ZX832
Multisensing fire detector

Multi criteria sensing

ZX832 multisensor represents the next generation of fire detectors giving an earlier warning of fire or smoke, with the ability to discriminate against false alarms. Fuzzy logic software using multi-criteria sensing form the basis of this advanced detector. The detector consists of integrated high sensitivity smoke and thermal sensors. The system combines the dynamic results of rates of change patterns and absolute levels of smoke and heat, to identify real fire criteria. Selectable software algorithms allow the response to be matched to each particular hazard. Algorithms can change for day/night operation.

Advanced self test facility

Units are of low-profile design and plug into either a surface, or a semi-recessed base. An automatic facility is provided to lock the sensor into its base, requiring a special tool to remove. The sensor contains a built-in LED, which illuminates when the detector is in an alarm condition.
An advanced self test facility excites the smoke chamber as though smoke were present, and fully tests the complete sensor as well as communication with the panel.
ZX832 detectors are suited to applications requiring the highest level of alarm integrity. Each sensor can protect up to 100²m subject to room and ceiling design and local codes. If the detector is intended to be used in thermal-only mode at certain times, then maximum coverage is 50m².

Automatic calibration

The ZX832 is a standard ZP addressable device, which uses the ZP addressing system. Up to 127 devices can be connected to each ZP address loop. The system automatically compensates each sensor individually for calibration changes caused by dirt, temperature, humidity, voltage fluctuations and long term contamination.
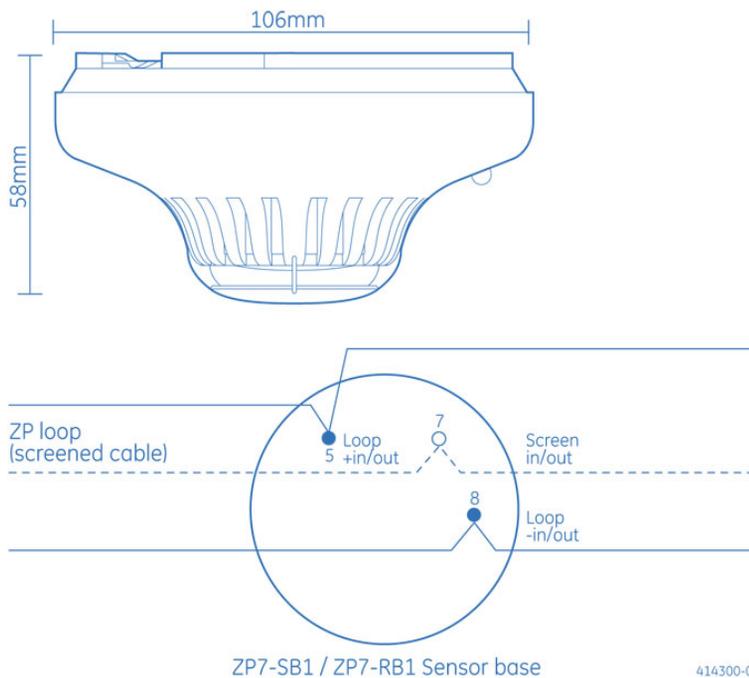
Standard Features

- **Multi-criteria fire sensing**
- **Enhanced detection certainty**
- **False alarm discrimination**
- **Fuzzy logic algorithms**
- **Selectable algorithms**
- **Microprocessor based**
- **Smoke element complies with EN54 Pt7**
- **Heat element complies with EN54 Pt5 certification A1**

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Specifications

Model No	ZX832
Specification	EN54 Pt5 (Classification A1) and EN54 Pt7
Description	Intelligent multisensing fire detector
Sensitivity	Smoke - m = 0.13dB/m
	Heat - software selectable 58ºC or 75ºC
Compatibility	All ZP analogue systems
Mounting	Plugs into surface or semi recessed base
Area Coverage	Smoke - 100m², heat - 50m², subject to local codes
Wiring	2 core loop or spur
Monitoring	Open and short circuit fault. Sensor removal and device type.
Indication	Alarm LED (red)
Operating voltage	Address line pulsed 20V (19.5V to 20.5V). Max line less 4V
Current	600uA quiescent, 700uA alarm
Detection principle	Smoke - photo electric light scatter, thermal - thermistor
Application	Indoor installation
EN60529 rating	IP32
Temp range	-20ºC to +75ºC
Humidity range	20% to 95% RH (non condensing)
EMC	CE marked (EEC89/336)
Material	Moulded ABS
Dimensions	106mm (dia) x 59mm (H) (excluding base)
Height	67mm ZP7-SB1 surface base, 45mm ZP7-RB1 recessed base
Colour	White
Weight	105g (excluding base)
Publication No	PS1110

ZP7-SB1 / ZP7-RB1 Sensor base   414300-01

Ordering Information

Part No.	Description
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