

## Product Features

The Photoelectric smoke Detector has been designed with a unique 'Flat Response Technology', enabling the detector to be equally sensitive to a much wider range of combustible materials.

The 'Flat Response' detection chamber consists of an LED and photo-diode arrangement. The 'Flat Response' detection chamber minimises unwanted alarms by two methods:

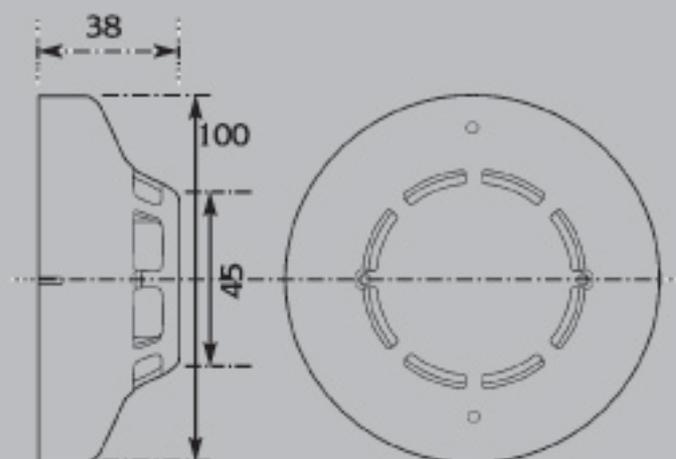
- The chamber is designed so that light emitted by the LED cannot normally reach the photo-diode, the new physical construction of the SLV-E(j) minimises external influences like dust, vapour, insects etc from causing unwanted alarms.
- The 'Flat Response' detection chamber has also enabled the detector threshold level to be increased, thereby improving the signal to noise ratio and reducing susceptibility to false alarms.

## Product Operation

When smoke particles enter the chamber the light is scattered and some of this light falls on the photo-diode. This is converted into an electronic signal, filtered and then used to trigger the internal latching circuit. The chamber is easily removed or replaced for cleaning and utilises a unique baffle design which allows smoke to enter the chamber whilst keeping out ambient light.

The SLV-E(j) Photoelectric smoke Detector eliminates the need to use Ionisation Detectors. In the majority of applications, this makes system design easier and overcomes the cleaning and disposal problems associated with Ionisation Detectors.

## Dimensions (mm)



## Specification

|                           |  |
|---------------------------|--|
| Ordering code             | SLV-E(j)   |
| Disposable chamber        | YES  |
| Operating voltage         | 15-30 Vdc (Nominal rating 24Vdc)                   |
| Standby current           | 35µA   |
| Current in alarm state    | 40mA at 24Vdc                                      |
| Ambient temperature range | -10°C to +50°C                                     |
| Storage temperature range | -30°C to +60°C                                     |
| Humidity (Max)            | 95%RH - Non Condensing at +40°C                    |
| Colour                    | Ivory White  |
| Case Material             | ABS  |
| Dimensions (mm)           |  |
| Diameter                  | 100  |
| Height with Base          | 46   |
| Compatible bases          | YBN-R/4C,<br>YBO-R/4C with Remote Indicator Output |
| Base Fixing centres       | 48mm through to 74mm                               |
| Approvals                 | LPCB (EN54-7:2000)                                 |
| Weight                    | 80g  |

## Applications

The SLV-E(j) Photoelectric Smoke Detector with 'Flat Response Technology' is suited to a wide range of commercial applications. It can be installed in areas where traditionally both Photoelectric and Ionisation Detectors have been used, thereby providing a simpler solution for system designers and minimising the future disposal cost.

It has been designed for commercial applications where high reliability, resistance to unwanted alarms and aesthetics are important aspects to the building owner as well as protecting the environment.

## Other Products

- Fixed Temperature Heat Detector (DFJ-60E/90E)
- Rate of Rise Heat Detector (DCD-1E/2E and R1E)
- Fixed Temperature Waterproof Heat Detector (DFG-60BLKJ)
- Fixed Temperature Heat Detector (DFE-60E/90E)
- Range of Bases



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