 for installation with or without remote indicator
Standards	EN 54-7:2018
Declaration of Perf.	DoP-0370-CPR-6414-1

Maintenance

Alarm test should be conducted regularly, recommending every 6 months (check local regulations).
The dust cover can protect the detector from noxious dust accumulation during construction works, but the detector will not be able to detect smoke while the dust cover is on.
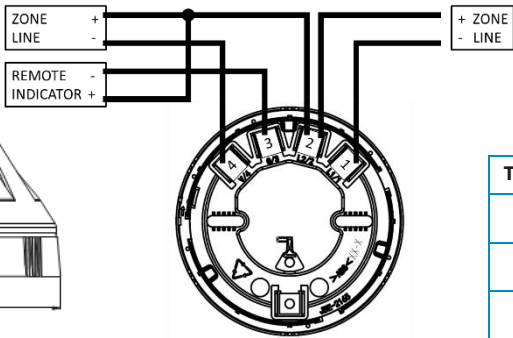
Installation

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 diagram below.
3. Select the sensitivity profile most appropriate for your application using the JBE-AT1 tool.
4. Mount the detector onto its base and turn it clockwise to secure.
5. Test each detector and wiring integrity after installation and periodically according to local fire regulations.

Mechanical dimensions (all dimensions in mm) and connection diagram:

Terminals	Connection
1 / L1	Negative voltage of the Zone (No polarity)
2 / L2	Positive voltage of the Zone (No polarity)
3 / G	Negative remote indicator (Optional)
4 / V	Negative voltage of the Zone (No polarity)