# NSF100

## Sounder with LED VAD
## EN54-3 and EN54-23 approved

This EN54 approved sounder / strobe provides a high efficiency, low power solution for alarm signalling when both audible and visual alarm signals are required.

Combined into one unit with a unique first fix installation method in the base, this unit is quick to install to reduce the cost of installation.

The high quality and robust design ensures that the user has trouble free operation over the life of the product, even in tough environments.

With a wide range of selectable options for tones and flash, the product is suitable for a wide range of applications.

## Key Features

Quick First fix installation
Wide operating voltage
Low power consumption
Attractive design
Full independent monitoring of pre-alarm and alarm channels (Dual flash versions)
32 alarm tones
2 stage alarm option
Fully synchronised
IP65 rated with Deep base

## Key Benefits

Reduces costs where multiple VAD are required.

Full synchronisation across tones and flashes on all products in the range enabling very flexible system upgrades and changes.

Lower installation costs
One unit suits many applications

High specification and efficiency simplifies product selection

## Applications

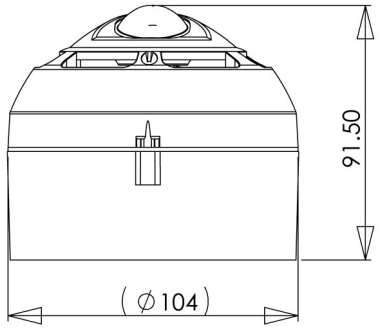
Offices, Retail outlets, Hospitals, Universities, Commercial and Industrial sites.
Where visual alarms are required with audible alarms
Where low power consumption is required with a high light output

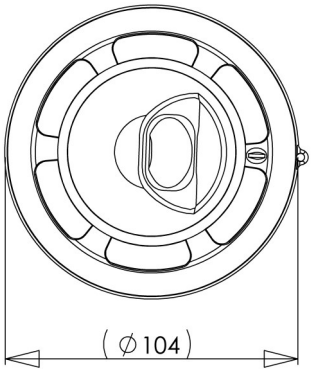
# Product data

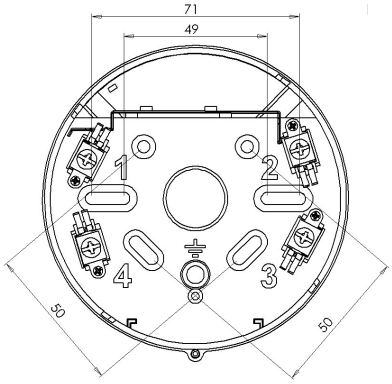
## Specification

| | Compliant operating range | Maximum Operating range |
|---|---|---|
| Supply voltage range | 18—56 V dc | 18 - 56V dc |
| Current consumption | VAD 10mA to 30mA dependent on setting : Sounder 10mA to 25mA depending on setting | |
| Power consumption | Max. 2.4W : 0.5W to 2.4W depending on setting and supply voltage | |
| Cable monitoring | Individual reverse polarity monitoring on both Pre-alarm and Alarm circuits | |
| Terminal size | 0.28 to 2.5mm² conductor | |
| LED Configuration | Red and White LED's | |
| Mounting | Wall | |
| EN54 –23 coverage | W2.4—7.6 (High setting) : W2.4-5.6 (Low setting) | |
| EN54 –23 coverage volume | 138m³ (High setting) : 75m³ (Low setting) | |
| Sound Output | 98dB(A) to 110dB(A) depending on tone : 103dB at 28V on EN54 approved tones | |
| 32 selectable tones | Selected via DIL switch | |
| Volume control | Provides up to -15dB attenuation | |
| Flash options | High and low output, 1s and 2s flash rates DIL switch selectable | |
| Material | V0 rated ABS body & base, V0 Polycarbonate lens | |
| Weight | 226g Deep base :146g Shallow base | |
| Base colour | White or Red | |
| Lens colour | Clear | |
| Fixing method | Body to base – Bayonet auto connect, Base to wall - Screw | |
| Operating temperature | –25°C to +75°C | |
| IP Rating | IP65 and TYPE B | |

## Dimensions




## Order codes

| | |
|---|---|
| NSF100R-R-S | Sounder in Red with red strobe and shallow base |
| NSF100R-R-D | Sounder in Red with red strobe and Deep base |
| NSF100R-W-S | Sounder in Red with white strobe and shallow base |
| NSF100R-W-D | Sounder in Red with white strobe and Deep base |

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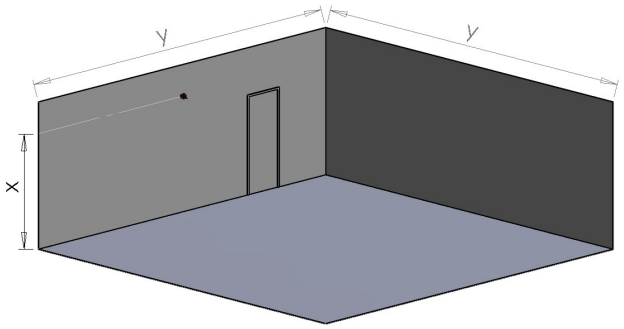
# VAD coverage

| Switch Number | Function | NSF100 Combined sounder / VAD EN54-23 code / coverage volume | |
|---|---|---|---|
| 1 2 3 | | WHITE flash | RED flash |
| 0 0 0 | 1s Low power | W-2.4-5.6/75m³ | W-2.4-5/60m³ |
| 0 0 1 | 1s High power | W-2.4-7.6/138m³ | W-2.4-6.5/101m³ |
| 0 1 0 | 2s Low power | W-2.4-5.6/75m³ | W-2.4-5/60m³ |
| 0 1 1 | 2s High power | W-2.4-7.6/138m³ | W-2.4-6.5/101m³ |

Where Coverage distance= W(x)-(y)




# Tone table

| Tone Number | Tone description | Switches 45678 | 2nd tone | Typical SPL @ 1m | EN54-3 SPL @28V on axis |
|---|---|---|---|---|---|
| 1 | 800 & 1000Hz, Alternating (250ms – 250ms) | 00000 | 21 | 103 | |
| 2 | 660Hz, Intermittent (1.8s ON – 1.8s OFF) | 00001 | 2 | 103 | |
| 3 | 2400 & 2900Hz, Alternating (250ms – 250ms) | 00010 | 22 | 110 | |
| 4 | 1000Hz Intermittent (0.5s ON, 0.5s OFF X3, 1s OFF) ISO 8201 | 00011 | 18 | 100 | |
| 5 | 2400 – 2900Hz Sweep, (7Hz) | 00100 | 22 | 110 | |
| 6 | 660Hz, Intermittent (0.5s ON – 0.5s OFF) | 00101 | 6 | 103 | 103 |
| 7 | 1000Hz Intermittent (0.25s ON, 1s OFF ) | 00110 | 21 | 100 | |
| 8 | 800 - 1000Hz, Sweep, (1Hz) | 01000 | 21 | 103 | 103 |
| 9 | 660Hz, Continuous | 01001 | 9 | 103 | |
| 10 | 800 & 1000Hz, Alternating (0.5s – 0.5s) | 01010 | 21 | 103 | 101 |
| 11 | 1400 – 2000Hz, Sweep (10Hz) | 01011 | 11 | 102 | |
| 12 | 500 -1200Hz, Sweep, (3.5s ON -0.5s OFF) | 01100 | 21 | 103 | 103 |
| 13 | 800 - 1000Hz, Buzz (Sweep at 50Hz) | 01101 | 21 | 100 | |
| 14 | 440Hz (100ms) and 554Hz (400ms), Alternating | 01110 | 21 | 103 | |
| 15 | 800 – 1000Hz, Fast Sweep, (7Hz) | 10000 | 21 | 103 | |
| 16 | 660Hz, Intermittent (6.5s ON – 13s OFF) | 10001 | 16 | 103 | |
| 17 | 1000Hz, Intermittent (1s ON – 1s OFF) | 10010 | 21 | 100 | |
| 18 | 2900Hz Intermittent (0.5s ON, 0.5s OFF X3, 1s OFF) ISO 8201 | 10011 | 4 | 106 | |
| 19 | 2400 – 2900Hz, Sweep, (1Hz) | 10100 | 22 | 108 | |
| 20 | 2900Hz Intermittent (150ms ON, 100ms OFF ) | 10101 | 21 | 104 | |
| 21 | 1000Hz, Continuous | 10110 | 21 | 100 | |
| 22 | 2900Hz, Continuous | 11000 | 21 | 105 | |
| 23 | 440 & 554Hz, Alternating (1s – 1s) | 11001 | 23 | 0 | |
| 24 | 2900Hz, Intermittent (1s ON – 1s OFF) | 11010 | 22 | 105 | |
| 25 | 800 & 1000Hz, Alternating (0.5s – 0.5s) | 11011 | 22 | 103 | |
| 26 | 1200 - 500Hz, Sweep, (1Hz), DIN tone | 11100 | 21 | 103 | |
| 27 | 2400 – 2900Hz, Buzz (Sweep at 50Hz) | 11101 | 22 | 108 | |
| 28 | 660Hz, Intermittent (150ms ON – 150ms OFF) | 11110 | 28 | 103 | |
| 29 | 990 - 660Hz, Alternating (0.5s - 0.5s) | 00111 | 6 | 101 | |
| 30 | 910 - 685Hz, Alternating (250ms - 250ms) | 01111 | 6 | 100 | |
| 31 | 750 - 1000Hz, Alternating (0.5s - 0.5s) | 10111 | 17 | 98 | |
| 32 | 925 - 628Hz, Alternating (250ms - 250ms) | 11111 | 6 | 100 | |

See data sheet DS45-0010 A for more details