

ZETTLER

Addressable Fire Alarms Devices



Superior Technology for the Highest Protection



ZETTLER

Built on 100 years of product innovation

The ZETTLER range has been built around MZX Technology which provides some of the most advanced fire detection capabilities that are currently available.

Developed from integrating many years of product innovation through research and development across Europe, the MZX Technology platform has provided some of the best sensing technologies over 100 years and has been a great contributor to early detection and minimizing false alarms. Our products have been designed to utilize tools and techniques that allow for easy and flexible engineering, configuration and installation. It has also been responsible for some of the best installation techniques allowing easy and flexible engineering and installation.

This has resulted in the ZETTLER range being one of the most resilient, reliable and serviceable systems available with the broadest level of global standards compliance and certifications. With such heritage, experts at ZETTLER have developed a new series of Sounders, Visual Alarm Devices (VADs) and Visual Indication Devices (VIDs). Using our cutting edge, in-house testing centers, our engineers have performed rigorous, accurate situational testing programs with a special focus on EN54 part 23 requirements to enable them to enhance the performance of our new product range.

This combined with our expert knowledge in fire detection technology and systems has meant that we now offer a range of superior devices that are amongst the most advanced available and meet all the current standards and requirements.

What to use where?



It is advisable to carry out a fire risk assessment of the area to be covered before applying any system design. This will determine the type and specification of the devices required.

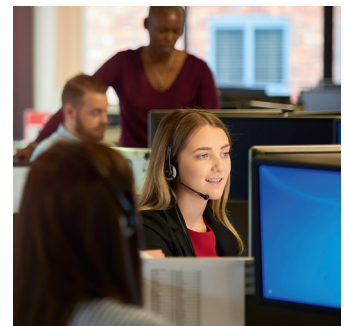
Sounders are considered as the most important of all the alarm devices. It is a mandatory requirement that sounders are used as an integral part of the fire detection and alarm system.

VADs are used to supplement sounders, providing an effective means of alerting and evacuating occupants of the building, as part of its fire safety strategy.

Regulations and codes of practices recommend that they should be installed in places where audible devices alone would be ineffective, or, where they are simply undesirable. Installation of VADs has been mandatory since January 2014 and, with the introduction of the EN54-23 the use of VADs has grown considerably.

VIDs are generally used as a supplementary indication to raise situational awareness. But, when an event occurs, they cannot be used as the only means to alert people to a potential hazard.

Typical examples of sites where VADs are needed:





What is EN54-23?



The recent release, by the European Committee for Standardization (CEN), of EN54-23 now clarifies the use of Visual Alarm Devices in fire detection and alarm systems in non-domestic premises. These requirements became mandatory in January 2014.

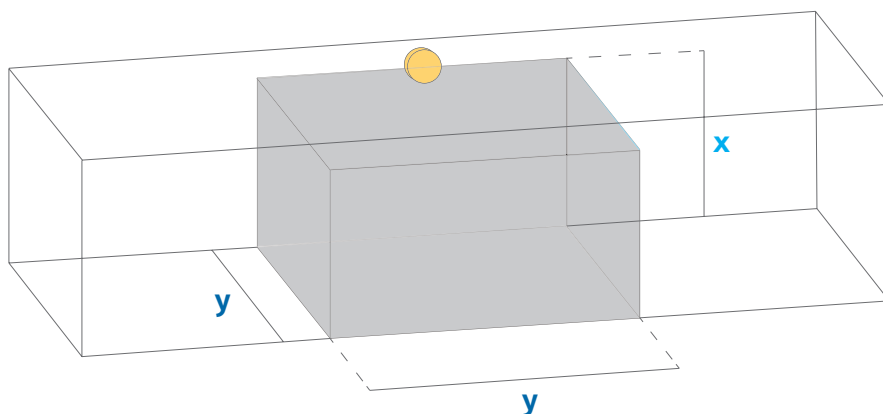
EN54-23 now provides clarity by standardizing requirements, test methods and performance criteria of Visual Alarm Devices (VADs) and ensures all device parameters are measured in a uniform manner throughout Europe.

Prior to this release, misinterpretation and confusion over a particular product's performance was a common concern in the industry as there was no EN standard in existence for VADs.

Main Requirements from EN54-23 are:

- The coverage volume (i.e. volume within which required illumination is achieved) must be stated on the product or supporting documentation.
- The VAD should meet the requirement for coverage volume of at least one of the following categories: W (Wall), C (Ceiling), O (Open Class).
- Required illumination of 0.4 lux on a surface perpendicular to the direction of the light emitted from the VAD.
- The rate of flash should be stated between 0.5Hz and 2Hz.
- The devices must be classified as Type A, indoor and Type B, outdoor.

Wall Category



Coverage volume code:

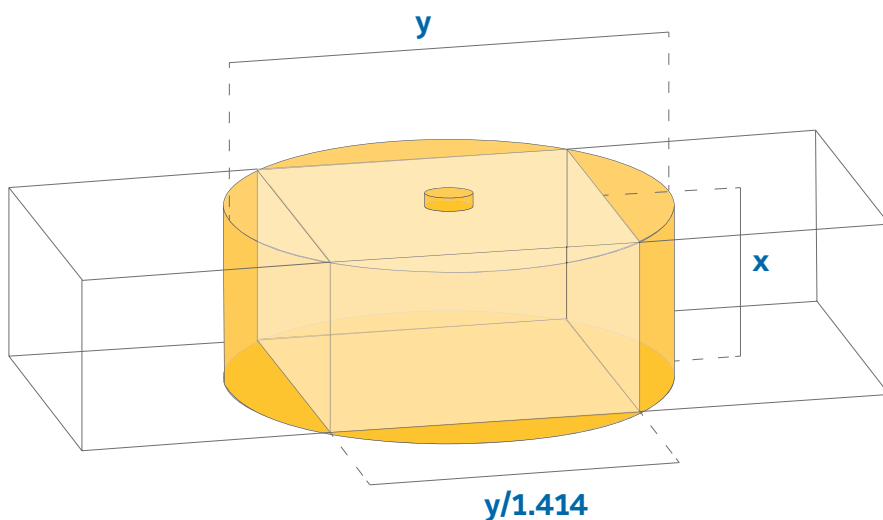
W - (x) - (y)

W = wall mounted

x = maximum mounting height

y = length and width in metres of the cubic volume covered (to a minimum level of 0.4 lux) when the device is mounted to the wall at a height of **x**

Ceiling Category



Coverage volume code:

C - (x) - (y)

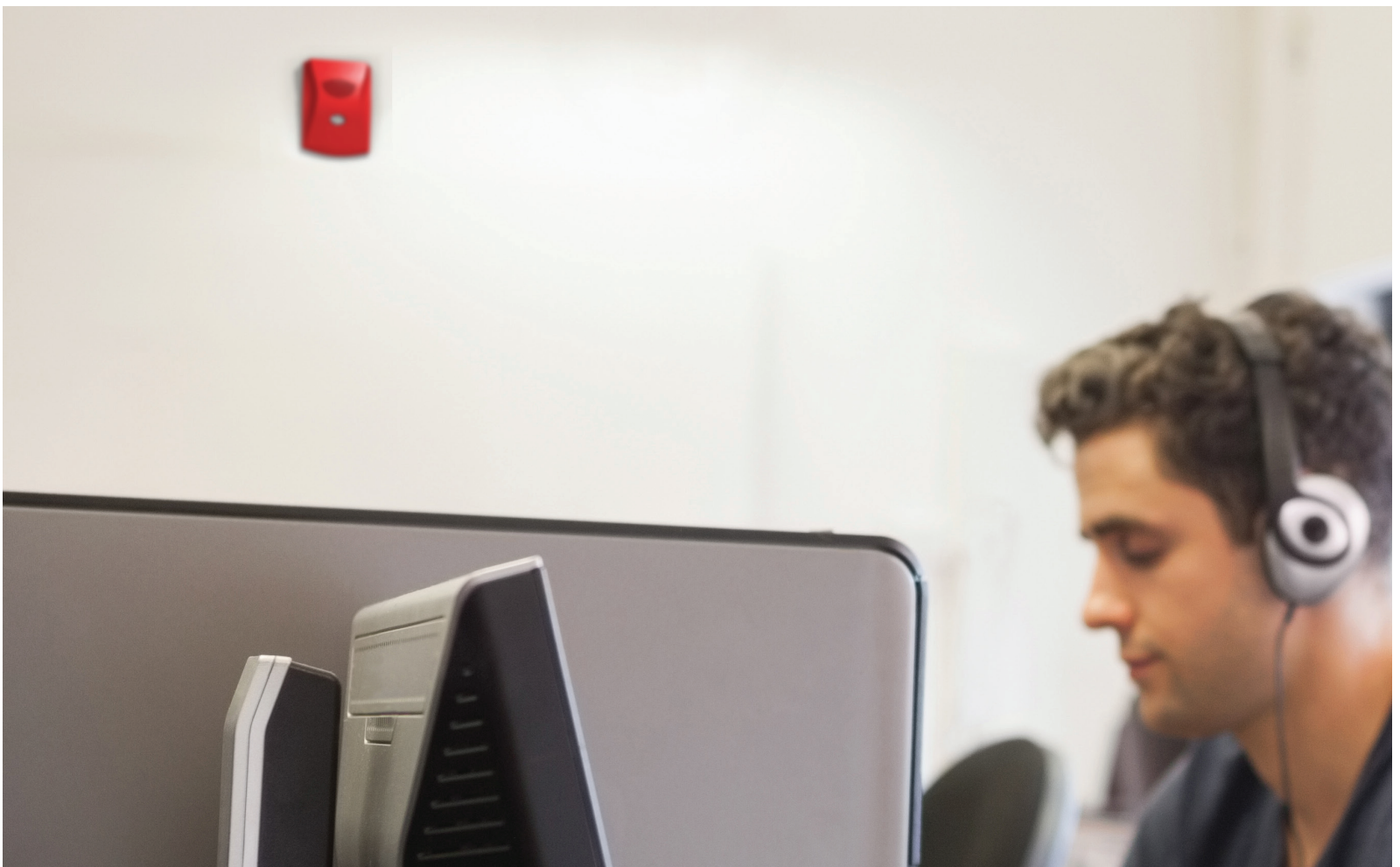
C = ceiling mounted

x = maximum mounting height

y = diameter in metres of the cylindrical volume covered (to a minimum level of 0.4 lux) when the device is mounted to the ceiling at a height of **x**

Open Class Category

The coverage volume and its shape are specified by the manufacturer and include mounting position and orientation alongside any restriction on the mounting height.



Faster Reaction to Alarm Activation 20ms Pulse Length

Xenon beacons are very effective visual alarm indicators, however, as they require high levels of power, it can be challenging when designing a fire detection system to accommodate their power requirements on a loop in the most effective way.

In the last decade, more power efficient LED technology had advanced significantly and become more prevalent as the majority of manufactures now utilize this light source in most of their visual indicating and alarm devices. Recent research has shown that the effect of the LED light on the human eye is influenced by the light pulse length and this may not be the same as that emitted by a Xenon light.

Independent laboratory tests show that duration of the pulse within visual alarm devices influences the way people react to it. Interestingly, the shorter the pulse duration, the faster the reaction. Consequently shorter pulse durations of LED devices will result in improved reactions as attention to the light is drawn sooner. This finding has had a major impact on the global fire detection industry. The requirement of pulse width not exceeding 20ms for notification appliances was included in the 2016 edition of NFPA 72 - the national fire alarm and signaling code for United States of America.

Although EN54-23 does not impose a 20ms pulse length, our experts understand how the shorter pulse length is a crucial element in improving reaction times.

The new range of devices from ZETTLER capture these latest innovations and breakthroughs in light technology to operate LED devices with a pulse duration that does not exceed 20ms. This can have an effect on the human eye that is comparable to Xenon light.



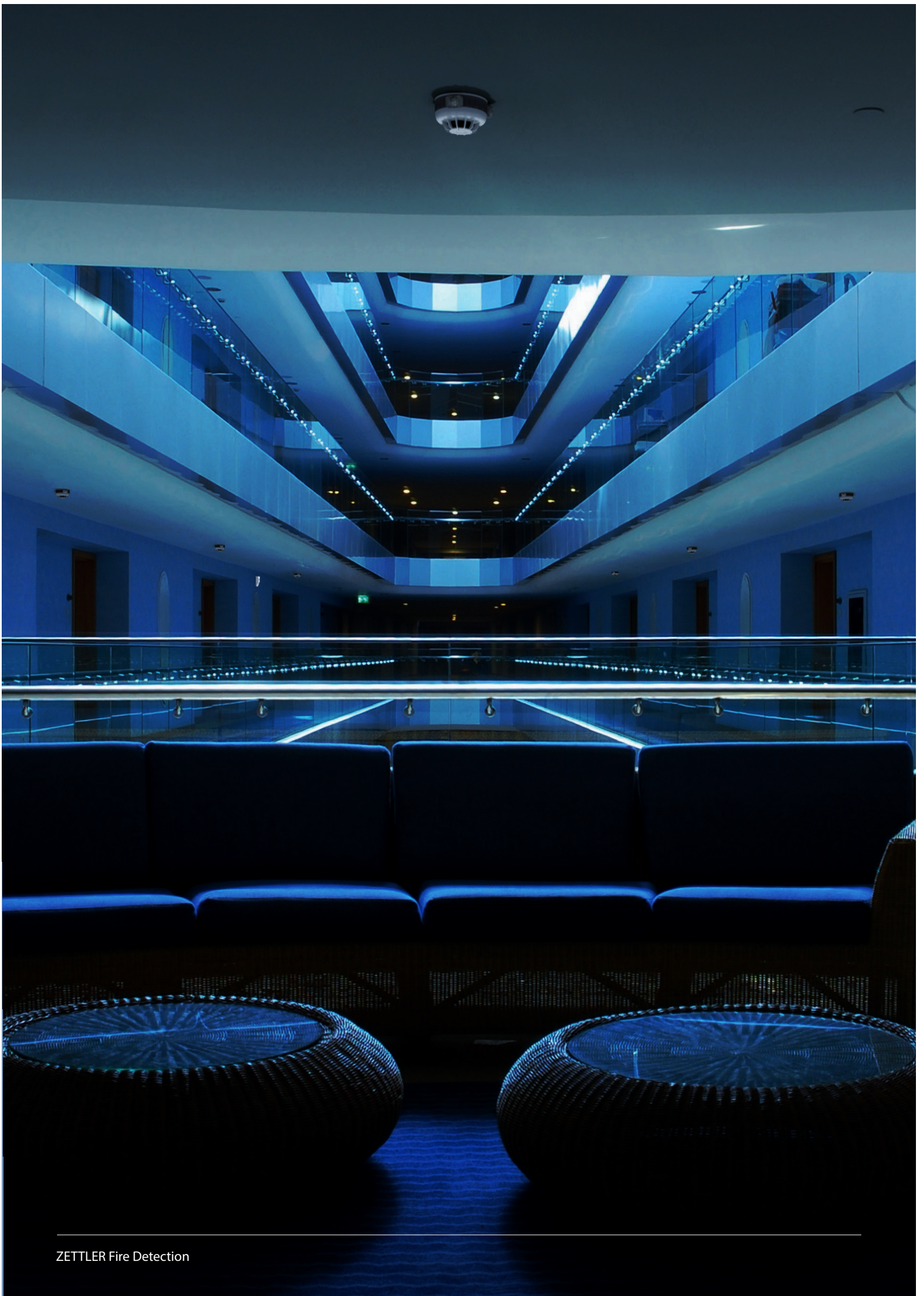
Optimized Costs More Devices on a Loop

Power consumption is the biggest consideration when complying with EN54-23.

The new visual alarm and indication devices from ZETTLER operate with low levels of current consumption, meaning more devices can be used on a loop with the same amount of energy, making systems design and installation easier.

Now with our PROFILE Flexible Fire Control Panels we have high power loops with up to 1 amp and 250 addresses, enabling the use of more sounders and VADs – meaning fewer loops to protect a site, reducing the installation cost while maintaining compliance.







Less Disruption

Automatic Self Test

Regular testing of fire detection systems is necessary but is often disruptive especially in buildings such as hospitals or hotels. The new range of VIDs and VADs from ZETTLER are smart enough to test themselves without disruption when required.

Reflective Light Monitoring (RLM) is used to perform a full self-test of all visual devices. Instant Reflective Sound Monitoring (RSM) enables a full self-test of sounding devices with an activation time of a fraction of a second per device. Such a short testing time minimizes disruption

and reduces the desensitization of the buildings occupants. In turn this keeps reactivity during a real fire alarm high and reduces the chance of mistaking an actual event.

RSM and RLM measure and test sound and light output. These are not based on electronic measurements or simulations, but on real output. This method of testing is highly accurate and reassures the end user by providing a high level of confidence in the performance of the system.

These self-tests can be performed at any time. They can be programmed to take place at a pre-determined time which suits the building's occupants; hence causing no disruption to occupants and normal operations.

High Quality

and Expertise

Our team has extensive expertise with developing notification devices globally.

We have sold millions of devices improving our product and sales knowledge.

Now, ZETTLER can benefit from this impressive knowledge. Our new alarm devices are made in world-class globally certified European factories, which ensure the highest levels of quality and environmental health and safety.



P80AVW, P80AVR & P85AVR

Addressable Wall Sounder VADs

The P80AV range of compact addressable wall sounders with a Visual Alarm Device (VAD) includes three models with the same low current and high output specification; red and white body indoor models plus an IP rated version for either outdoor or harsh environment applications.



(*) Full intensity VAD with sounder at high volume, 1 A loop.

Loop quantities are for guidance only and should be verified with the loop calculator.

	P80AVW	P80AVR	P85AVR
Coverage volume code	W-2.4-7.5	W-2.4-7.5	W-2.4-7.5
Devices per loop	Up to 73(*)	Up to 73(*)	Up to 73(*)
Flash rate	0.5 / 1Hz	0.5 / 1Hz	0.5 / 1Hz
Dimensions (WxHxD) mm	89x135x40 (Without backBox)	89x135x40 (Without backBox)	105x153x97 (With IP BackBox)
Sound output @ 1m	Up to 100dBA	Up to 100dBA	Up to 100dBA
Body colour	White	Red	Red
Flash colour	White	White	White
IP code	IP21C	IP21C	IP55
Approvals	EN54-3, 23, 17	EN54-3, 23, 17	EN54-3, 23, 17

Features

- A compact and unobtrusive sounder solution
- Reflective Sound Monitoring (RSM)
- Reflective Light Monitoring (RLM)
- Automatic self-test
- Shorter light pulse for faster response
- Indoor and outdoor versions
- Indoor models can be semi-flush or surface mounted including a choice of shallow or deep back box
- IP rated option has a deep surface back box for use with suitable IP-rated glands and cabling
- Power and data from the loop. No additional wiring or power supplies required
- Built-in line isolator
- 16 selectable tones
- Realistic conventional bell tone
- 2 selectable volumes
- 2 selectable flash rates
- Select the tone volume and flash rate using panel configuration software
- Independent addressable control of the sounder and beacon
- Different tones can be used for fire alarm and class change
- Rectangle wall mount for an aesthetically pleasing option
- A locking pin/screw supplied which prevents unauthorized removal

Part Numbers

576.080.007	P80AVW Addressable Wall Sounder VAD White
576.080.008	P80AVR Addressable Wall Sounder VAD Red
576.080.009	P85AVR Addressable Wall Sounder VAD IP Red
557.080.007	S-BOXR Shallow Surface Back Box For Indoor Wall Sounder / VAD / VID Red
557.080.008	S-BOXW Shallow Surface Back Box For Indoor Wall Sounder / VAD / VID White
557.080.010	A-BOX Flush Back Box Adaptor For Indoor Wall Sounder / VAD / VID
557.080.011	D-BOXR Deep Surface Back Box For Indoor Wall Sounder / VAD / VID Red
557.080.012	D-BOXW Deep Surface Back Box For Indoor Wall Sounder / VAD / VID White

P80AIW, P80AIR & P85AIR

Addressable Wall Sounder VIDs

The P80AI range of compact addressable wall sounders with the Visual Indicating Device (VID) includes three models with the same low current and high output specification; red and white body indoor models plus an IP rated version for either outdoor use or for harsh environment applications.



(*) Beacon at 0.5Hz with sounder at high volume, 1 A loop.

Loop quantities are for guidance only and should be verified with the loop calculator.

	P80AIW	P80AIR	P85AIR
Devices per loop	Up to 92(*)	Up to 92(*)	Up to 92(*)
Flash rate	0.5 / 1Hz	0.5 / 1Hz	0.5 / 1Hz
Dimensions (WxHxD) mm	89x135x40 (Without backBox)	89x135x40 (Without backBox)	105x153x97 (With IP BackBox)
Sound output @ 1m	Up to 100dBA	Up to 100dBA	Up to 100dBA
Body colour	White	Red	Red
Flash colour	Red	Red	Red
IP code	IP21C	IP21C	IP55
Approvals	EN54-3, 17	EN54-3, 17	EN54-3, 17

Features

- A compact and unobtrusive sounder solution
- Reflective Sound Monitoring (RSM)
- Light is electronically monitored by the control panel
- Automatic self-test
- Indoor and outdoor versions
- Indoor models can be semi-flush or surface mounted including a choice of shallow or deep back box
- IP rated option has a deep surface back box
- Power and data from the loop. No additional wiring or power supplies required
- Built-in line isolator
- 16 selectable tones
- Realistic conventional bell tone
- 2 selectable volumes
- 2 selectable flash rates
- Select the tone volume and flash rate using panel configuration software
- Independent addressable control of the sounder and beacon
- Different tones can be used for fire alarm and class change
- Rectangle wall mount for an aesthetically pleasing option
- A locking pin/screw supplied which prevents unauthorized removal

Part Numbers

576.080.011	P80AIW Addressable Wall Sounder VID White
576.080.012	P80AIR Addressable Wall Sounder VID Red
576.080.013	P85AIR Addressable Wall Sounder VID IP Red
557.080.007	S-BOXR Shallow Surface Back Box For Indoor Wall Sounder / VAD / VID Red
557.080.008	S-BOXW Shallow Surface Back Box For Indoor Wall Sounder / VAD / VID White
557.080.010	A-BOX Flush Back Box Adaptor For Indoor Wall Sounder / VAD / VID
557.080.011	D-BOXR Deep Surface Back Box For Indoor Wall Sounder / VAD / VID Red
557.080.012	D-BOXW Deep Surface Back Box For Indoor Wall Sounder / VAD / VID White

P80SW, P80SR & P85SR

Addressable Wall Sounder

The P80S range of compact addressable wall sounders includes three models with the same low current and high output specification; red and white body indoor models plus an IP rated version for either outdoor use or for harsh environment applications.



(*) Sounder set at high volume, 1 A loop.

Loop quantities are for guidance only and should be verified with the loop calculator.

	P80SW	P80SR	P85SR
Devices per loop	Up to 119(*)	Up to 119(*)	Up to 119(*)
Dimensions (WxHxD) mm	89x135x40 (Without BackBox)	89x135x40 (Without BackBox)	105x153x97 (With IP BackBox)
Sound output @ 1m	Up to 100dBA	Up to 100dBA	Up to 100dBA
Body colour	White	Red	Red
IP code	IP21C	IP21C	IP55
Approvals	EN54-3, 17	EN54-3, 17	EN54-3, 17

Features

- A compact and unobtrusive sounder solution
- Reflective Sound Monitoring (RSM)
- Automatic self-test
- Indoor and outdoor versions
- Indoor models can be semi-flush or surface mounted including a choice of shallow or deep back box
- IP rated option has a deep surface back box
- Power and data from the loop. No additional wiring or power supplies required
- Built-in line isolator
- 16 selectable tones
- Realistic conventional bell tone
- 2 selectable volumes
- Select the tone volume using panel configuration software
- Different tones can be used for fire alarm and class change
- Rectangle wall mount for an aesthetically pleasing option
- A locking pin/screw supplied which prevents unauthorized removal

Part Numbers

576.080.003	P80SW Addressable Wall Sounder White
576.080.004	P80SR Addressable Wall Sounder Red
576.080.005	P85SR Addressable Wall Sounder IP
557.080.007	S-BOXR Shallow Surface Back Box For Indoor Wall Sounder / VAD / VID Red
557.080.008	S-BOXW Shallow Surface Back Box For Indoor Wall Sounder / VAD / VID White
557.080.010	A-BOX Flush Back Box Adaptor For Indoor Wall Sounder / VAD / VID
557.080.011	D-BOXR Deep Surface Back Box For Indoor Wall Sounder / VAD / VID Red
557.080.012	D-BOXW Deep Surface Back Box For Indoor Wall Sounder / VAD / VID White

P80AVB & P81AVB

Addressable Sounder VAD Bases

The P80AVB and P81AVB are addressable sounder bases with a Visual Alarm Device (VAD) specifically for use with the ZETTLER addressable detectors. The bases are available as fire alarm sounders with Visual Alarm Device in two power outputs, standard and high. The high power option provides more coverage for the VAD compared to standard. Each has an address so they can be monitored and controlled from the fire alarm control panel, which is independent of the detector fitted to the base. The power and communications for the sounder, VAD and detector are provided by the two-wire digital loop. This helps to reduce installation costs as no additional wiring is required.



(*) Full intensity VAD with sounder at high volume, 1 A loop.

Loop quantities are for guidance only and should be verified with the loop calculator.

	P80AVB	P81AVB
Coverage volume code	C-3-8	C-3-15
Devices per loop	Up to 86(*)	Up to 54(*)
Flash rate	0.5 / 1Hz	0.5 / 1Hz
Dimensions (ØxH) mm	135x45	135x45
Sound output @ 1m	Up to 90dBA	Up to 90dBA
Body colour	Clear	Clear
Flash colour	White	White
IP code	IP21C	IP21C
Approvals	EN54-3, 23, 17	EN54-3, 23, 17

Features

- A compact and discrete solution
- VAD approved to EN54-23 with two ranges, standard power and high power available
- High power option provides a larger VAD coverage volume compared to standard
- Reflective Sound Monitoring (RSM)
- Reflective Light Monitoring (RLM)
- Automatic self-test
- Shorter light pulse for faster response
- Optimise the system design for lowest power requirements and lowest cost installation
- Triple light source
- One point of installation for detector, sounder and visual indicator with no additional wiring
- Independent addressable control of the sounder and beacon
- Built-in line isolator
- Select the tone, volume and flash rate using panel configuration software
- 15 selectable tones. Allows users to select the tone with which they are most familiar.
- Realistic conventional bell tone
- 2 selectable volumes
- 2 selectable flash rates
- Different tones can be used for fire alarm and class change
- VADs and sounders are synchronised over the entire loop
- A locking pin supplied with the base which prevents the unauthorized removal of the detector
- Provides an EN54-23 approved upgrade path for

Part Numbers

576.080.006	P80AVB Addressable Base Sounder VAD Standard Power
576.080.014	P81AVB Addressable Base Sounder VAD High Power
557.080.001	B-CAP Blanking Cap For Sounder / VID / VAD Bases White
557.080.002	A-CON Conduit Adaptor For Sounder / VID / VAD Bases White

P80SB & P80AIB

Addressable Sounder Base and Addressable Sounder VID Base

The P80SB is an addressable sounder base specifically for use with the ZETTLER addressable detectors. The base incorporates a fire alarm sounder that carries its own address so it can be monitored and controlled from the fire alarm control panel, which is independent of the detector fitted to the base. Both power and communications for the sounder and detector are provided by the two-wire digital loop. This helps to reduce installation costs as no additional wiring is required. Additionally, the P80AIB houses an addressable LED beacon to provide a visual indicator otherwise known as a VID.



(*) Sounder at high volume, 1 A loop.

(**) Beacon at 0.5 Hz with sounder at high volume, 1 A loop.

Loop quantities are for guidance only and should be verified with the loop calculator.

	P80SB	P80AIB
Devices per loop	Up to 231(*)	Up to 149(**)
Flash rate	N/A	0.5 / 1Hz
Dimensions (ØxH) mm	114x45	114x45
Sound output @ 1m	Up to 90dBA	Up to 90dBA
Body colour	White	Clear
Flash colour	N/A	Red
IP code	IP21C	IP21C
Approvals	EN54-3, 17	EN54-3, 17

Features

- A compact and discrete solution
- One point of installation for detector, sounder and visual indicator with no additional wiring
- Reflective Sound Monitoring (RSM)
- Light is electronically monitored by the control panel
- Automatic self-test
- Independent addressable control of the sounder and beacon
- Built-in line isolator
- Select the tone, volume and flash rate using panel configuration software
- 15 selectable tones. Allows users to select the tone with which they are most familiar
- Realistic conventional bell tone
- 4 selectable volumes
- 2 selectable flash rates
- Different tones can be used for fire alarm and class change
- VIDs and sounders are synchronised over the entire loop
- A locking pin supplied with the base which prevents the unauthorized removal of the detector
- Replace legacy LPSB3000 and LPAV3000

Part Numbers

576.080.002	P80SB Addressable Base Sounder
576.080.010	P80AIB Addressable Base Sounder VID
557.080.001	B-CAP Blanking Cap For Sounder / VID / VAD Bases White

80DSB Detector Sounder Base

Detector Activated Sounder Base

The 80DSB is a detector base specifically for use with the ZETTLER addressable detectors. The base incorporates a fire alarm sounder that is activated directly by the detector.



(*) Sounder at high volume, 1 A loop.

Loop quantities are for guidance only and should be verified with the loop calculator.

P80DSB

Devices per loop	Up to 250(*)
Dimensions (ØxH) mm	114x45
Sound output @ 1m	Up to 90dBA
Body colour	White
IP code	IP21C
Approvals	EN54-3

Features

- A compact and discrete solution
- One point of installation for detector and sounder with no additional wiring
- Low power with up to 250 sounders on a single loop. Provides uncompromised system design solutions
- Simple to select the tone and volume using switches. No special training or tools needed.
- 9 selectable tones
- 4 selectable volumes
- A locking pin supplied with the base which prevents the unauthorized removal of the detector
- Replaces legacy 802SB and it is compatible with 800 series detectors. Can be used for service and repair or as part of a planned upgrade path

Part Numbers

576.080.001	80DSB Zettler Detector Base Sounder
557.080.001	B-CAP Blanking Cap for Sounder / VID / VAD Bases White
557.080.002	A-CON Conduit Adaptor for Sounder / VID / VAD Bases White

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ZETTLER

About Johnson Controls' Building Technologies and Solutions

Johnson Controls' Building Technologies & Solutions is making the world safer, smarter and more sustainable; one building at a time. Our technology portfolio integrates every aspect of a building, whether security systems, energy management, fire suppression or HVAC, to ensure that we exceed customer expectations at all times. We operate in more than 150 countries through our unmatched network of branches and distribution channels, helping building owners, operators, engineers and contractors enhance the full lifecycle of any facility. Our arsenal of brands includes some of the most trusted names in the industry, such as Tyco®, YORK®, Metasys®, Sabroe®, ZETTLER®, Frick®, TOTAL and Sensormatic®.

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