



A Bosch Company

- Ideal Where Smoke Detection is Unsuitable
- Integrated Voice Enhanced Sounder
- Integrated AS 7240-23 / EN54-23 Visual Alarm Device
- Seven Selectable Voice Messages
- Loop Powered
- Low Current
- Programmable Volume Control
- Integral Short Circuit Isolator
- Protec Algo-Tec™ 6000PLUS Protocol
- FAST™ Addressing
- VAD Classification Adjustable from 3m to 7.5m Room Coverage Volume
- AS 1670 or NZS4512 Compliant

## 6KPXXX/HT/TSVAD - Heat Sensor Plus Talking Sounder and Visual Alarm Device



The Protec Algo-Tec™ 6000PLUS sensor range has been developed to incorporate advanced fire sensing technology, electronic sounders, high intensity LED visual alarm devices (VAD) and speech enhanced talking sounder capability, all integrated within the sensor head and powered from the loop.

### 6KPXXX/HT/TSVAD

Interactive addressable heat sensor with low thermal mass thermistor, giving fast response to temperature increases.

The intelligent sensor data is evaluated by the Protec Algo-Tec™ 6000PLUS interactive programmable algorithms. Suitable for applications where smoke detection is unsuitable but require a high sensitivity heat detector. Examples are boiler rooms, kitchens, laundries and ventilated areas.

**Sensor Talking Sounder** - For the ultimate method of alerting building occupants of the incidence of an emergency, the Protec Algo-Tec™ 6000PLUS sensor is equipped with an integrated voice enhanced sounder. The talking sounder

is capable of delivering synchronised alert and evacuate messages around a building, removing any ambiguity, particularly for anyone unfamiliar with the building alert and evacuation strategy, enabling a more prompt and safe building evacuation.

**Sensor VAD** - Compliance with DDA legislation is assisted by the addition of the Protec visual alarm device (VAD) to the 6000PLUS sensor, to warn those with hearing impairments or in noisy environments. The VAD utilises a high intensity LED with lower power consumption and increased reliability when compared to alternative indicators.

The VAD is located in the centre of the sensor, so can be viewed from all angles. Suitable for ceiling mounting the VAD distributes light in a cylindrical pattern to achieve the required minimum illumination of 0.4lux over the entire coverage area in accordance with AS 7240-23 / EN54-23. The maximum mounting height is 3m with a coverage diameter of 7.5m.

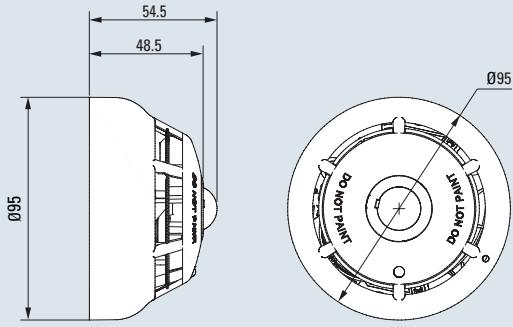
For smaller areas the device can be programmed on-site for coverage diameter of 3m or 5m at reduced power.

# Technical Specification

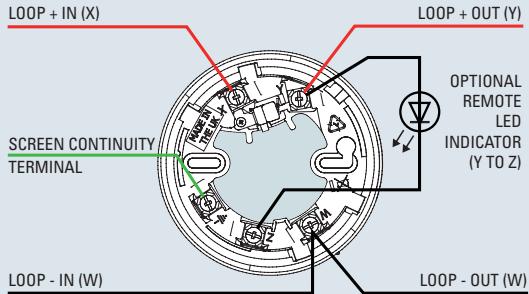
PRODUCT CERTIFICATION



## Dimensions (mm)



## Typical Wiring using 6000PLUS/BASE



## Technical Specification:

|                         |  |
|-------------------------|--|
| Environment             | -10°C to +50°C (95% R.H. non condensing) |
| Ingress Protection      | IP21C                                    |
| Weight (excluding base) | 109.46g                                  |
| Loop Powered            | Yes                                      |
| Loop Voltage            | 18 - 28V                                 |
| Loop Standby Load       | 0.55mA                                   |
| Peak Alarm Load         | 25mA                                     |
| Mounting Height         | 3m                                       |
| Coverage                | 7.5m, 5m or 3m cylindrical diameter      |
| VAD Flash Rate          | 1Hz or 0.5Hz white flash                 |
| Isolator                | Yes                                      |
| Device Protocol         | Algo-Tec™ 6000PLUS                       |
| Relevant Standard       | AS 7240 Part 5                           |

## Design Guidance

Protec VAD's have been approved to BS EN 54-23 and use the rating codes below:

### C-x-y (eg C-3-7.5)

Where:

**C** is ceiling mounted

**x** is the maximum height (M)

**y** is the illumination diameter for the cylindrical volume (M)

BS EN 54-23 approved VAD's are approved as ceiling mounted and must provide a minimum illumination level of 0.4 lux for the stated volume

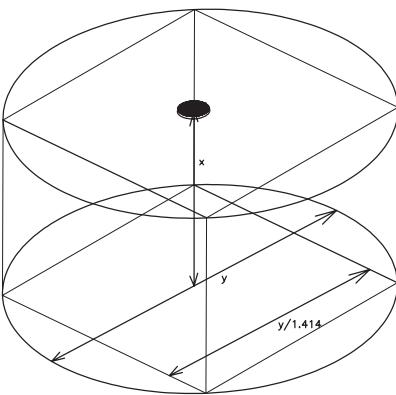
## Table B: Indirect Viewing

Coverage volumes for various ambient light levels (lux)

|                   |         |
|-------------------|---------|
| BS EN54-23 Rating | C-3-7.5 |
| Mounting Position | Ceiling |
| Less than 100 lux | 9.8dia  |
| 100 - 200 lux     | 9dia    |
| 200 - 300 lux     | 7.5dia  |
| 300 - 400 lux     | 6dia    |
| 400 - 500 lux     | 4.5dia  |
| 500 - 600 lux     | 3.8dia  |
| 600 - 700 lux     | *       |
| 700 - 800 lux     | *       |

Coverage volumes height, diameter, length and width dimensions are in metres.

\* Where ambient light levels may, at any time, exceed 600 lux, direct viewing is preferred (CoP 001 clause 4.6.9.4)



## Talking Sounder Message Set

Please refer to MED2033 Talking Sounder Table

## Order Codes

6KPAUS/HT/TSVAD - Australian Version

6KPNZ/HT/TSVAD - New Zealand Version

## Table A: Direct Viewing

Coverage volumes for various ambient light levels (lux)

|                   |         |
|-------------------|---------|
| BS EN54-23 Rating | C-3-7.5 |
| Mounting Position | Ceiling |
| Less than 100 lux | 21dia   |
| 100 - 200 lux     | 18dia   |
| 200 - 300 lux     | 14.3dia |
| 300 - 400 lux     | 10.5dia |
| 400 - 500 lux     | 8.3dia  |
| 500 - 600 lux     | 6.8dia  |
| 600 - 700 lux     | 5.3dia  |
| 700 - 800 lux     | 3.8dia  |

