



Manufacturers of Visual & Audible Signalling Devices





# NEW EXCENSION Proof Range

www.moflash.com





# **MOFLASH**

# Welcome to the world of Moflash

# Moflash is the largest independent manufacturers of signalling devices in the UK

Based in Birmingham at the heart of Great Britain, Moflash Signalling is one of the largest independent manufacturers of signalling devices in the UK. Formed from the Moflash Company Co Ltd in 1998, the company has grown dramatically over the last 15 years with the introduction of a number of new product lines and with the acquisition of signalling products from other manufacturers such as the Klaxon range of hooters and horns, now

produced in the Moflash factory.
The company produces the following types of devices: Incandescent Beacons - both flashing and static, LED and Xenon Beacons, as well as the traditional Rotating Beacons for which Moflash is world famous. On the acoustic side of the business, the company offers Buzzers, Hooters including the iconic Klaxet and ES, Bells, Electronic Sounders, Air Horns and Piezo devices for the following markets shown on the right.

Moflash serves a diverse range of customers from electrical wholesalers/contractors to global distribution organisations, original equipment manufacturers and a variety of end users such as mining, manufacturing, electrical and gas utilities, to name but a few.

With its programme of development, Moflash is in a strong position to keep meeting the increasing demands of a safety conscious world. With a dedicated team based in the UK and through the excellent relationships via local distributors and partners Moflash can successfully promote and sell its product range to over 70 countries worldwide.

Our products are always available to meet the customer's needs. Moflash can modify or design a beacon to your specific needs. If our standard products are outside the scope of your project, please speak with our technical department to see if we can help, or e-mail your requirements via our contact page on the Moflash website: www.moflash.com. All projects will be considered on their commercial viability.

And finally, our commitment to quality and service continues today as it did when we formed 15 years ago: it underpins our focus and passion for our industry.

#### **Moflash Markets**

Industrial Signalling

**Process Control** 

Status Indication

Fire and Security

Hazardous Location

**Obstruction Marking** 

Marine

Automotive

Safety and Protection



FM 558977





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# **MOFLASH**

# **Selection & Application**

## **Visual Warning Signals**

The environment in which the beacon is to be installed will determine the product type and light intensity that is required for any application. Thus, a beacon designed for Industrial use incorporating a very high light output would not be suitable for local signalling at a control panel. Alternatively, a low light output beacon would be ineffective for large factory environment.

Generally, Moflash can supply beacons for all types of applications. Listed below are some of the main market areas.

#### **Automotive**

Warning beacons for use on automobiles (commercial & private) agricultural / off road vehicles and forklift trucks etc.

For further information see our Automotive section

## **Industrial & Marine**

Warning beacons for heavy duty, high light output applications such as foundries, factory shopfloors, large warehouses, docks, ports and general offshore use etc.

For further information see our Industrial & Marine section.

### **Fire & Security**

Warning beacons for light duty, low to medium light output to give local indication such as offices, hospitals and schools.

For further information see our Fire & Security section.

## **Explosion Proof**

Warning beacons for use in potentially explosive environments such as oil rigs, refineries and mines etc.

For further information see our Hazardous Areas section.

# **Environmental Factors determining Selection**

- Safe atmosphere or potentially explosive atmosphere
- . The ambient level of existing light
- The light output required from the beacon
- . The duration the beacon has to operate
- The IP rating of the beacon
- The electrical supply available

## Types of Visual Warning Beacons Available

Moflash manufactures five different types of Visual Warning beacons.

## Rotating Beacons - 'R'

A parabolic reflector, driven by an electric motor, revolves around a continuously illuminated bulb on the vertical axis of the beacon creating a powerful beam of light travelling through 360 degrees.

These units are available with either a filament or a tungsten halogen bulb. In general, this type of beacon has a greater degree of light output than other models but this is reduced as the parabolic reflector only illuminates one given point at a time.

## Flashing Filament - 'FF'

Operating through an internal circuit, which simply cycles the bulb On, and Off. These types of beacons generally give a much lower light output as it takes longer for the bulb to fully illuminate itself. These units are available with either a filament or tungsten halogen bulb. The light output can be improved by the use of a Dioptric (Fresnal) lens which is placed over the bulb capturing the light emitted, magnifying and directing it to increase the brightness of the visual signal. In terms of light coverage this type of beacon is more efficient as it illuminates the whole surface of the beacon constantly through 360 degrees.

## Static Filament (Continuous) Beacons 'SF'

These units are identical to Flashing Filament beacons with the exception that they do not operate through an On, and Off cycle. When the unit is energised the light source stays permanently 'On'. The main advantage of this type of beacon is that the light can be controlled by a separate source ie a control panel, giving the unit more flexibility. These units are available with either a filament or tungsten halogen bulb.

## Xenon (Strobe) Beacons - 'X'

A discharge capacitor operating through a converter circuit ignites xenon gas inside a tube creating a brilliant flash of light. Xenon gas ignites virtually instantaneously so maximum brightness is obtained immediately. This signal can be improved further by the use of a Dioptric (Fresnal) lens as described earlier. In some Moflash models a 'Double Flash' option is also available which extends the signal duration making it more noticeable to the human eye. See X88, X201/200, X401/400 & X501/500.

Xenons have an added advantage of low current consumption combined with long life. The tube life of a xenon beacon is approximately 5 million flashes. These units are the most efficient available incorporating a 360 degree light output with the brightest and most effective visual signal.



# **SELECTION & APPLICATION**

# **MOFLASH**

## LED Beacons - 'LED'

A light emitting diode (LED) is a semiconductor device that emits visible light when an electric current passes through it. The four major benefits of LED technology incorporated into warning beacons are:

- Low power requirement
- High efficiency
- Very long life
- Multiple Colour Signal options in a single beacon enclosure

Moflash offer a range of LED options, from beacons containing 8 off LEDs up to 144 off LEDs in a single enclosure. They can be set in various modes of operation from **Flashing**, **Static and Rotating**. Some beacons have a combined **Audible & Visual** option. **Ethernet** compatible and **PLC** controllable beacons also make up the range along with high 'Ingress Protection' enclosures.

## **Levels of Brightness**

Brightness depends upon the type of beacon chosen, the rated power output of the unit ie Watts and Joules, the distance that the signal is observed from and the dome colour of the beacon used. In general, if the viewing distance is doubled, the light intensity observed is reduced to a quarter and if the distance is quadrupled the light intensity is reduced to a sixteenth.

### **Beacon Lens Colours**

The intensity of the light can be greatly reduced as it passes through the dome of the beacon. The extent of this reduction is dependent upon:

- The type of light source used ie conventional filament (Incandescent) bulb, tungsten halogen bulb or a xenon tube.
- The colour of the beacon lens that is used.

The table below gives an indication of the percentage of light that will pass through the beacon dome for different light sources and dome colours.

COLOUR	FILAMENT	HALOGEN	XENON
Clear	100%	100%	100%
Amber	70%	70%	70%
Red	30%	27%	23%
Green	12%	15%	25%
Blue	8%	10%	13%

Dome colours convey different messages to the observer.

Alternatively, green colour beacons are used by Doctors and Veterinarians and blue beacons for the Police and Fire departments.

## **Audibility**

An audible sound is produced when the beacon is illuminated. This is of particular use in low level noisy environments if the warning light is obscured from direct viewing or as a back-up warning should the bulb fail.

# Installation and Maintenance of Visual Warning Beacons

- When installing a Hazard Warning Beacon, care should be taken to position it in the most effective location to allow for all round light visibility and to maintain the IP (Ingress Protection) rating of the beacon. Therefore the following parameters should be noted:
- To maintain the IP rating, the beacon should be mounted with the dome above the black moulded base. Never mount the unit with the dome horizontal or below base position.
- Always fit mounting gasket provided (200/1, 400/1 & 500/1 series models only) and ensure the 'O' ring is in place between the dome and base.
- Fit a suitably IP rated cable gland (not supplied) where appropriate.
- Regularly clean the beacon dome, as this will improve light output and help dissipate heat build up in the beacon. Do not clean dome with petroleum based cleaners.
- Areas of vibration should be avoided. If this is not possible, then our Anti-Vibration mount must be used. Reference 50080 (available for 88/125 & 200/1 series models only).
- Avoid situation Xenon beacons in close proximity to communication aerials or equipment and power lines that may be subject to high voltage transients.
- DC voltage Xenon beacons should only be run on a smoothed rectified supply.
- Unlike Incandescent lamps which fail instantly, Xenon tubes deteriorate very slowly. The impending failure of the tube will be indicated by erratic flashing. Once this is recognised the tubes should be replaced immediately. Failure to do so may result in damage to the electrical circuit.
- Always disconnect the beacon from the supply before attempting maintenance. In addition, allow Xenon beacons at least 15 minutes to self-discharge before removing the dome as high voltages will remain on the pcb for this period of time.





# **MOFLASH**

## The CE Mark

The Moflash products that show the CE mark, are deemed to comply, where applicable, with the EMC Directive No: 89/366/EEC and additional amendments, regarding Electromagnetic Compatibility which states that 'An electrical product must not be susceptible to, or generate certain levels of, electromagnetic interference liable to interfere with other electronic equipment', and the LVD Directive No: 2006/95/EC regarding low voltage electrical material which states that 'Electrical equipment within the voltage ranges of 50 to 1000v Ac and 75 to 1500v Dc are constructed within the principles of good engineering practice and provide adequate levels of protection against an electric shock'.

## The Machinery Directive 2006/42/EC

These directives are designed to harmonise wide range health and safety requirements in machinery design and daily use by indicating a potential hazard by the use of an immediately recognisable audible or visual warning signal.

# prEN 842 Safety of Machinery: Visual Warning Signals

Classifies the type of warning light and specifies the characteristics the warning light must achieve to conform to the machine directive.

## **Warning Signals**

Visual warning signals must be at least five times brighter than the area where they are used.

#### **Danger Signals**

Clearly visible even in strong light, distinguishable from other lights and Visual warning signals and be understood immediately.

## **Emergency Signals**

These have the highest priority and must be at least ten times brighter than the area that they are to be used in and understood immediately.

# IEC 60073 - Colours of Luminous Indicators & Push Buttons

Establishes the various meanings of coloured luminous indicators and push buttons to conform to the machine directive.

#### Colour: RED

DANGER ACT NOW

- Danger of live or unguarded
- Moving machinery or essential
- Equipment in protected zone

#### Colour: AMBER

WARNING: PROCEED WITH CARE

Temperature of pressure different from normal level

## **Colour: GREEN**

SAFETY PRECAUTION: GO AHEAD

Checks complete the machine is about to start

#### Colour: BLUE

SPECIFIC MEANING GIVEN DEPENDING ON SITUATION

Pre-set ready or remote control

## Colour: CLEAR

NO SPECIFIC MEANING

Could confirm an earlier message

All Moflash coloured domes are manufactured from 'UV' stable polycarbonate plastic that will not tarnish, fade or become brittle over a period of time unlike many domes available that are produced from Acrylic plastic.

## Lens Colours

01	Amber	Ambar	Gelb	Jaune	Arancio
02	Red	Rojo	Rot	Rouge	Rosso
03	Blue	Azul	Blau	Bleu	Blu
04	Green	Verde	Grun	Vert	Verde
05	Clear	Transparente	Klar/Durchsichtig	Transparent	Incolore



# **SELECTION & APPLICATION**

# **MOFLASH**

# **Hazardous Areas to Meet ATEX Approval**

The risk of an explosive atmosphere being formed is obviously a variable factor being dependent upon the conditions in a given environment. Thus in order to achieve a consistent level of safety, hazardous areas are classified into three zones.

#### Zone 0

A zone in which an explosive atmosphere is constantly present, or present for long periods.

#### Zone '

A zone in which an explosive atmosphere is likely to occur in normal operation.

#### Zone 2

A zone in which an explosive atmosphere is not likely to occur in normal operation, and if it occurs it will exist only for a short time.

## **Apparatus Groups (Gas Groups)**

Apparatus for use in harzardous areas is, where appropriate, grouped in one of four sub-groups namely I, IIA, IIB, IIC. Apparatus Sub-Grouping is normally applied to Flameproof and Intrinsically safe types of protection. Other types of protection apply equally to all gases subject only to temperature classification.

The following table shows the relationship between the apparatus group and the Representative gas.

Apparatus Group	Representative Gas
I (Mining)	Methane
IIA	Propane
IIB	Ethylene
IIC	Hydrogen

## **Maximum Surface Temperature**

A gas/air mixture can ignite when it comes into contact with excessively hot surface. The surface temperature at which equipment operates is therefore of crucial importance. The equipment is temperature classified as follows:

Class	T1	T2	T3	T4	T5	T6			
Max Surface	450C	300C	200C	135C	100C	85C			
Temperature in Centigrade									

Note: The above information is intended as a guide only. The selection of Hazardous area equipment should only be undertaken by a suitable qualified Engineer and installed according to the relevant standards.



# SELECTION & APPLICATION MOFLASH

IP Ratings

The IP 'Ingress Protection' rating system provides a means of classifying the Degrees of protection from dust and water afforded by electrical equipment and enclosures. The system is recognised in most countries and is set out in BS EN60529 1992 Degrees of Protection.

First Nur	nber on Against Solids			nd Number tection Against L	iquids
IP	<b>J</b>	Test	IP		Test
0	G	No protection	0	G	No protection
1		Protection against solid objects over 50mm eg accidental touch by hands	1		Protection against vertically falling drops of water
2	G.	Protection against solid objects over 12mm eg fingers	2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Protection against direct sprays of water up to 15 <sup>o</sup> from the vertical
3	G.	Protection against solid objects over 2.5mm (tools & wires)	3		Protection against sprays 60º from the vertical
4	F	Protection against solid objects over 1mm (tools, wires & small wires)	4		Protection against water sprayed from all directions - limited Ingress permitted
5	E	Protection against dust - limited Ingress (no harmful deposit)	5		Protection against low pressure jets of water sprayed from all directions - limited Ingress permitted
6	G	Totally protected against dust	6		Protection against strong pressure jets of water eg for use on shipdecks - limited Ingress permitted
			7	Im Vicentin	Protection against the effects of temporary immersion between 15cm and 1m. Duration of test 30 minutes
			8	In Sign man	Protection against long periods of immersion under pressure
			9k		Protection againsts strong pressures jets of water (80-100 bar) at a temperature of 80°C for durations of 30 seconds. Simulating pressure cleaning conditions on a plan floor (Food Industry etc)



# **SELECTION & APPLICATION**

# **MOFLASH**

#### **Buzzers**

Either Electro Mechanical type where the diaphragm is deflected by a moving magnet which is triggered by a make and break contactor or the Piezo type where the diaphragm is controlled by an electronic circuit. The Mechanical versions offer medium/high dB output with low frequency sound and are of robust construction.

Piezo versions are relatively low dB and high frequency and are only suitable for local signalling applications.

#### **Electronic Sounders**

The Electronic Sounder is a versatile acoustic signal incorporating 8 individual tones. It incorporates a medium dB output with a distinctive multi-tone frequency option to indicate various processes, a second one can be remotely switched via a third wire.

This type of signal is suitable for fire alarm use and conforms to the current EC regulations.

#### **Airhorns**

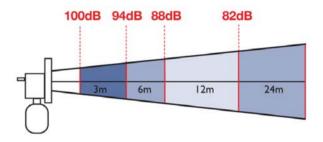
Airhorns are non-electrical devices that only operate from a compressed air supply. They offer very high dB output with very low frequency sound making them ideal for very noisy environments. Moflash offers an industrial and marine range. Being non-electrical they can be used in hazardous area Category 1 use.

## Bells

Bells are a cost effective traditional signalling device with a wide range of signalling applications. They offer medium dB output with a unique sound. Moflash offers two types: solenoid driven for industrial applications where they are under constant daily use, and a motor driven type more suitable for fire alarm applications.

#### **Hooters**

Hooters are powerful motor driven horns producing the unique and never forgotten 'Klaxon' sound used the world over. A serated rotor driven against a hardened steel diaphragm stud creates a high dB output with low frequency sound. These types of signals are ideal for indoor and outdoor applications where a rugged and durable sounder is required.



m	dB (A)																									
1	65	70	75	80	85	90	92	94	96	98	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130
2	59	64	69	74	79	84	86	88	90	92	94	96	98	100	102	104	106	108	110	112	114	116	118	120	122	124
3	55	60	65	70	75	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110	112	114	116	118	120
5	51	56	61	66	71	76	78	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110	112	114	116
10	45	50	55	60	65	70	72	74	76	78	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
20	39	44	49	54	59	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96	98	100	102	104
30	35	40	45	50	55	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96	98	100
50	=	36	41	46	51	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96
100		=	=	40	45	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90
200				=	39	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84
300					=	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80
500						=	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76
1000							=	=	=	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70
2000										=	=	=	38	40	42	44	46	48	50	52	54	56	58	60	62	64
3000													=	=	38	40	42	44	46	48	50	52	54	56	58	60
5000															=	=	38	40	42	44	46	48	50	52	54	56



# SELECTION & APPLICATION MOFLASH

Icon Legends		<u>*</u>			
₹ <b>FPM</b> 60	Single or Double flashes per minute.	Flashes Simples o Dobles por minuto. Muestra que la unidad tiene una opcion	Einfacher oder Doppelblitz pro Minute. Zeigt, ob das	Signaux clignotants simples ou doubles par minute. Indigue que	Flash singoli o doppie al minute. Indica che il dispositivo puo fornire
FPM	Shows the unit has a double flash option.	de doble flash	gerät die Doppelblitzfunktion hat	l'unite est equipee d'une option de signal clignotant double	flash doppi
<b>© RPM</b> 120	Revolutions per minute	Revoluciones por minuto	Umdrehungen pro Minute	Tours / minute	Giri al minuto
IP 65	Ingress Protection of the unit	Grado de proteccion IP	Einbruchschutz	Protection de l'unite	Indice di protezione del dispositivo
<b>€</b> °C -25+55	Operating Temperature in Centigrade	Temperatura de funcionamiento	Arbeitstemperatur des Gerätes	Temperatures de service l'unite	Temperatura di funzionamento in gradi centigadi
<b>Kg</b> 0.20 to 0.3	Boxed weight including the Dome	Peso empaquetado incluida la cupula	Verpackungsgewicht einschließlich Haube	Poids conditionne, y compris partie superieure	Peso inscatolato con calotta
√50/60 <b>Hz</b>	Operates on a frequency of 50/60 Hz Ac	Funciona a una freceuncia de 50/60 Hz Ac	Arbeitet bei 50/60 Hz Wechselstrom	Fonctionne sur une frequence de 50/60 Hz CA	Funziona con 50/60 Hz in CA
<b>dB</b> 90	Fitted with Audible Sounder. Indicates Decibel level at 1 meter	Dispone de dispositivo acustico. Indica el nivel de decibelios a 1 metro	Mit akustischem Signal versehen. Gibt Lautstärke in dB in 1 m Entfernung an	Equipe d'um signal sonore. Indique le niveau de decibel a 1 m	Dotato di segnalatore acustico Indica 1 dB a 1m
<b>†</b> MARINE	Suitable for use in marine applications.	Utilzable en aplicaciones maritimas	Geeignet für Anwendungen im Schiffs - und Marinebereich	Approprie aux applications en milieu naval	Idonei per applicazoni navali
FIRE FIRE	Suitable for use in fire alarm systems	Utilizable en sistmas de alarma anti incendios	Geeignet für Anwendungen in Brandmeleanlagen	Approprie aux installations de lutte contre le feu	Idonei per impianti anticendio
INDUSTRIAL	Suitable for use in industrial applications	Valido para uso en aplicaciones industriales	Geeignet für industrielle Anwendungen	Convient aux applications industrielles	Adatto per impiego nel settore industriale
AUTOMOTIVE	Suitable for use in automotive applications	Valido para uso en aplicaciones de automocion	Geeignet für Anwendungen im Automobilbereich	Convient aux applications automobiles	Adatto per impiego nel settore dell'auto
OBSTACLE MARKING	Suitable for obstacle marking applications	Valido para uso en aplicaciones de balizamiento	Geeignet für Hinderniss- beleuchtung im Luftfahrtbereich	Convient aux applications de marquage d'obstacle	Adatto per segnalazione ostacolo aereo
EXPLOSION PROOF	Suitable for eplosive proof applications to ATEX approval	Valido para uso en aplicaciones en zonas de riesgo con certificacion ATEX	Geeignet für explosionsgeschutzte Anwendungen mit ATEX - Zulassungen	Convient aux applications antideflagrantes repondant a la norma ATEX	Adatto per impeigo in atmosfera esplosiva secondo omologazione ATEX



HEALTH & SAFETY
INDUSTRIAL
MATERIALS HANDLING
PROCESS CONTROL & STATUS INDICATION
MARINE
FIRE & SECURITY
EXPLOSION PROOF
AUTOMOTIVE
ICAO OBSTACLE MARKING



# FF125 Series **ES Version**

# Industrial Flashing Filament Beacons > FF125 Series

The FF125 series is suitable for security, process control & generally light industrial signalling applications.

These beacons are of the flashing mode type (single stage alarm). Once the beacon is energised the internal electronics will cycle the Incandescent lamp through a 1Hz on/off sequence. The design allows for termination inside the enclosure through the base (Not ES version).

The ES version has an ES27 Edison Screw cap fitted into the base of the beacon.

This design lends itself for use in temporary signalling locations where a warning or hazard is not normally present, or has the ability to be installed in an area using existing electrical lighting points, avoiding any additional wiring.

The range is ideal for low cost, local signalling applications.

# FF125 Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:
FF125-80	12v Dc	Ba15d x 21w	1.75 A
FF125-81	24v Dc	Ba15d x 21w	0.88 A
FF125-82	115v Ac ~	Ba15d x 15w	0.13 A
FF125-83	230v Ac ~	Ba15d x 15w	0.07 A
ES Version			
FF125ES-76	115v Ac ~	Ba15d x 15w	0.13 A
FF125ES-77	230v Ac ~	Ba15d x 15w	0.07 A

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING 01





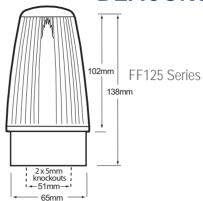






# Visual Signals FLASHING FILAMENT

# **BEACONS**





- Continuously rated
- · Suitable for surface, conduit box or wall mounting
- Optional wall bracket & guard available (except ES version) - see accessories
- 2 point fix
- 360° light output around the vertical axis
- 180° light output above the horizontal axis
- Dustproof and Weatherproof

UV Stable Polycarbonate Lens

UV Stable ABS Plastic Base

Kg 0.20 FF125 0.22 ES













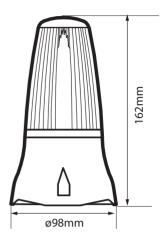








# Visual Signals FLASHING FILAMENT BEACONS



# Optional Piezo Buzzers 3 Holes x ø4.5 on 88 pcd Lead exit position 5mm max cable size 11° Side knockout position

# Industrial Flashing Filament Beacons > FF125 DIN & FFA125 Series

## Product overview

The FF125 DIN and FFA125 series are suitable for security, process control & generally light industrial signalling applications.

These beacons are of the flashing mode type (single stage alarm). Once the beacon is energised the internal electronics will cycle the

Incandescent lamp through a 1Hz on/ off sequence. The design allows for termination inside the enclosure via an M12 sealing grommet in the base.

The FFA version incorporates two piezo buzzers situated in the base of the unit that are synchronised to the flash rate (the buzzers cannot be controlled independently of the light) offering a combined audible & visual warning device.

# FF125 DIN & FFA125 Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:
FF125-90	12v Dc	Ba15d x 21w	1.75 A
FF125-91	24v Dc	Ba15d x 21w	0.88 A
FF125-92	115v Ac ~	Ba15d x 15w	0.13 A
FF125-93	230v Ac ~	Ba15d x 15w	0.07 A
For Audible Opt	tion		
FFA125-80	12v Dc	Ba15d x 21w	1.80 A
FFA125-81	24v Dc	Ba15d x 21w	0.90 A
FFA125-82	115v Ac ~	Ba15d x 15w	0.15 A
FFA125-83	230v Ac ~	Ba15d x 15w	0.08 A

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING









#### Features

- · Continuously rated
- Suitable for surface or wall mounting
- Optional wall bracket & guard available - see accessories
- 3 point fix
- 360° light output around the vertical axis
- 180° light output above the horizontal axis
- Dustproof and Weatherproof

#### Material

UV Stable Polycarbonate Lens UV Stable ABS Plastic Base

**Kg** 0.25

√ 50/60 Hz



**IP** 65















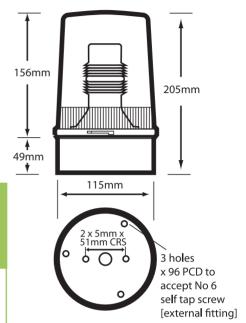






FF201-88/89

# Visual Signals FLASHING FILAMENT **BEACONS**



# Industrial Flashing Filament Beacons > FF201/200 Series

The FF201/200 series is suitable for security, process control and industrial applications where a more robust and powerful signal is required.

These beacons are of the flashing mode type (single stage alarm).

Once the beacon is energised the internal electronics will cycle the Incandescent/halogen lamp through a 1Hz on/off sequence.

The design allows for termination inside the enclosure through the base. The 15w and 21w units incorporate a Fresnel lens to maximise light intensity.

# FF201/200 Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:
FF201-84	12v Dc	Ba15d x 21w	1.75 A
FF201-85	24v Dc	Ba15d x 21w	0.88 A
FF201-88	12v Dc	H1 x 55w	4.70 A
FF201-89	24v Dc	H1 x 70w	3.00 A
FF200-86	115v Ac ~	Ba15d x 15w	0.13 A
FF200-87	230v Ac ~	Ba15d x 15w	0.07 A

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING 01











- Continuously rated
- · Suitable for surface, conduit box or wall mounting
- Optional wall bracket & guard available - see accessories
- 2 point fix
- 360° light output around the vertical axis
- 180° light output above the horizontal axis
- Dustproof and Weatherproof

UV Stable Polycarbonate Lens UV Stable ABS Plastic Base

**Kg** 0.70





















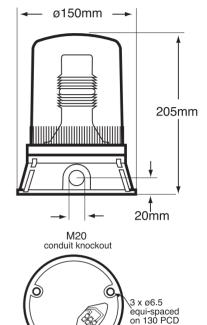


FF401-88/89

FF400-86/87

# Visual Signals FLASHING FILAMENT

# **BEACONS**



# Industrial Flashing Filament Beacons > FF401-400 Series

The FF401/400 series is suitable for security, process control and industrial applications where a more robust and powerful signal is required.

These beacons are of the Flashing mode type (single stage alarm).

Once the beacon is energised the internal electronics will cycle the Incandescent / halogen lamp through a 1Hz on/off sequence.

The design allows for termination inside the enclosure through the base. The 15w and 21w units incorporate a Fresnel lens to maximise light intensity.

- Continuously rated
- Suitable for surface or wall mounting
- Optional wall bracket & guard available - see accessories
- 3 point fix
- M20 conduit side entry or bottom cable entry
- 360° light output around the vertical axis
- 180° light output above the horizontal axis
- Dustproof and Weatherproof

# FF401-400 Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:
FF401-84	12v Dc	Ba15d x 21w	1.75 A
FF401-85	24v Dc	Ba15d x 21w	0.88 A
FF401-88	12v Dc	H1 x 55w	4.70 A
FF401-89	24v Dc	H1 x 70w	3.00 A
FF400-86	115v Ac ~	E14 x 60w	0.55 A
FF400-87	230v Ac ~	E14 x 60w	0.29 A

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING 01











UV Stable Polycarbonate Lens UV Stable ABS Plastic Base

**Kg** 0.80

√ 50/60 **Hz** 









APPROVALS and

**CONFORMITIES** 



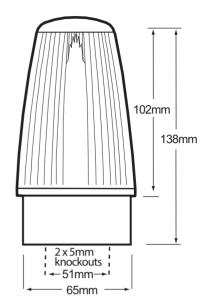








# Visual Signals STATIC FILAMENT **BEACONS**



# Industrial Static Filament Beacons > SF125 Series

The SF125 series is suitable for security, process control & generally light industrial signalling applications.

These beacons are of the Static mode type (single stage alarm).

Once the beacon is energised the incandescent lamp will stay permanently on. An advantage of this type of beacon is that it can be controlled via a remote source (ie control panel / plc etc) giving the beacon greater flexibility and offering a (flashing) second stage alarm.

The design allows for termination inside the enclosure through the base. The SF125 series is the most economical beacon in the Moflash range and is ideal for low cost, local signalling applications.

# SF125 Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:
SF125-80	12v Ac/Dc ₋≃₋	Ba15d x 21w	1.75 A
SF125-81	24v Ac/Dc	Ba15d x 21w	0.88 A
SF125-82 SF125-83	115v Ac ~ 230v Ac ~	Ba15d x 15w Ba15d x 15w	0.13 A 0.07 A

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING 01











- Continuously rated
- · Suitable for surface, conduit box or wall mounting
- Optional wall bracket & guard available - see accessories
- 2 point fix
- 360° light output around the vertical axis
- 180° light output above the horizontal axis
- Dustproof and Weatherproof

UV Stable Polycarbonate Lens UV Stable ABS Plastic Base

**Kg** 0.17



















# Industrial Static Filament Beacons > SF125 DIN & SFA125 Series

The SF125 DIN and SFA125 series are suitable for security, process control & generally light industrial signalling applications.

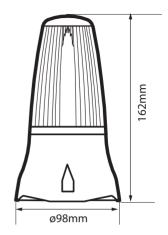
These beacons are of the Static mode type (single stage alarm). Once the beacon is energised the incandescent lamp will stay permanently on. An advantage of this type of beacon is that it can be controlled via a remote source

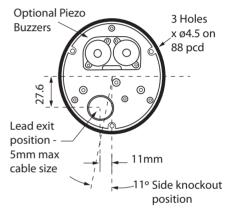
(ie. control panel / plc etc ) giving the beacon greater flexibility and offering a (flashing) second stage alarm.

The design allows for termination inside the enclosure via an M12 sealing grommet in the base.

The SFA version incorporates two piezo buzzers situated in the base of the unit that are synchronised to the light (the buzzers cannot be controlled independently of the light) offering a combined audible & visual warning device.

# Visual Signals STATIC FILAMENT **BEACONS**





# SF125 DIN & SFA125 Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:
SF125-90	12v Dc	Ba15d x 21w	1.75 A
SF125-91	24v Dc	Ba15d x 21w	0.88 A
SF125-92	115v Ac ~	Ba15d x 15w	0.13 A
SF125-93	230v Ac ~	Ba15d x 15w	0.07 A
For Audible Op	tion		
SFA125-80	12v Dc	Ba15d x 21w	1.80 A
SFA125-81	24v Dc	Ba15d x 21w	0.90 A
SFA125-82	115v Ac ~	Ba15d x 15w	0.15 A
SFA125-83	230v Ac ~	Ba15d x 15w	0.08 A

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING











- · Continuously rated
- Suitable for surface or wall mounting
- Optional wall bracket & guard available - see accessories
- 3 point fix
- 360° light output around the vertical axis
- 180° light output above the horizontal axis
- Dustproof and Weatherproof

UV Stable Polycarbonate Lens UV Stable ABS Plastic Base

**Kg** 0.25

50/60 **Hz** 





**dB** 90





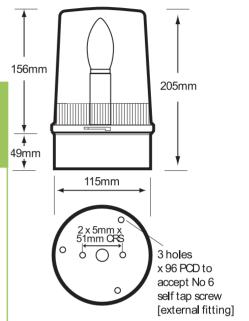








# **BEACONS**



Visual Signals STATIC FILAMENT

# Industrial Static Filament Beacons > SF201/200 Series

The SF201/200 series is suitable for security, process control and industrial applications.

These beacons are of the Static mode type (single stage alarm).

Once the beacon is energised the Incandescent/Halogen lamp will stay permanently on. An advantage of this type of beacon is that it can be controlled via a remote source (ie control panel / plc etc ) giving the beacon greater flexibility and offering a (flashing) second stage alarm.

The design allows for termination inside the enclosure through the base. The lower wattage units incorporate a Fresnel lens to maximise light intensity.

# SF201/200 Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:
SF201-26	12v Ac/Dc .~.	Ba15d x 5w	0.42 A
SF201-27	24v Ac/Dc_~_	Ba15d x 5w	0.21 A
SF201-28	12v Ac/Dc _~_	Ba15d x 10w	0.84 A
SF201-29	24v Ac/Dc _~_	Ba15d x 10w	0.42 A
SF201-62	12v Ac/Dc_~_	H1 x 55w	4.60 A
SF201-63	24v Ac/Dc _~_	H1 x 70w	2.90 A
SF201-05	12v Ac/Dc .~.	Ba15d x 48w	4.00 A
SF201-06	24v Ac/Dc_~_	Ba15d x 48w	2.00 A
SF201-07	48v Dc	Ba15d x 35w	0.65 A
SF200-08	115v Ac ~	Ba15d x 60w	0.55 A
SF200-09	230v Ac ~	Ba15d x 60w	0.29 A
FL200-09	230v Ac ~	E27 x 9w (Fluorescent)	

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING 01











Continuously rated

· Suitable for surface,

• 2 point fix

conduit box or wall mounting

 Optional wall bracket & guard available - see accessories

Low current consumption options

• 360° light output around the vertical axis

• 180° light output above the horizontal axis

UV Stable Polycarbonate Lens UV Stable ABS Plastic Base

• Dustproof and Weatherproof

**Kg** 0.76

√ 50/60 **Hz** 



**IP** 65

















SF401-62/63

# Industrial Static Filament Beacons > SF401/400 DIN Base Series

The SF401/400 series is suitable for security, process control and industrial applications where a more robust and powerful signal is required.

These beacons are of the Static mode type (single stage alarm). Once the beacon is energised the Incandescent / halogen lamp will stay permanently on.

An advantage of this type of beacon is that it can be controlled via a remote source (ie. control panel / plc etc ) giving the beacon greater flexibility and offering a (flashing) second stage alarm. The design allows for termination inside the enclosure through the base.

# SF401/400 DIN Base Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:	
SF401-62	12v Ac/Dc -=-	H1 x 55w	4.60 A	
SF401-63	24v Ac/Dc .~.	H1 x 70w	2.90 A	
SF401-05	12v Ac/Dc .~.	Ba15s x 48w	4.00 A	
SF401-06	24v Ac/Dc -=-	Ba15s x 48w	2.00 A	
SF401-07	48v Dc	Ba15d x 35w	0.65 A	
SF400-08	115v Ac ~	E14 x 60w	0.55 A	
SF400-09	230v Ac ~	E14 x 60w	0.29 A	

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING 01











# **Kg** 0.71

**CONFORMITIES** 







# INDUSTRIAL

# APPROVALS and

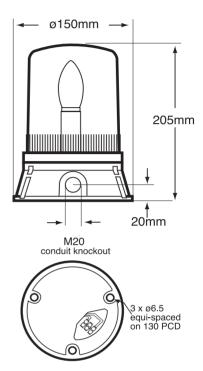








# Visual Signals STATIC FILAMENT **BEACONS**

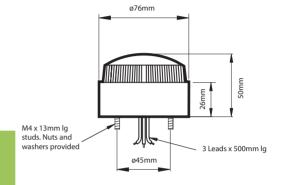


- Continuously rated
- Suitable for surface or wall mounting
- Optional wall bracket & guard available - see accessories
- 3 point fix
- M20 conduit side entry or bottom cable entry
- 360° light output around the vertical axis
- 180° light output above the horizontal axis
- Dustproof and Weatherproof

UV Stable Polycarbonate Lens UV Stable ABS Plastic Base



# Visual Signals LIGHT EMITTING DIODE **BEACONS**



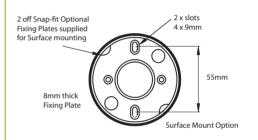
# Industrial LED Dual Function > **LED80 Series**

The LED80 incorporates 12 ultra bright Surface Mount LEDs offering an economic solution for a wide range of general signalling solutions.

Ideally suited for local indication the beacon is controlled by either two wires (flashing mode) or three (static mode).

The beacons are supplied fully assembled and ready for immediate installation.

The unit offers two mounting options, either Stud Mount or Surface Mounting using the two piece fixing plate supplied. One plate is fixed to the appropriate surface the other to the beacon, the two plates then 'Snap Fit' together.



# LED80 Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:
LED80-02	10-100v Dc	LED Array	90 mA Flashing 200 mA Static at 24v Dc
LED80-04	115/230v Ac ~	LED Array	20 mA

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING









- · LED long life
- Extra bright
- · Continuously rated
- Wide operating voltage
- 120° prime light output from vertical axis
- Dustproof & submersible in water

**UV** Stable Polycarbonate Lens and Body

**Kg** 0.14

























# Visual Signals LIGHT EMITTING DIODE

# **BEACONS**

# Industrial LED Multi Functional Beacons > LEDD & LEDA 125 Series

# Product overview

The LEDD and LEDA125 series are suitable for security, process control & industrial applications, where low maintenance and long life are the pre-requisite requirement.

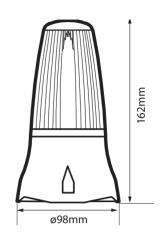
These beacons offer a three stage alarm option, selected by a jumper link on the PCB:

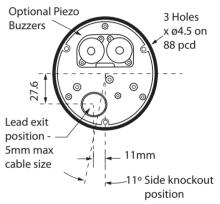
- 1. Continuous mode
- 2. Flashing mode at 1Hz
- 3. Flashing mode at 2Hz

An advantage of the Continuous mode is that it can be controlled via a remote

source (ie. control panel / plc etc ) offering the potential of remote flash option. The design for the DC unit allows for termination inside the enclosure via an M12 sealing grommet in the base. The AC units are supplied with a 1 metre flying lead.

The LEDA version incorporates two piezo buzzers situated in the base of the unit that are synchronised to the light mode (the buzzers can be controlled separately of the light on the DC version Only) offering a combined audible & visual warning device.





# LEDD & LEDA 125 Series > Ordering Information

Code No:	Voltage:	Light Sou	rce:		Current:		
			01	02	03	04	05
LEDD125-02 LEDD125-03 LEDD125-04	115v Ac ~	48 LEDs	150 mA 60 mA 40 mA	170 mA 60 mA 40 mA			
For Audible C LEDA125-02 LEDA125-03 LEDA125-04	24v Dc 115v Ac ~	48 LEDs	155 mA 60 mA 40 mA	175 mA 60 mA 40 mA			

Widto

05

UV Stable Polycarbonate Lens UV Stable ABS Plastic Base

Continuously rated

· LED long life and extra bright

 Optional wall bracket & guard available - see accessories

• 360° light output around the vertical axis.

· Dustproof and Weatherproof

• Suitable for surface or wall mounting

Kg 0.57 Ac 0.33 Dc

√ 50/60 Hz

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING

Note: The technical specification listed above will only come into standard manufacture in the 2nd quarter of 2013.



**IP** 65



• 3 point fix





**dB** 90





For current standard specification for these beacons go to our website.









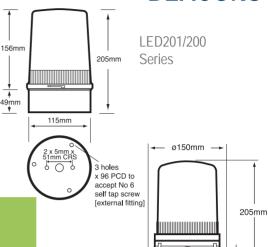
LED201/200 Series



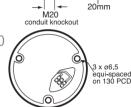
LED401/400 Series

# Visual Signals LIGHT EMITTING DIODE

# **BEACONS**



LED401/400 Series



# Industrial LED Flashing Rotating Static Beacons > LED201/200 & LED401/400 Series

# **Product overview**

The LED201/200 and LED401/400 are suitable for security, process control & industrial applications, where low maintenance and long life are the pre-requisite requirement.

These beacons offer a four stage alarm option, selected by a four way switch on the PCB:

- 1. Continuous mode
- 2. Flashing mode at 1Hz
- 3. Rotating mode: Twin column
- 4. Rotating mode: single column

An advantage of the continuous mode is that it can be controlled via a remote source (ie. control panel / plc etc) offering the potential of a remote flashing option. The design allows for termination inside the enclosure through the base.

# LED201/200 & LED401/400 Series > Ordering Information

Code No:	Voltage:	Light Source	:	Current:	
LED201-02 LED200-04 •	24v Dc 115/230v Ac ~	144 LEDs 144 LEDs	Flashing 0.25 0.09/0.05	Rotating 0.20 •• 0.12/0.06 ••	<b>Static</b> 0.50 A 0.17/0.10 A
LED401-02 LED400-04 •	24v Dc 115/230v Ac ~	144 LEDs 144 LEDs	0.25 0.09/0.05	0.20 •• 0.12/0.06 ••	0.50 A 0.17/0.10 A

• Pre-set to 230v Ac ~ •• 2 Bar Rotating Note: Current consumption is an average over a 60 second cycle

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING

01



# -eatures

- · Continuously rated
- · LED long life and extra bright
- LED201/200: Suitable for surface, conduit box or wall mounting
- LED401/400: Suitable for surface or wall mounting
- Optional wall bracket & guard available - see accessories
- LED401/400: M20 conduit side entry or bottom cable entry.
- 360° light output around the vertical axis.
- Dustproof and Weatherproof

#### Materia

UV Stable Polycarbonate Lens

UV Stable ABS Plastic Base







**IP** 65









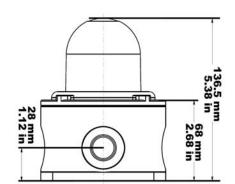








# Visual Signals LIGHT EMITTING DIODE **BEACONS**



# Industrial LED Beacons > LED450 Series

The LED450 series is suitable for Industrial & Marine signalling applications where a visual signal is required to operate in very harsh enviromental conditions.

The beacons incorporate an ultra bright LED array and offers a three stage alarm option.

The unit has a multiple flash rate setting, that can be set at installation, that ranges from 60 flashes per minute up to 120 flashes per minute to create a more noticeable warning signal to the human eye. A rotating light mode and a static (steady on) mode are also available.

The units also have the ability to be fitted with a telephone initiation function and can be used as the second ring output indicator for telephones when installed in very noisy environments. Design allows for termination in the base.

# 105 mm 4.13 in 85 mm 3.35 in 4 X Φ 6mm **Fixing Hole** 4 X Ф 1/4

- LED long life
- Continuously rated
- · High light output
- Suitable for surface or wall mounting
- Supplied as standard with 1 x M20 threaded side cable entry with provision for up to 4 supplied to special order
- 360° light output around the vertical axis
- · Dustproof and Weatherproof

# LED450 Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:
LED450-18	12-48v Dc	LED 10W	1.1/0.53/0.24 A
LED450-22	100-240v Ac ~	LED 10W	0.08 A •
• at 230v Ac~			

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING













UV Stable, Flame retardent polycarbonate

Kg 0.5











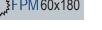
















# Visual Signals LIGHT EMITTING DIODE BEACONS

# Traditional LED Static Tower Lights > **Modular TLM Series**

# Product overview

The TLM series is designed for status indication signalling.

These beacons are of the Static mode type (single stage alarm) Once the beacon is energised the lamp will stay permanently on.

An advantage of this type of beacon is that it can be controlled via a remote source (ie.control panel / plc etc) giving

the beacon greater flexibility and offering a (flashing) 2nd stage alarm.

The design allows for termination inside the enclosure through the base. The lens modules have been designed to accommodate a Ba15d lamp fitting.

An audible module is available which can be fitted to the top of the tower stack. The mounting cap and base are required for all installations whereas the foot & pole mount are optional.

# 

# LED Static Tower Lights > Ordering Information

Code No:	Voltage:	Current:	Description:
TLM + colour * (outer module)	n/a	n/a	Outer module Ba15d fitting, maximum 5 Watts
LED Lamp 50130 + colour* LED Lamp 50132 + colour*	24v Ac/Dc 230v Ac/Dc		*ADD THE FOLLOWING COLOUR CODES TO THE LIGHT MODULE AND LAMP PART CODE WHEN ORDERING  01 02 03 04 05
TLM-BC	n/a	n/a	Mounting cap and base
Accessories Options			
TLM-AUD-24	24v Ac/Dc_~_	0.02 mA	Audible module
TLM-AUD-230	230v Ac/Dc .~.	0.02 mA	Audible module
TLM-P100	n/a	n/a	Mounting foot and 100mm pole
TLM-P150	n/a	n/a	L-shaped mounting bracket

#### Conturne

- · Continuously rated
- LED long life
- Lamp selection determines voltage of modules
- Modular design allows for flexibility of construction & upgrades
- 360° light output around the vertical axis

#### Materia

UV Stable Polycarbonate Lens

Kg 0.35 Per Module



**IP** 54

**dB** 90













# HZ510A Mare LED-AF Mare LED-A



# Visual Signals LIGHT EMITTING DIODE BEACONS

# E-Flare Battery Operated > **LED Portable Beacon**

# Product overview

Suitable for a wide range of applications the E-Flare beacon has been designed with versatility in mind. The unit provides a highly visible warning zone, day or night. These beacons are single colour only and incorporate a failsafe activation switch to prevent accidental turn on or off and come with a range of accessories.

The HZ510A beacon is powered by two 'D' Cell Alkaline batteries (not supplied) that will provide at least 40 hours of peak brightness operation.

The EF350 beacon is an economy option, powered by four 'AA' Cell Alkaline batteries (not supplied) that will provide at least 30 hours of peak brightness operation and comes with a lanyard (as standard) for hanging/wearing the unit.

# 200mm A 76.00 A EF350

#### Feature:

- Continuously rated
- LED long life
- Shock resistant
- Ultra quick installation
- Versatile accessory options
- 360° light output around the vertical axis
- Special bulk pack pricing
- Dustproof and Weatherproof

# LED Portable Beacon > Ordering Information

Code No:	Volta	ge: Ligh	t Source:		alks.
LED-P-F-01 (HZ510A - Amber)	3v Do		LEDs	90	
LED-P-F-02 (HZ510A - (Red)	3v Do	C 8	BLEDs	50170 Standard Base	50171 Aviation Base
LED-P-EF350-01 (Amber)	3v Do	c 4	LEDs		
LED-P-EF350-01B (Amber Pk 1	2) 3v Do	C 4	LEDs		Pa
LED-P-EF350-02 (Red)	3v Do	c 4	LEDs	50172	50173
LED-P-EF350-02B (Red Pk 12)	3v Do	c 4	LEDs	Magnetic Clip	Cone Clip
Accessories		-			<b></b>
	50174	50175	50176	50177	50178
	Magnetic Base	Flotation Collar	Suction Cup	Daylight Hood	Carry Bag

#### Material

UV Stable Polycarbonate Lens
UV Stable ABS Body



















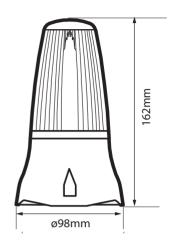








# Visual Signals LIGHT EMITTING DIODE **BEACONS**



3 Holes x ø4.5 on 88 pcd

11º Side knockout

position

# LED Tri-Colour Visual & Audible Beacon > LEDA125-01 PLC Controllable Series

The LEDA125-01 offers maximum flexibility in terms of visual and audible requirements.

The beacon can produce 3 colours, Amber, Green and Red in conjunction with an audible signal. Two piezo sounders situated in the base of the unit can be

synchronised with any colour and flash rate required. The unit requires high or low voltage inputs to function (plc / relays etc).

Ideally suited to status control the beacon is a cost effective alternative to the traditional tower light. An M12 sealing grommet in the base allows for cable entry and termination inside the enclosure. Maximum cable size is 5mm.

Lead exit position -5mm max cable size

- Continuously rated
- · LED long life and extra bright
- Suitable for surface or wall mounting
- Optional wall bracket & guard available - see accessories
- 3 point fix
- 360° light output around the vertical axis
- Dustproof and Weatherproof

UV Stable Polycarbonate Lens UV Stable ABS Plastic Base

# LEDA125-01 Series > Ordering Information

Code No: Voltage: **Light Source: Current:** 24v Dc ---LFDA125-01 48 SM LFDs **Amber** 350mA Green/Red 250mA

**Kg** 0.33



**IP** 65

**dB** 90

INDUSTRIAL









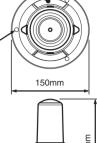


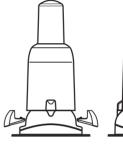




# Sound aperture x 2

Mounting holes 3 off 6.5mm dia. Equally spaced on a PCD of 130mm







# Audible + Visual > Tri-Colour LED PLC Controllable Beacon

## Product overview

The Spectrum 600 Series utilises ultra-bright, tri-colour LEDs in one enclosure producing amber, green and red light in conjunction with two synchronised piezo sounders. The beacon is a cost-effective alternative to traditional stacking beacons and other process indication applications where multiple signal outputs, long life and low power consumption are

required. The Spectrum 600 comes totally assembled and ready for immediate installation. In addition, the enclosure incorporates a high Ingress Protection (IP) rating and is manufactured from a tough, UV stable polycarbonate plastic that makes the beacon suitable for harsh industrial and marine environments. The Spectrum 600 requires external input signals for it to function. If no PLC (or similar) is available, then the Spectrum Interface Unit gives the end user a control option.

# n are end user a control option.

- Three colours in one housingamber red green
- 360° visibility
- LED long life and low power
- Combined beacon & piezo sounders
- 28 signal options
- PLC controllable
- Optional interface unit for non PLC operation
- Ethernet compatible
- Tough, UV stable polycarbonate housing
- IP66,67 69k

# Spectrum 600 Series > Ordering Information

Code No:	Voltage:	Light Source:	Cur	rrent:
			Amber	Red/Green
LEDA600-01	24v Dc/230v Ac	Tri-Colour LED	350 mA	250 mA
LEDA600-03	24v Dc/115v Ac	Tri-Colour LED	350 mA @ 24v Dc	250 mA
50165 Interface 50166 Mounting Pole 50004 Right-angled W	230v Ac ~ all Bracket			

#### Materia

UV Stable Polycarbonate Plastic

**Kg** 0.85

√50/60 **Hz** 



**IP** 66 67 69k



















# The Control Signal

The Control Signal must consist of a 5-bit word, which has to be assembled and transmitted in parallel mode to the Spectrum Beacon. The colour, flash frequency

and sound are independent of one another but a colour signal is necessary for the control word to be accepted, thus any word beginning with OO will not be accepted.

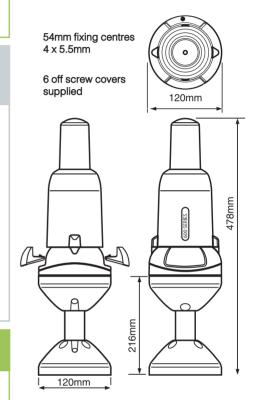
# 50165 Interface Unit (optional)

for further information download the Interface Datasheet from the website

The Interface Unit contains seven electrically isolated prioritised channels. Each channel accepts 24-230v Ac or 12-48v Dc input. A pre-selected audio and/or visual signal is supplied for each of the seven channels. In the event of no signal being applied, the beacon displays continuous green. The operating voltage for the unit is 230v Ac. The design allows for a 12v Dc auxiliary power supply for use in volt free applications. Additionally, the unit incorporates a battery back-up (not supplied) sufficient to maintain the unit for 12 hours in case of mains failure. Provision is made for mains failure to be signalled from the interface unit (device not supplied). The unit is supplied complete with mounting plate and cover. This can be installed either inside an existing enclosure or into a standard weatherproof 'Fibox' IP67 mounting box (ref: MNX PCM200/63 G).

# **Technical Specification**

24v Dc or 230v Ac Type: LFDA600-01 LEDA600-03 24v Dc or 115v Ac Ultra-bright Tri-colour LEDs **Light Source: Amber** 3.9 Effective Candela (390 mcd) 6.2 Effective Candela (620 mcd) Green 4.4 Effective Candela (440 mcd) Red **Signal Options:** Continuous Slow Flash 60 fpm 90 fpm (0.11sec ON, 0.23sec OFF) Rapid Flash 1 Rapid Flash 2 90 fpm (0.23sec ON, 0.11sec OFF) Sounder Type: Electronic Piezo Sounders x 2: 20mA 90dB ±3dB (horn covers not installed) dB@1m 3.1Hz +500Hz Frequency Visual and audible signalling options can be combined audible signal sychronised with beacon flash. -35°C to 55°C **Operating Temp:** Weight: 0.85kg **Enclosure Material: UV Stable Polycarbonate Plastic Ingress Protection:** IP65 & IP67 as standard as one enclosure. IP66 with sounder covers fitted. Sounder covers can be fitted (snap-fixed) or permanently (adhered) into place. Sounder covers supplied as standard. **Beacon Control:** The beacon is supplied with flying leads 2 x 1 metre. 4 core power cables and 6 core signal cables. For further information download the Technical Datasheet from the website



#### Mounting Options

The beacon has three mounting options:

Surface Mount Plate
(3 point DIN fix) fitted

(3 point DIN fix) fitted as standard. Side knockouts x 2 cabling in/out (15mm x 10mm).

Foot and Pole Mount (50166)

Right Angled Wall Bracket (50004)



# Visual Signals ROTATING BEACONS



## Product overview

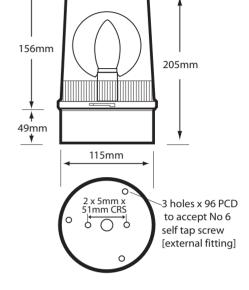
The R201/200 series beacon is a cost effective, single stage alarm, suitable for a wide range of applications where a powerful & commanding signal is required. It incorporates a parabolic reflector which, when energised, revolves

around a continuously illuminated lamp. This creates a powerful beam of light that sweeps through 360 degrees. The reflector is driven by a twin belt drive system that is powered by a series wound motor for 'AC' units and a permanent magnet motor for 'DC' units. The design allows for termination inside the enclosure through the base.

# R201/200 Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:
R201-13	12v Dc	H1 x 55w	4.70 A
R201-14	24v Dc	H1 x 70w	3.00 A
R201-29 •	24v Dc	Ba15s x 10w	0.60 A
R201-60	12v Dc	Ba15d x 21w	1.85 A
R201-61 •	24v Dc	Ba15d x 21w	0.95 A
R201-62	12v Dc	Ba15d x 48w	4.00 A
R201-63	24v Dc	Ba15d x 48w	2.00 A
R201-64	48v Dc	Ba15d x 35w	0.75 A
R200-03	24v Ac ~	Ba15d x 48w	2.00 A
R200-02	48v Ac ~	Ba15d x 35w	0.75 A
R200-04	115v Ac ~	Ba15d x 60w	0.55 A
R200-05	230v Ac ~	Ba15d x 60w	0.29 A
R200-04-MB	115v Ac ~	Ba15d x 60w	0.55 A
R200-05-MB	230v Ac ~	Ba15d x 60w	0.29 A

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING 01 02 03 04 05



#### Features

- Continuously rated
- Suitable for surface, conduit box or wall mounting
- Optional wall bracket & guard available - see accessories
- 2 point fix
- Magnetic base versions available
- Low current consumption options
- 360° light output around the vertical axis
- Dustproof and Weatherproof

#### Materia

UV Stable Polycarbonate Lens
UV Stable ABS Mounting Base

**Kg** 0.83

Diode Polarised for Fire Alarm Systems





MB - Magnetic Base



**RPM** 160 Dc













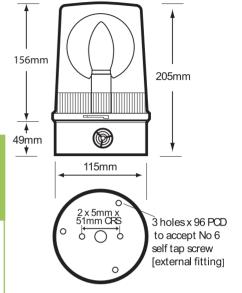




**RPM** 120 Ac



# Visual Signals ROTATING **BEACONS**



# Industrial Rotating Beacons > RA201/200 Series

The RA201/200 series beacon is a cost effective, single stage alarm, suitable for a wide range of applications where a powerful & commanding signal is required.

It incorporates a parabolic reflector which, when energised, revolves around a continuously illuminated lamp. This creates a powerful beam of light that sweeps through 360 degrees. The reflector is driven by a twin belt drive

system that is powered by a series wound motor for 'AC' units and a permanent magnet motor for 'DC' units.

In addition the unit incorporates a Piezo buzzer on the side of the base that is automatically activated when the light source is energised.

The buzzer cannot be powered independently of the beacon on the standard model. However independent buzzer control units can be made to order. The design allows for termination inside the enclosure through the base.

# RA201/200 Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:
RA201-20	12v Dc	H1 x 55w	4.70 A
RA201-21	24v Dc	H1 x 70w	3.00 A
RA201-64	48v Dc	Ba15d x 35w	0.75 A
RA200-03	24v Ac ~	Ba15d x 48w	2.00 A
RA200-02	48v Ac ~	Ba15d x 35w	0.75 A
RA200-24	115v Ac ~	Ba15d x 60w	0.55 A
RA200-25	230v Ac ~	Ba15d x 60w	0.29 A

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING











- Continuously rated
- · Suitable for surface, conduit box or wall mounting
- Optional wall bracket & guard available - see accessories
- 2 point fix
- Magnetic base versions available
- Low current consumption options
- 360° light output around the vertical axis
- Dustproof and Weatherproof

UV Stable Polycarbonate Lens **UV Stable ABS Mounting Base** 

**Kg** 0.86





**IP** 65

**RPM** 160 Dc

**RPM** 120 Ac

APPROVALS and **CONFORMITIES** 







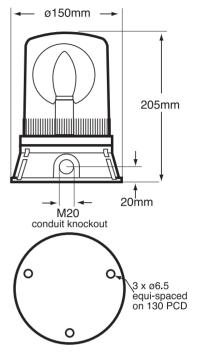


INDUSTRIAL

**dB** 95



# Visual Signals ROTATING **BEACONS**



# Industrial Rotating Beacons > R401/400 Series

The R401/400 series beacon is a cost effective, single stage alarm, suitable for a wide range of applications where a powerful & commanding signal is required.

It incorporates a parabolic reflector which, when energised, revolves around a continuously illuminated

lamp. This creates a powerful beam of light that sweeps through 360 degrees.

The reflector is driven by a twin belt drive system that is powered by a series wound motor for 'AC' units and a permanent magnet motor for 'DC' units. The design allows for termination inside the enclosure through the base.

# R401/400 Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:
R401-13	12v Dc	H1 x 55w	4.70 A
R401-14	24v Dc	H1 x 70w	3.00 A
R401-29 •	24v Dc	Ba15s x 10w	0.60 A
R401-60	12v Dc	Ba15d x 21w	1.85 A
R401-61 •	24v Dc	Ba15d x 21w	0.95 A
R401-62	12v Dc	Ba15d x 48w	4.00 A
R401-63	24v Dc	Ba15d x 48w	2.00 A
R401-64	48v Dc	Ba15d x 35w	0.75 A
R400-03	24v Ac ~	Ba15d x 48w	2.00 A
R400-02	48v Ac ~	Ba15d x 35w	0.75 A
R400-04	115v Ac ~	E14 x 60w	0.55 A
R400-05	230v Ac ~	E14 x 60w	0.29 A

Diode Polarised for Fire Alarm Systems



ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING



03 04

02

- Continuously rated
- Suitable for surface and wall mounting
- Optional wall bracket & guard available - see accessories
- 3 point fix
- M20 conduit side entry or bottom cable entry
- Low current consumption options
- 360° light output around the vertical axis
- · Dustproof and Weatherproof

UV Stable Polycarbonate Lens **UV Stable ABS Mounting Base** 

**Kg** 0.98







05

**RPM** 160 Dc

**RPM** 120 Ac

















# Visual Signals XENON BEACONS

ø76mm

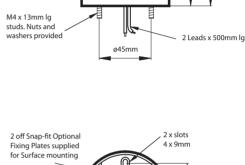


## Product overview

The X80 is a flashing mode type of beacon (single stage alarm) suitable for a wide range of 'local' signalling applications where a low cost and energy efficient solution is required.

Xenon beacons (sometimes called strobes) are controlled via a PCB and put out a very brief but bright flash of white light by ionizing and then discharging a large current through the xenon gas.

The unit comes fully assembled and ready for installation and has two mounting options, stud mount or surface mount using a two piece fixing plate supplied. One plate is fixed to the appropriate surface the other to the beacon, the two plates then 'snap fit' together.



55mm

Surface Mount Option

# X80 Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:
X80-01	18-30v Dc	Xenon 1.0 J	40 mA •
X80-02	10-100v Dc 20-72v Ac ~	Xenon 2.0 J	110 mA •
X80-04	115-230v Ac ~	Xenon 2.0 J	100 / 50 mA

Average running current at 24v Dc over a 60 second cycle

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING











#### **Features**

8mm thick Fixing Plate

- Continuously rated
- Wide operating voltage
- 120° prime light output from vertical axis
- Dustproof and submersible in water

## Material

UV Stable Polycarbonate Lens UV Stable Polycarbonate Base

**Kg** 0.13





















# Industrial Xenon Beacons > X125 Series

The X125 series are suitable for security, process control and light industrial applications where a lower cost and energy efficient solution is required.

These beacons are of the flashing mode type (single stage alarm) Xenon beacons (sometimes called strobes) are controlled via a PCB and put out a very brief but bright flash of white light by ionizing and then discharging a large

current through the xenon gas. The design allows for termination inside the enclosure through the base (except ES version).

The ES version has an ES27 Edison Screw cap fitted into the base of the beacon. This design lends itself for use in temporary signalling locations where a warning or hazard is not normally present, or has the ability to be installed in an area using existing electrical lighting points, avoiding any additional wiring.

# X125 Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:
X125-Ac/Dc	10-100v Dc 20-72v Ac ~	Xenon 2.0 J	130 mA •
X125-55	115v Ac ~	Xenon 2.3 J	30 mA
X125-56	230v Ac ~	Xenon 2.7 J	21 mA
ES Version			
X125ES-51	115v Ac ~	Xenon 2.3 J	30 mA
X125ES-52	230v Ac ~	Xenon 2.7 J	21 mA

At 24v Dc ---

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING 01



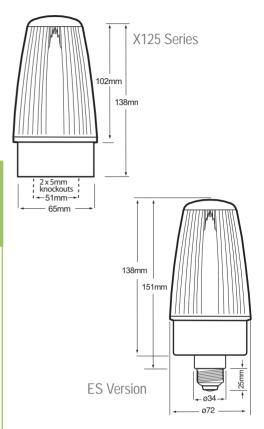








# Visual Signals XENON **BEACONS**



- Continuously rated
- Suitable for surface, conduit box or wall mounting (except ES version)
- Optional wall bracket & guard available - see accessories
- 2 point fix
- 360° light output around the vertical axis
- 180° light output above the horizontal axis
- Dustproof and Weatherproof

UV Stable Polycarbonate Lens UV Stable ABS Plastic Base























# Industrial Xenon Beacons > X125 DIN Base Series

## Product overview

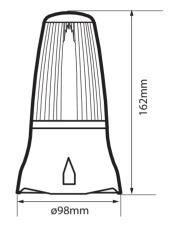
The X125 DIN base series are suitable for security, process control & generally light industrial signalling applications.

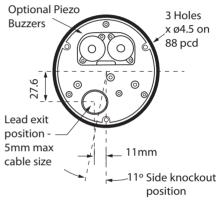
These beacons are of the Flashing mode type (single stage alarm) Xenon beacons (sometimes called strobes) are controlled via a PCB and put out a very brief but bright flash of white

light by ionizing and then discharging a large current through the xenon gas. The design allows for termination inside the enclosure via an M12 sealing grommet in the base.

The XA version incorporates two piezo buzzers situated in the base of the unit that can either be synchronised to the flash rate or controlled independently of the light offering a combined audible & visual warning device.

# Visual Signals XENON BEACONS





#### **Features**

- Continuously rated
- Suitable for surface or wall mounting
- Optional wall bracket & guard available - see accessory page
- 3 point fix
- 360° light output around the vertical axis
- 180° light output around the horizontal axis
- Dustproof and Weatherproof

# X125 DIN Base Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:
X125-64	10-100v Dc 20-72v Ac ~	Xenon 2.0 J	130 mA •
X125-62	115v Ac ~	Xenon 2.3 J	30 mA
X125-63	230v Ac ~	Xenon 2.7 J	21 mA
Audible Option			
XA125-63	230v Ac ~	Xenon 2.7 J	120mA ••
• at 24v Dc		•• With both audible	e & visual signals

operating at the same time

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING













UV Stable Polycarbonate Lens UV Stable ABS Plastic Base



















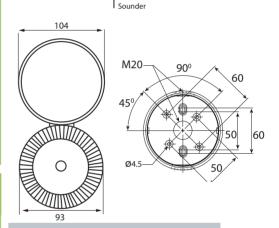






# Acoustic & Visual Signals XENON BEACONS

# Top of Combination Unit Sounder & Beacon Combination Sounder & Beacon Combination Sounder & Beacon Combination



# Industrial Acoustic & Xenon Beacons > X194 Combination Series

# Product overview

The X194 combination series is suitable for status indication, process control & industrial applications.

These units offer a versatile range of multi signalling combinations. Beacons are fitted together to give up to five different colour sequences with the addition of an audible option giving a possible six stage alarm device.

**Description:** 

The Xenon beacons (sometimes called strobes) are controlled via a PCB and put out a very brief but bright flash of white light by ionizing and then discharging a large current through the xenon gas.

The design allows for termination in the uppermost beacon through an M20 knockout either through top or rear of the enclosure.

All signals can be controlled independently from each other.

# X194 Combination Series > Ordering Information

X194-02RD	Beacon only, Red Back Box	18-28v Dc	Xenon 2.5 J	180 mA	
X194-02RS	Beacon / Sounder Red	18-28v Dc	Xenon 2.5 J	200 mA •	
X194-02WH	Beacon only, White Back Box	18-28v Dc	Xenon 2.5 J	180 mA	
X194-02WS	Beacon / Sounder White	18-28v Dc	Xenon 2.5 J	200 mA •	
• Set at BS	fire tone 104 dB				
X194-05RD	Beacon only, Red Back Box	180-265v Ac ~	Xenon 5.0 J	110 mA	
X194-05RS	Beacon / Sounder Red	180-265v Ac ~	Xenon 5.0 J	130 mA •	
X194-05WH	Beacon only, White Back Box	180-265v Ac ~	Xenon 5.0 J	110 mA	
X194-05WS	Beacon / Sounder White	180-265v Ac ~	Xenon 5.0 J	130 mA •	

Voltage:

Eg X194-02RS-01-02-04 Part code follows colour sequence order from sounder (last digit dictates top position)

(24v Dc Unit, Red Sounder & Back Box + Amber, Red, Green beacons with Red Back Boxes)

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING







Light Source: Current:





#### Materia

UV Stable Polycarbonate Lens VO Rated ABS Back Box

Continuously rated

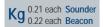
• Suitable for wall mounting

 Red (RD) or White (WH) back box colour choice

Dustproof and Weatherproof

• 120° prime light output above the vertical axis for the beacons

Sounder has 32 selectable tones.



Code No:





















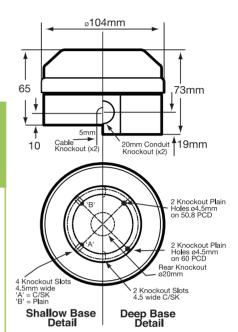


X195 & X197 Deep Base Option



X195 Shallow Base Option

# Visual Signals XENON **BFACONS**



# Industrial Xenon Beacons > X195 / X197 Series

The X195 and X197 are suitable for security, process control & general industrial signalling applications.

These beacons are of the Flashing mode type (single stage alarm) Xenon beacons (sometimes called strobes) are controlled via a PCB and put out a very brief but bright flash of white light by ionizing and then discharging a large current through the xenon gas. The design allows for

termination inside the enclosure. The X195 deep base version offers 2 x M20 side knockouts and 1 x M20 rear. The shallow base (low profile version) allows for cable entry of up to 5mm on the side of the unit (x2) and 1 x M20 knockout at the rear.

The X197 high power version only allows for internal connection via the M20 rear knockout. Due to the power rating the unit has a rated 'On' time of 2 hours in any six (see technical data sheet).

# X195 / X197 Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:
5 Joules Version			
X195-02WH-SB	15-28v Ac/Dc _~_	Xenon 5.0 J	310 mA
X195-02WH	15-28v Ac/Dc _~_	Xenon 5.0 J	310 mA
X195-05WH-SB	180-265v Ac ~	Xenon 5.0 J	110 mA
X195-05WH	180-265v Ac ~	Xenon 5.0 J	110 mA
10 Joules Version			
X197-02WH	24v Dc	Xenon 10.0 J	650 mA

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING 01











- Continuously rated Not X197
- Suitable for conduit box or wall mounting
- 120° prime light output above the vertical axis
- WH = White back box
- SB = Shallow base
- Dustproof and Weatherproof

UV Stable Polycarbonate Lens UV Stable ABS Plastic Base

**Kg** 0.25





**IP** 65











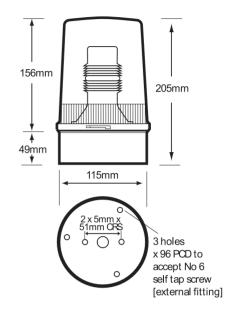








### Visual Signals XENON **BEACONS**



### Industrial Xenon Beacons > X201-200 Series

The X201/200 series is suitable for security & general industrial signalling applications where a more robust and powerful signal is required.

These beacons are of the Flashing mode type (single stage alarm) Xenon beacons (sometimes called strobes) are controlled via a PCB and put out a very brief but very bright flash of white light by ionizing and then discharging

a large current through the xenon gas. The design allows for termination inside the enclosure.

This range of beacons incorporates an internal Fresnel lens designed to maximise the light intensity and has a double flash option (activated by a slide switch on the PCB) that extends the signal duration making it more noticeable to the human eye. The DC unit is factory set at 24v but a slide switch on the PCB can change it to 12v operation.

### X201-200 Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:
X201-18 •	12/24v Dc	Xenon 10J / 7.5J	1.45 / 0.7 A
X201-19 ••	12/24v Dc	Xenon 10J / 7.5J	1.45 / 0.7 A
X200-88	24v Ac ~	Xenon 10J / 7.5J	0.72 A
X200-21	115v Ac ~	Xenon 10J / 7.5J	0.10 A
X200-22	230v Ac ~	Xenon 10J / 7.5J	0.06 A

Pre-set at 24v Dc ---Diode Polarised for Fire Alarm Systems

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING 11











- Continuously rated
- High light output
- Suitable for surface. conduit box or wall mounting
- Optional wall bracket & guard available - see accessories
- 2 point fix
- 360° light output around the vertical axis
- 180° light output above the horizontal axis
- Dustproof and Weatherproof

UV Stable Polycarbonate Lens UV Stable ABS Plastic Base

**Kg** 0.72

√ 50/60 **Hz** 



**IP** 65



















### Visual Signals XENON **BEACONS**

### Industrial Xenon Beacons > X201SD-200S Series

The X201SD-200S series are suitable for security & general industrial signalling applications where a more robust and powerful signal is required.

These beacons are of the Flashing mode type (single stage alarm) Xenon beacons (sometimes called strobes) are controlled via a PCB and put out a very brief but very bright flash of white light by ionizing and then discharging a large current through the xenon gas. The design allows for termination inside the enclosure. The internal electronics are encapsulated with a resin compound to protect against the harshest of environments, also offering additional protection from vibration.

This range of beacons incorporates a Fresnel design on the outside lens designed to maximise the light intensity and has a double flash as standard on the DC versions, single flash on the AC version.

## 153mm 6" 140mm. 5.5"

0.5" NPT Conduit Thread 2 x 0.2"Ø Drillout Fixing Holes on 3.5" PCD

- Continuously rated
- · High light output
- Very robust construction
- · Suitable for surface or wall mounting
- Optional wall bracket (not pre-drilled) & guard available - see accessories
- 360° light output around the vertical axis
- 180° light output above the horizontal axis
- Dustproof and Weatherproof

UV Stable Polycarbonate Lens

Zinc Cast Metal Base

### X201SD-200S Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:
X201-SD-12	12-48v Dc	Xenon 11.0J	1.50 A •
X200S-240	240v Ac ~	Xenon 11.0J	0.05 A

At 24v Dc ---

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING





APPROVALS and

**CONFORMITIES** 





**IP** 66



















**BFACONS** 

3 x ø6 5

equi-spaced on 130 PCD



### Industrial Xenon Beacons > X401/400 Series

The X401/400 series are suitable for security & general industrial signalling applications where a more robust and powerful signal is required.

These beacons are of the Flashing mode type (single stage alarm) Xenon beacons (sometimes called strobes) are controlled via a PCB and put out a very brief but very bright flash of white light by ionizing and then discharging a large current through the xenon gas. The design allows for termination inside the enclosure.

This range of beacons incorporates an internal Fresnel lens designed to maximise the light intensity and has a double flash option (activated by a slide switch on the PCB) that extends the signal duration making it more noticeable to the human eye. The DC unit is factory set at 24v but a slide switch on the PCB can change it to 12v operation.

### X401/400 Series > Ordering Information

Code No:	Code No: Voltage:		Current:
X401-18 •	12/24v Dc	Xenon 10J / 7.5J	1.45 / 0.7 A
X401-19 ••	12/24v Dc	Xenon 10J / 7.5J	1.45 / 0.7 A
X400-88	24v Ac ~	Xenon 10J / 7.5J	0.72 A
X400-89 •••	48v Ac ~	Xenon 7J / 5J	0.37 A
X400-21	115v Ac ~	Xenon 10J / 7.5J	0.10 A
X400-22	230v Ac ~	Xenon 10J / 7.5J	0.06 A

- Pre-set at 24v Dc ---
- Diode Polarised for Fire Alarm Systems
- Ambient Temperature Range -25°C to +35°C

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING 1











### 02





**Kg** 0.82 √ 50/60 **Hz** 







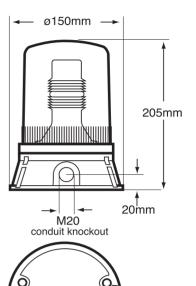












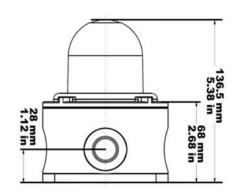
Visual Signals XENON

- Continuously rated
- · High light output
- Suitable for surface or wall mounting
- Optional wall bracket & guard available - see accessories
- 3 point fix
- M20 side entry or bottom cable entry
- 360° light output around the vertical axis
- 180º light output above the horizontal axis
- Dustproof and Weatherproof

UV Stable Polycarbonate Lens UV Stable ABS Plastic Base



### Visual Signals XENON **BEACONS**



### Industrial Xenon Beacons > X450 Series

The X450 series is suitable for Industrial & Marine signalling applications where a visual signal is required to operate in very harsh environmental conditions.

The beacons are of the flashing mode type (single stage alarm). Xenon beacons (sometimes called strobes) are controlled via a PCB and put out a very brief but bright flash of white light by ionizing and the discharging a large current through the xenon gas in the tube.

The beacon has multiple flash rate settings, that can be set at installation, that range from 60 flashes per minute up to 180 flashes per minute to create a more noticeable warning signal to the human eye.

The units also have the ability to be fitted with a telephone initiation function and can be used as the second ring output indicator for telephones when installed in very noisy environments. Design allows for termination in the base.

### 105 mm 4.13 in 85 mm 3.35 in 4 X Φ 6mm **Fixing Hole** 4 X Ф 1/4

- Continuously rated
- · High light output
- Suitable for surface or wall mounting
- Optional lens guard
- 4 x M20 cable entry options
- 360° light output around the vertical axis
- 180° light output above the horizontal axis
- Dustproof and Weatherproof

### X450 Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:
X450-18	12-48v Dc	Xenon 10J	0.85/0.49/0.25 A
X450-22	100-240v Ac~	Xenon 10J	0.06 A •

at 230v Ac~

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING 01













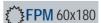
UV Stable, Flame RetardentPolycarbonate

**Kg** 0.5

50/60 **Hz** 



**IP** 66

















205mm

20mm

3 x ø6.5

equi-spaced



### Visual Signals XENON **BEACONS**

ø150mm →



The X501/500 series are suitable for industrial signalling applications where a very powerful signal is required.

These beacons are of the Flashing mode type (single stage alarm) Xenon beacons (sometimes called strobes) are controlled via a PCB and put out a very brief but very bright flash of white light by ionizing and then discharging a large current through the xenon gas. The design allows for termination inside the enclosure.

maximise the light intensity and has a double flash option (activated by a jumper link on the PCB) that extends the signal duration making it more noticeable to the human eye.

The DC unit is factory set at 24v but a jumper link on the PCB can change it to 12v operation. The DC version is also supplied with a bi-lateral current limiter that must be used on all installations to protect the PCB from inrush current damage. Due to the power rating of the beacon it is not recommended for use in excess of 12 hours in any 24 hour period.

- Rated use only
- · Very high light output
- Suitable for surface or wall mounting
- Optional wall bracket & guard available - see accessories
- 3 point fix
- M20 side entry or bottom cable entry
- 360° light output around the vertical axis
- 180º light output above the horizontal axis
- Dustproof and Weatherproof

### X501/500 Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:
X501-18 •	12/24v Dc	Xenon 24J / 18J	2.30 / 1.30 A
X500-21	115v Ac ~	Xenon 24J / 18J	0.65 A
X500-22	230v Ac ~	Xenon 24J / 18J	0.40 A

Pre-set at 24v Dc ---

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING











UV Stable Polycarbonate Lens UV Stable ABS Plastic Base

**Kg** 1.25



**IP** 65













APPROVALS and **CONFORMITIES** 

## Miscellaneous Brackets, Cage Guards, Domes, Mounts ACCESSORIES

## Brackets > **50001>50158**

50001 Right Angled Wall Bracket

Suitable for use with 88, 125 & 201/200 series beacons

50004 Right Angled Wall Bracket

Suitable for use with 401/400, 501/500, 600 & X250 series beacons

50006 Pipe Bracket

Suitable for use with 401/400, 501/500, 600 & X250 series beacons

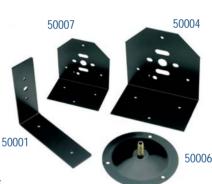
50007 Right Angled Wall Bracket

Suitable for use with 125 & 125DIN series beacons

50158 IP66 Weatherproof Band

Suitable for use with 201/200 series beacons (not shown)

**Please Note:** Brackets and Cage Guards are not interchangeable at this present time.



## Cage Guards > **50003**>**50010**

50003 Small Cage Guard

Suitable for use with 125 series beacons

50003/1 Optional Mounting Plate

Suitable for use with 125 series beacons

50010 Large Cage Guard

Suitable for use with 201/200, 401/400 & 501/500 series beacons

50010/1 Optional Mounting Plate

Suitable for use with 201/200, 401/400 & 501/500 series beacons

**Please Note:** Brackets and Cage Guards are not interchangeable at this present time.







#### **Small Domes**

**50018** Red Lens

50019 Amber Lens

50020 Blue Lens

50021 Green Lens

50022 Clear Lens

Please Note:

Suitable for use with 125 series beacons only

### Large Domes

50064 Amber Lens

**50065** Red Lens

50066 Blue Lens

50067 Green Lens

50068 Clear Lens

### Please Note:

Suitable for use with 88, 98, 201/200, 401/400 & 501/500 series beacons

#### Anti-Vibration Mount

50080 Anti-Vibration Mount Suitable for use with 125 Series (2 point fix)

201/200 Series

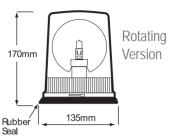


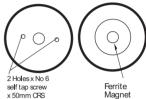


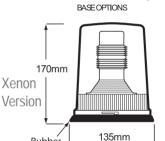
### **AUTOMOTIVE**

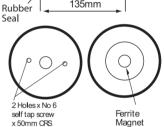


## Visual Signals AUTOMOTIVE BEACONS









BASE OPTIONS

## Automotive Beacons > Xenon or Rotating Series

### Product overview

The X88 Series is suitable for automotive & general signalling applications where a more robust and powerful signal is required.

Static Fix

Xenon beacons (sometimes called strobes) are controlled via a PCB and put out a very brief but very bright flash of white light by ionizing and then discharging a large current through the xenon gas. This range of beacons incorporates an internal Fresnel lens designed to maximise the light intensity and has a double flash option (activated by a slide switch on the PCB)

that extends the signal duration making it more noticeable to the human eye.

The DC unit is factory set at 24v but a slide switch on the PCB can change it to 12v operation.

The R88 Series is a cost effective alternative for automotive applications where a powerful & commanding signal is required. It incorporates a parabolic reflector which, when energised, revolves around a continuously illuminated lamp. This creates a powerful beam of light that sweeps through 360 degrees. The reflector is driven by a worm drive system powered by a permanent magnet motor.

### Automotive Beacons > Ordering Information

Code No:	Voltage:	Light Source:	Current:
ROTATING OPTIONS			_
R88-34 (MB)	12v Dc	H1 x 55w	4.70 A
R88-38 (MB)	24v Dc	H1 x 70w	3.00 A
R88-37 (SF)	12v Dc	H1 x 55w	4.70 A
R88-39 (SF)	24v Dc	H1 x 70w	3.00 A
XENON OPTIONS			
X88-72 • (MB)	12/24v Dc	Xenon 8.5 / 6.5J	1.40 / 0.7 A
X88-75 • (SF)	12/24v Dc	Xenon 8.5 / 6.5J	1.40 / 0.7 A
<ul><li>Pre-set to 24v Dc</li></ul>			
MB = Magnetic Base	SF = Static Fix		
ADD THE FOLLOWING LE	NS CODES TO THE PRODUC	T WHEN ORDERING 01 0	2 03 04 05

#### Features

- · Continuously rated
- · High light output
- X88: 360° light output around the vertical axis and 180° light output above the horizontal axis
- R88: 360° degree light output around the vertical axis
- Dustproof and Weatherproof

#### Materia

UV Stable Polycarbonate Lens Acetal Base with Neoprene Seal

Kg 1.11 MB 0.67 SF





















AUDIBLE & VISUAL SIGNALS FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES



## Visual Signals EXPLOSION PROOF GRP BEACON

## Explosion Proof Beacon > GRP BC150 Series

### Product overview

The BC150 range has been approved for use in potentially explosive atmospheres and very harsh environmental conditions.

Typical applications are Oil and Gas, On-shore and Offshore, Chemical, Petrochemical, Refineries & Marine locations etc. These beacons have a choice of two types of light source: either Xenon (strobe) with multiple flash rate and power ratings or an LED array with three status type indication options and two power ratings. The design allows for termination inside the enclosure.

The units also have the ability to be fitted with a telephone initiation function and can be used as the second ring output indicator for telephones when installed in very noisy environments.

#### Features/Certifications

- Approved by ATEX and CQST
   IMETRO and IECEX (Pending)
- ATEX: II 2G Exd IIC T4 T6 (incorporating IIA & IIB)
- Zones 1&2, Zones 21&22 (Pending)
- Conforms to EN (IEC) 60079-0 EN (IEC) 60079-1 and EN54
- 360° light output around the vertical axis
- Dustproof & Weatherproof

#### BC150 Series > Ordering Information Power (Xenon)\* Beacon Power (LED) Duty Label Tag Label Lens Guard Telephone Initiated Lens Colour Voltage Cable Entry Finish Colour Type BC150 Y = Amber A = M20RD = Red**DC** 12 - 48v Χ Υ Υ 05 Standard $\mathbf{R} = \mathsf{RED}$ Yes Yes Xenon B = M25**YW** = Yellow 5W Yes **Product** Υ **10** = 10J B = BLUE AC1 Selection Yes $C = \frac{1}{2} NPT$ **BU** = Blue 12 - 48v G = Green **15** = 15J Ĺ 10 N N N $D = \frac{3}{4} NPT$ RI = Black C = Clear LED AC2 10W No No No O = Other OR = Other Follow the chart (right) to O = Other Choose either Xenon power or LED power only generate your part code. MODEL CONFIGURATOR (By using the table above, complete this box sequence to select your required beacon). BC150 Telephone Lens (Xenon)<sup>2</sup> (LED) Labe Label Guard \* Choose either Xenon power or LED power only Note: All customers orders will be confirmed in writing. Care should be taken that the correct code has been ordered as be-spoke manufactured products cannot be returned for exchange or credit later.

**Kg** 3.8



**IP** 66/67





**GRP** 

APPROVALS and CONFORMITIES











## Explosion Proof Beacon > GRP BC150 Series

### General Information

EX CODE: Exd IIC T4 - T6

CERTIFICATION: ATEX, CQST

TYPE: Xenon or LED Visual Beacon

		Xenon - Flashing Selectable from 60-180 Flashes per Minute			
		Effective Candela	109	293	395

LED Working Status	LED - Fla	LED - Flashing / Rotating / Static		
Flash Rate	Selectable	Selectable from 60-120 Flashes per Minute		
Rotation Rate	Selectable	Selectable from 60-120 Revolutions per Minute		
Static Mode	Permaner	Permanently ON (ie Steady)		
Power Rating	5 W	10 W		
Effective Candela	128	312		

### MULTIPLYING FACTOR FOR COLOURED LENSES:

Yellow (Amber) x 0.51, Red x 0.15, Blue x 0.12, Green x 0.49, Clear x 0

### **Mechanical Specifications**

MATERIAL: GRP (Glass Reinforced Plastic)

LENS COLOURS: Yellow (Amber), Red, Blue, Green, Clear or Other (specify)

ENCLOSURE COLOUR: Red (RAL3001), Yellow (RAL1003)

Blue (RAL5005), Black (RAL9004)

**WEIGHT:** 3.8 Kg / 8.38 lb

DIMENSIONS: Length/Width: 150mm / 5.91" Height: 212mm / 8.35"

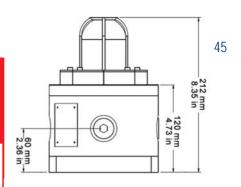
INGRESS PROTECTION: IP 66 & 67
AMBIENT TEMPERATURE: -40 to +70HUMIDITY: ≤ 95% RH

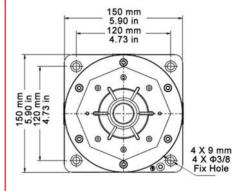
### **Electrical Specifications**

**POWER SUPPLY:** 12-48v Dc, 12-48v Ac or 100-240v Ac

**TERMINATION:** Accepts upto ≤ 2.5mm<sup>2</sup> incorporating rising clamp protectors

CABLE ENTRY: 4 x M20, M25, 1/2"NPT, 3/4"NPT or Other (Specify)





Cage Guard S/S	05/5006011010
Xenon PCB (DC)	05/5006040062
Xenon PCB (AC)	05/5006040062
LED PCB (DC)	05/5006040061
LED PCB (AC)	05/5006040061
M20 Stainless Steel Exd Blind Plug	05/5510011092
M25 Stainless Steel Exd Blind Plug	05/5510011092
1/2" NPT Stainless Steel Exd Blind Plug	05/5510011082
3/4" NPT Stainless Steel Exd Blind Plug	05/5510011084
M20 Stainless Steel Exd Cable Gland	05/CG SM020
M25 Stainless Steel Exd Cable Gland	05/CG SM025
1/2" NPT Stainless Steel Exd Cable Gland	05/CG SN012
3/4" NPT Stainless Steel Exd Cable Gland	05/CG SN034)

### BC150 Series > Working Current

### Xenon

ENERGY	12v Dc	24v Dc	48v Dc	110v Ac	220v Ac
5 J	460 mA	280 mA	140 mA	60 mA	35 mA
10 J	850 mA	490 mA	250 mA	100 mA	60 mA
15 J	1200 mA	700 mA	360 mA	140 mA	80 mA
21 J	N/A	960 mA	480 mA	180 mA	110 mA

LED

POWER	12v Dc	24v Dc	48v Dc	110v Ac	220v Ac
5 W	530 mA	260 mA	120 mA	80 mA	40 mA
10 W	1100 mA	530 mA	240 mA	160 mA	80 mA



### Audible Signals EXPLOSION PROOF **GRP SOUNDER**

### Explosion Proof Sounder > GRP SD150 Series

The SD150 electronic sounder range has been approved for use in potentially explosive atmospheres and very harsh environmental conditions

Typical applications are Oil and Gas, On-shore and Offshore, Chemical, Petrochemical, Refineries & Marine locations etc.

The unit incorporates a three stage alarm option with sixty three tones to choose from which includes four tones that can be mounting bracket as standard.

recorded or customised by the installer. All tones can be pre-set during installation.

The units also have the ability to be fitted with a telephone initiation function and can be used as the second ring output indicator for telephones when installed in very noisy environments.

The design allows for termination inside the enclosure.

The sounder is supplied with a

- Approved by ATEX and CQST • IMETRO and IECEX (Pending)
- ATEX: II 2G Exd IIC T4 T6 (incorporating IIA & IIB)
- Zones 1&2, Zones 21&22 (Pending)
- Conforms to EN (IEC) 60079-0 EN (IEC) 60079-1 and EN54
- Volume control
- · Dustproof & Weatherproof

### SD150 Series > Ordering Information

Standard **Product** Selection

Follow the chart (right) to generate your part code.

Duty Label Tag Label Finish Colour Telephone Voltage Cable Entry Initiated SD150 **A** = M20 RD = RedDC Yes B = M25YW = Yellow VAS Υ AC1 Yes  $C = \frac{1}{2} NPT$ **BU** = Blue N N  $D = \frac{3}{4} NPT$ BL = Black AC2 No O = Other OR = Other

MODEL CONFIGURATOR (By using the table above, complete this box sequence to select your required sounder).

**SD150** Tag Label Voltage Duty Cable Finish Telephone

Note: All customers orders will be confirmed in writing. Care should be taken that the correct code has been ordered as be-spoke manufactured products cannot be returned for exchange or credit later.

**Kg** 5.4



**IP** 66/67

**dB** 115





APPROVALS and **CONFORMITIES** 



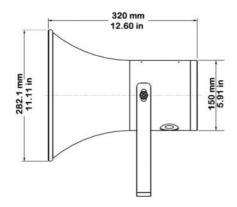


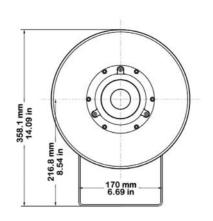




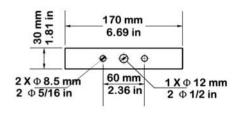


**GRP** 





### Explosion Proof Sounder > GRP SD150 Series



EX CODE: Exd IIC T4 - T6

**CERTIFICATION:** ATEX, CQST TYPE: Electronic Sounder

3 Stage alarm with 63 Selectable tones SOUNDER:

**POWER RATING:** 5-20 Watts Adjustable SOUND OUTPUT: Up to 115 dB at 1 metre

AMBIENT TEMPERATURE: -40 to +70 **HUMIDITY**: ≤ 95% RH

**Mechanical Specifications** 

Enclosure: GRP (Glass Reinforced Plastic) & MATERIAL:

Bracket: Stainless Steel 316

**ENCLOSURE COLOUR:** Red (RAL3001), Yellow (RAL1003)

Blue (RAL5005), Black (RAL9004)

WEIGHT: 5.4 Kg / 11.9 lb **DIMENSIONS:** Length: 320mm / 12.7"

See outline drawing for other dimensions

IP 66 & 67 **INGRESS PROTECTION:** 

**Electrical Specifications** 

POWER SUPPLY: 12-48v Dc, 12-48v Ac or 100-240v Ac

**TERMINATION:** Accepts upto ≤ 2.5mm<sup>2</sup> incorporating rising clamp protectors

CABLE ENTRY: 4 x M20, M25, 1/2"NPT, 3/4"NPT or Other (Specify)

CURRENT CONSUMPTION: Sounder 250 mA - 1500 mA (Adjustable by tone selection)

### SD150 Series > Working Current

12v Dc	24v Dc	48v Dc	110v Ac	220v Ac
910 mA (Max 10W)	960 mA	500 mA	210 mA	100 mA

Spareparts & Access	sories
Sounder Driver	05/50050140620
Sounder PCB (DC)	05/50053530501
Sounder PCB (AC)	05/50053530502
M20 Stainless Steel Exd Blind Plug	05/50100110920
M25 Stainless Steel Exd Blind Plug	05/55100110925
1/2" NPT Stainless Steel Exd Blind Plug	05/55100110821
3/4" NPT Stainless Steel Exd Blind Plug	05/55100110843
M20 Stainless Steel Exd Cable Gland	05/CG SM020X
M25 Stainless Steel Exd Cable Gland	05/CG SM025X
1/2" NPT Stainless Steel Exd Cable Gland	05/CG SN012X
3/4" NPT Stainless Steel Exd Cable Gland	05/CG SN034X



### Audible Signals EXPLOSION PROOF **GRP SOUNDER/BEACON**

### Explosion Proof Sounder/Beacon > GRP SB150-1 Series

The SB150-1 electronic combined sounder beacon range has been approved for use in potentially explosive atmospheres and very harsh environmental conditions.

Typical applications are Oil and Gas, On-shore and Offshore, Chemical, Petrochemical, Refineries & Marine locations etc.

The unit incorporates a four stage alarm option with sixty three tones to choose from which includes four tones that can be inside the enclosure. The unit can be recorded or customised by the installer.

All tones can be pre-set during installation. In addition, the unit also incorporates a visual warning signal with a choice of two types of light source: either xenon (strobe) with multiple flash rates and power ratings or an LED array with three status type indication options.

The units also have the ability to be fitted with a telephone initiation function and can be used as the second ring output indicator for telephones when installed in very noisy environments.

The design allows for termination bracket mounted only.

#### Features/Certifications

- Approved by ATEX and CQST • IMETRO and IECEX (Pending)
- ATEX: II 2G Exd IIC T4 T6 (incorporating IIA & IIB)
- Zones 1&2, Zones 21&22 (Pending)
- Conforms to EN (IEC) 60079-0 EN (IEC) 60079-1 and EN54
- 360° light output around the vertical axis
- Volume control
- Dustproof & Weatherproof

#### SB150-1 Series > Ordering Information Lens Guard' Beacon Power Power (LED) Duty Label Tag Label\*\* Lens Colour Voltage Finish Colour Туре (Xenon)<sup>3</sup> Initiated **A** = M20 RD = Red $\mathbf{R} = \text{Red}$ **02** = 2J Standard DC Χ γ γ 05 12 ~ 48v SB150-1 **Product 05** = 5J Yes Yes B = M25YW = Yellow Y = AmberXenon 5W Yes Selection AC1 **10** = 10J Yes C = 1/2 NPT **BU** = Blue B = Blue 12 ~ 48v L N 10 N N $D = \frac{3}{4} NPT$ BL = Black G = Green **15** = 15J LED 10W AC2 No No Follow the chart (right) to **21** = 21J O = Other **OR** = Other C = Clear generate your part code. \*\* These accessories need to be ordered separately. MODEL CONFIGURATOR (By using the table above, complete this box sequence to select your required sounder beacon). SB150-1 Voltage Finish Telephone Lens Beacon Power Power Duty Tag Lens (Xenon)\* (LED)\* Label\*\* Type Label Guard \*\* These accessories need to be ordered separately. \* Choose either Xenon power or LED power only Note: All customers orders will be confirmed in writing. Care should be taken that the correct code has been ordered as be-spoke manufactured products cannot be returned for exchange or credit later.

**Kg** 6.5



**IP** 66/67

**dB** 115





APPROVALS and **CONFORMITIES** 











**GRP** 

## Explosion Proof Sounder/Beacon > GRP SB150-1 Series

### General Information

EX CODE: Exd IIC T4 - T6

CERTIFICATION: ATEX, CQST

TYPE: Xenon or LED Audible and Visual Signal Warning Device

SOUNDER: 4 Stage alarm with 63 Selectable tones

POWER RATING: 5-20 Watts Adjustable SOUND OUTPUT: Up to 115 dB at 1 metre

Xenon Working Status			Xenon - Flashing		
Flash Rate			Selectable from 60-180 Flashes per Minute		
Power Rating         2.5 J         5 J           (4W) Max         (10W) Max		10 J (15W) Max	15 J (20W) Max	21 J (25W) Max	
Effective Candela	67	109	293	395	424

LED Working Status	LED - Flashing / Rotating / Static			
Flash Rate	Selectable from 60-120 Flashes per Minute			
Rotation Rate	Selectable from 60-120 Revolutions per Minute			
Static Mode	Permanently ON (ie Steady)			
Power Rating	5 W			
Effective Candela	128			

#### MULTIPLYING FACTOR FOR COLOURED LENSES:

Yellow (Amber) x 0.51, Red x 0.15, Blue x 0.12, Green x 0.49, Clear x 0

**Mechanical Specifications** 

MATERIAL: Enclosure: GRP (Glass Reinforced Plastic)

Bracket: Stainless Steel 316 Lens: Tempered Glass

LENS COLOURS: Yellow (Amber), Red, Blue, Green, Clear or Other (specify)

ENCLOSURE COLOUR: Red (RAL3001), Yellow (RAL1003)

Blue (RAL5005), Black (RAL9004)

AMBIENT TEMPERATURE: -40 to +70HUMIDITY:  $\leq 95\% \text{ RH}$ WEIGHT: 6.5 Kg / 14.3 lb

**DIMENSIONS:** Length: 413mm / 16.4" No Lens Guard Fitted

See outline drawing for other dimensions

INGRESS PROTECTION: IP 66 & 67

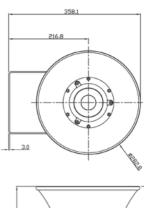
**Electrical Specifications** 

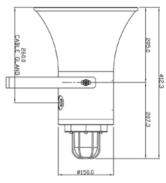
POWER SUPPLY: 12-48v Dc, 12-48v Ac or 100-240v Ac

**TERMINATION:** Accepts upto  $\leq 2.5$ mm<sup>2</sup> incorporating rising clamp protectors

CABLE ENTRY: 4 x M20, M25, 1/2"NPT, 3/4"NPT or Other (Specify)

CURRENT CONSUMPTION: Sounder 250 mA - 1500 mA (Adjustable by tone selection)







### Tag Label (Specified) 05/50070110229 Telephone Initiated PCB 05/50110105201 05/50060110109 Lens Guard M20 x 1.5 05/55100110920 Blind Plug \* M25 x 1.5 05/55100110925 Blind Plug ' 1/2" NPT 05/55100110821 Blind Plug \* 3/4" NPT 05/55100110843 Blind Plug ' M20 Stainless Steel 05/55100110920 Exd Blind Plug

\* Ex Stainless Steel Blind Plug (Selectable or Specify)

### SB150-1 Series > Power Consumption & Working Current

Power Consumption: Sounder: 5-20W & LED: 5W

Working Current: Sounder: 250 mA - 1500 mA & LED: 220 mA (Max)

Xenon

2.5 Joule	5 Joule	10 Joule	15 Joule	21 Joule
4 W (Max)	10 W (Max)	15 W (Max)	20 W (Max)	25 W (Max)

Xenon

2.5 Joule	5 Joule	10 Joule	15 Joule	21 Joule
160 mA	320 mA	650 mA	1A (Max)	1.4A (Max)



## Visual Signals EXPLOSION PROOF GRP PUSH BUTTON

## Explosion Proof Push Button > GRP **PB135 Series**

### Product overview

The PB135 push button range has been approved for use in potentially explosive atmospheres and harsh environmental conditions.

Typical applications are Oil and Gas, On-shore and Offshore, Chemical, Petrochemical, Refineries & Marine locations etc. It is compatible for use with a PLC, DCS and ESD systems via 4-20mA output. It is ideally suited for use in fire alarm systems and an addressable option with diode fitted is available.

The unit has the option for either a key reset or self reset. The range also offers an additional visual LED indication option; red, green (or both) can be fitted. When fault or alarm status arises the green LED will be overridden by the red LED. The design allows for termination inside the unit.

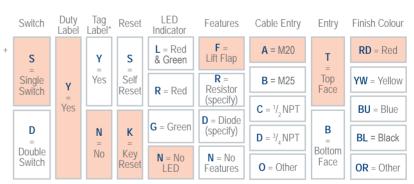
#### Features/Certifications

- Approved by ATEX and CQST
   IMETRO and IECEX (Pending)
- ATEX: II 2G Exd IIB +H<sub>2</sub> T4 T6 (incorporating IIA)
- Zones 1&2, Zones 21&22 (Pending)
- Conforms to EN (IEC) 60079-0 EN (IEC) 60079-1 and EN54
- Dustproof & Weatherproof

### PB135 Series > Ordering Information

Standard Product Selection

Follow the chart (right) to generate your part code.



\* These accessories need to be ordered separately.

MODEL CONFIGURATOR (By using the table above, complete this box sequence to select your required push button).

PB135

\* These accessories need to be ordered separately

Note: All customers orders will be confirmed in writing. Care should be taken that the correct code has been ordered as be-spoke manufactured products cannot be returned for exchange or credit later.

**Kg** 1.5



**IP** 66







APPROVALS and CONFORMITIES



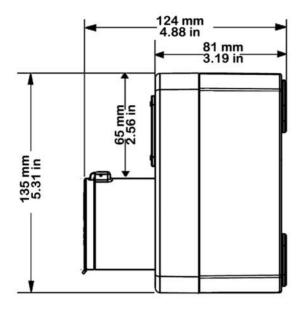


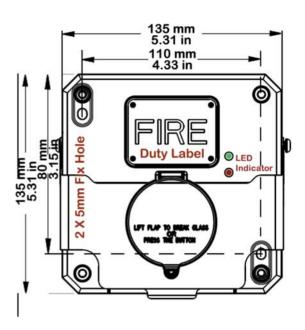






GRP





## Explosion Proof Push Button > GRP **PB135 Series**

### General Information

EX CODE: Exd IIB +H<sub>2</sub> T4 - T6

CERTIFICATION: ATEX, CQST TYPE: Push Button

**Mechanical Specifications** 

MATERIAL: Enclosure: GRP (Glass Reinforced Plastic)

ENCLOSURE COLOUR: Red (RAL3001), Yellow (RAL1003)

Blue (RAL5005), Black (RAL9004)

AMBIENT TEMPERATURE: -40 to +70HUMIDITY:  $\leq 95\% \text{ RH}$ WEIGHT: 1.5 Kg / 3.31 lb

DIMENSIONS: Width/Length: 135mm / 5.31" Height: 80.5mm / 3.17"

INGRESS PROTECTION: IP 66

**Electrical Specifications** 

SWITCH RATING: 30v Dc: 6A (Resistive), 6A (Inductive)

250v Ac: 11A (Resistive), 6A (Inductive)

OUTPUT: On-Off Output (NC/NO)

**TERMINATION:** Accepts upto  $\leq 2.5$ mm<sup>2</sup> incorporating rising clamp protectors

CABLE ENTRY: 4 x M20, M25, 1/2"NPT, 3/4"NPT or Other (Specify)





## Visual Signals EXPLOSION PROOF GRP PUSH BUTTON

## Explosion Proof Push Button > GRP **PB150 Series**

### Product overview

The PB150 push button range has been approved for use in potentially explosive atmospheres and harsh environmental conditions.

Typical applications are Oil and Gas, On-shore and Offshore, Chemical, Petrochemical, Refineries & Marine locations etc. It is compatible for use with a PLC, DCS and ESD systems via 4-20mA output. It is ideally suited for use in fire alarm systems and an addressable option with diode fitted is available.

The unit has the option for either a key reset or self reset. The range also offers an additional visual LED indication option; red, green (or both) can be fitted. When fault or alarm status arises the green LED will be overridden by the red LED. The design allows for termination inside the unit.

#### Features/Certifications

- Approved by ATEX and CQST
   IMETRO and IECEX (Pending)
- ATEX: II 2G Exd IIC T4 T6 (incorporating IIA & IIB)
- Zones 1&2, Zones 21&22 (Pending)
- Conforms to EN (IEC) 60079-0 EN (IEC) 60079-1 and EN54
- · Dustproof & Weatherproof

### PB150 Series > Ordering Information

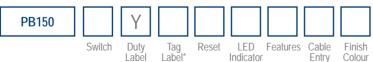
Standard Product Selection

Follow the chart (right) to generate your part code.



\* These accessories need to be ordered separately.

MODEL CONFIGURATOR (By using the table above, complete this box sequence to select your required push button).



PB150

\* These accessories need to be ordered separately

Note: All customers orders will be confirmed in writing. Care should be taken that the correct code has been ordered as be-spoke manufactured products cannot be returned for exchange or credit later.

**Kg** 4.2



**IP** 66











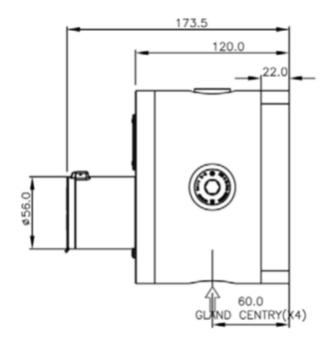


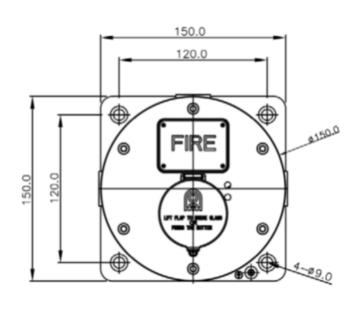






GRP





## Explosion Proof Push Button > GRP **PB150 Series**

### General Information

EX CODE: Exd IIC T4 - T6

CERTIFICATION: ATEX, CQST TYPE: Push Button

**Mechanical Specifications** 

MATERIAL: Enclosure: GRP (Glass Reinforced Plastic)

ENCLOSURE COLOUR: Red (RAL3001), Yellow (RAL1003)

Blue (RAL5005), Black (RAL9004)

AMBIENT TEMPERATURE: -40 to +70HUMIDITY:  $\leq 95\% \text{ RH}$ WEIGHT: 4.2 Kg / 9.26 lb

DIMENSIONS: Width/Length: 150mm / 5.91" Height: 164mm / 6.46"

INGRESS PROTECTION: IP 66

**Electrical Specifications** 

SWITCH RATING: 30v Dc: 6A (Resistive), 6A (Inductive)

250v Ac: 11A (Resistive), 6A (Inductive)

OUTPUT: On-Off Output (NC/NO)

**TERMINATION:** Accepts upto ≤ 2.5mm<sup>2</sup> incorporating rising clamp protectors

CABLE ENTRY: 4 x M20, M25, 1/2"NPT, 3/4"NPT or Other (Specify)





### Visual Signals EXPLOSION PROOF **GRP MANUAL CALL POINT**

### Explosion Proof Manual Call Point > GRP **CP135 Series**

The CP135 manual call point range has been approved for use in potentially explosive atmospheres and harsh environmental conditions.

Typical applications are Oil and Gas, On-shore and Offshore, Chemical, Petrochemical, Refineries & Marine locations etc.

It is compatible for use with a PLC, DCS and ESD systems via 4-20mA output. It is ideally suited for use in fire alarm systems and an addressable option with diode fitted is available.

The range also offers an additional visual LED indication option; red, green (or both) can be fitted. When fault or alarm status arises the green LED will be overridden by the red LED.

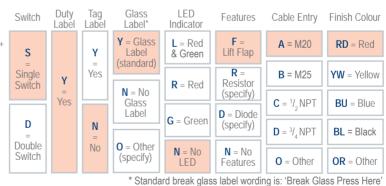
The design allows for termination inside the unit.

- Approved by ATEX and CQST IMETRO and IECEX (Pending)
- ATEX: II 2G Exd IIB +H, T4 T6 (incorporating IIA)
- Zones 1&2, Zones 21&22 (Pending)
- Conforms to EN (IEC) 60079-0 EN (IEC) 60079-1 and EN54
- Dustproof & Weatherproof

### CP135 Series > Ordering Information

Standard **Product** Selection

Follow the chart (right) to generate your part code.



MODEL CONFIGURATOR (By using the table above, complete this box sequence to select your required manual call point).

**CP135** Switch LED Cable

Labe

Label\*

**CP135** 

Entry \* Standard break glass label wording is: 'Break Glass Press Here'

Finish

Coloui

Note: All customers orders will be confirmed in writing. Care should be taken that the correct code has been ordered as be-spoke manufactured products cannot be returned for exchange or credit later.

Indicator

**Kg** 1.5



Label

**IP** 66











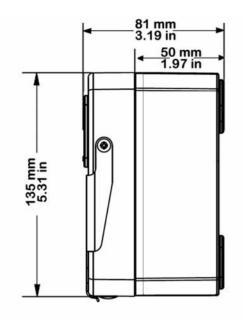


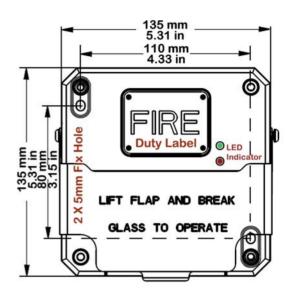






**GRP** 





## Explosion Proof Manual Call Point > GRP CP135 Series

### General Information

EX CODE: Exd IIB+H<sub>2</sub> T4 - T6

CERTIFICATION: ATEX, CQST TYPE: Manual Call Point

**Mechanical Specifications** 

MATERIAL: Enclosure: GRP (Glass Reinforced Plastic)

ENCLOSURE COLOUR: Red (RAL3001), Yellow (RAL1003)

Blue (RAL5005), Black (RAL9004)

AMBIENT TEMPERATURE: -40 to +70HUMIDITY:  $\leq 95\% \text{ RH}$ WEIGHT: 1.5 Kg / 3.31 lb

DIMENSIONS: Width/Length: 135mm / 5.31" Height: 80.5mm / 3.17"

INGRESS PROTECTION: IP 66

**Electrical Specifications** 

SWITCH RATING: 30v Dc: 6A (Resistive), 6A (Inductive)

250v Ac: 11A (Resistive), 6A (Inductive)

OUTPUT: On-Off Output (NC/NO)

**TERMINATION:** Accepts upto ≤ 2.5mm<sup>2</sup> incorporating rising clamp protectors

CABLE ENTRY: 4 x M20, M25, 1/2"NPT, 3/4"NPT or Other (Specify)





## Visual Signals EXPLOSION PROOF GRP MANUAL CALL POINT

## Explosion Proof Manual Call Point > GRP CP150 Series

### Product overview

The CP150 manual call point range has been approved for use in potentially explosive atmospheres and harsh environmental conditions.

Typical applications are Oil and Gas, On-shore and Offshore, Chemical, Petrochemical, Refineries & Marine locations etc. It is compatible for use with a PLC, DCS and ESD systems via 4-20mA output. It is ideally suited for use in fire alarm systems and an addressable option with diode fitted is available.

The range also offers an additional visual LED indication option; red, green (or both) can be fitted. When fault or alarm status arises the green LED will be overridden by the red LED. The design allows for termination inside the unit.

#### Features/Certifications

- Approved by ATEX and CQST
   IMETRO and IECEX (Pending)
- ATEX: II 2G Exd IIC T4 T6 (Incorporating IIA & IIB)
- Zones 1&2, Zones 21&22 (Pending)
- Conforms to EN (IEC) 60079-0 EN (IEC) 60079-1 and EN54
- Dustproof & Weatherproof

### CP150 Series > Ordering Information

Standard Product Selection

Follow the chart (right) to

generate your part code.

Duty Label Tag Label LED Switch Features Cable Entry Finish Colour Indicator **F** = Lift Flap L = Red A = M20RD = Red S Υ & Green Yes Single B = M25YW = Yellow Υ Resistor Switch R = Red(specify) Yes  $C = \frac{1}{2} NPT$ **BU** = Blue D = Diode G = Green D N (specify)  $D = \frac{3}{4} NPT$ RI = Black Double N = No LED N = NoO = Other **OR** = Other Features

MODEL CONFIGURATOR (By using the table above, complete this box sequence to select your required manual call point).

CP150 Y Tag LED Features Cable Finish Label Indicator Finity Colour

**CP150** 

Note: All customers orders will be confirmed in writing. Care should be taken that the correct code has been ordered as be-spoke manufactured products cannot be returned for exchange or credit later.

**Kg** 4.2



**IP** 66







APPROVALS and CONFORMITIES



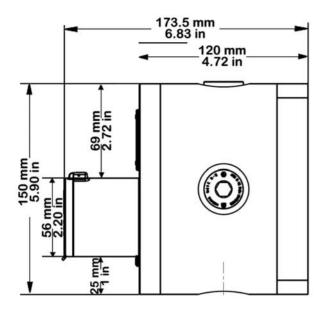


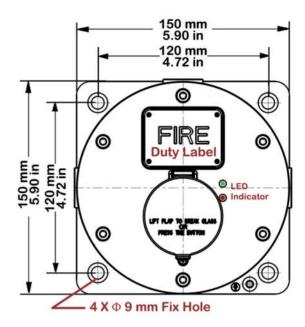






GRP





## Explosion Proof Manual Call Point > GRP CP150 Series

### General Information

EX CODE: Exd IIC T4 - T6

CERTIFICATION: ATEX, CQST
TYPE: Manual Call Point

**Mechanical Specifications** 

MATERIAL: Enclosure: GRP (Glass Reinforced Plastic)

ENCLOSURE COLOUR: Red (RAL3001), Yellow (RAL1003)

Blue (RAL5005), Black (RAL9004)

AMBIENT TEMPERATURE: -40 to +70HUMIDITY:  $\leq 95\% \text{ RH}$ WEIGHT: 4.2 Kg / 9.26 lb

DIMENSIONS: Width/Length: 150mm / 5.91" Height: 164mm / 6.46"

INGRESS PROTECTION: IP 66

**Electrical Specifications** 

SWITCH RATING: 30v Dc: 6A (Resistive), 6A (Inductive)

250v Ac: 11A (Resistive), 6A (Inductive)

OUTPUT: On-Off Output (NC/NO)

**TERMINATION:** Accepts upto ≤ 2.5mm<sup>2</sup> incorporating rising clamp protectors

CABLE ENTRY: 4 x M20, M25, 1/2"NPT, 3/4"NPT or Other (Specify)







### Visual Signals EXPLOSION PROOF

**Stainless Steel BEACON** 

Lens Guard not supplied as standard

## Explosion Proof Beacon > Stainless Steel **BC125 Series**

### Product overview

The BC125 range has been approved for use in potentially explosive atmospheres and very harsh environmental conditions.

Typical applications are Oil and Gas, On-shore and Offshore, Chemical, Petrochemical, Refineries & Marine locations etc. These beacons have a choice of two types of light source: either Xenon (strobe) with multiple flash rate and power ratings or an LED array with three status type indication options and two power ratings. The design allows for termination inside the enclosure.

The units also have the ability to be fitted with a telephone initiation function and can be used as the second ring output indicator for telephones when installed in very noisy environments.

#### Features/Certifications

- Approved by ATEX and CQST
   IMETRO and IECEX (Pending)
- ATEX: II 2G Exd IIC T4 T6 (incorporating IIA & IIB)
- Zones 1&2, Zones 21&22 (Pending)
- Conforms to EN (IEC) 60079-0 EN (IEC) 60079-1 and EN54
- 360° light output around the vertical axis
- Dustproof & Weatherproof

### BC125 Series > Ordering Information

Power (Xenon)\* Telephone Initiated Beacon Duty Label Tag Label Lens Guard Lens Colour Voltage Cable Entry Finish Colour Type BC125 Y = Amber A = M20RD = Red**DC** 12 - 48v Χ Υ Υ 05  $\mathbf{R} = \text{Red}$ Xenon Yes Yes B = M25YW = Yellow 5W Yes Υ **10** = 10J Follow the chart (right) to B = Blue AC1 Yes  $C = \frac{1}{2} NPT$ **BU** = Blue generate your part code. 12 - 48v G = Green **15** = 15J ī 10 N N N  $D = \frac{3}{4} NPT$ RI = Black C = Clear LED AC2 10W No No Nο **OR** = Other O = Other O = Other Choose either Xenon power or LED power only

MODEL CONFIGURATOR (By using the table above, complete this box sequence to select your required beacon).

BC125

Lens Beacon Power Power Voltage Duty Tag Lens Cable Finish Telepho
Colour Type (Xenon)\* (LED)\*

Label Label Guard Finity Colour Initiated

\* Choose either Xenon power or LED power only

Note: All customers orders will be confirmed in writing. Care should be taken that the correct code has been ordered as be-spoke manufactured products cannot be returned for exchange or credit later.

**Kg** 5.4



**IP** 66/67





STAINLESS STEEL













### **General Information**

EX CODE: Exd IIC T4 - T6

CERTIFICATION: ATEX, CQST

TYPE: Xenon or LED Visual Beacon

Xenon Working Stat	tus Xenon - Flashing		I			
Flash Rate		Selectable from 60-180 Flashes per Minute				
Power Rating 5 J (10W) Max		10 J (15W) Max   15 J (20W) Max   21 J (25W				
Effective Candela	109	293	395	424		

LED Working Status	LED - Flas	LED - Flashing / Rotating / Static		
Flash Rate	Selectable	Selectable from 60-120 Flashes per Minute		
Rotation Rate	Selectable from 60-120 Revolutions per Minut			
Static Mode	Permanent	Permanently ON (ie Steady)		
Power Rating	5 W	10 W		
Effective Candela	128	312		

### MULTIPLYING FACTOR FOR COLOURED LENSES:

Yellow (Amber) x 0.51, Red x 0.15, Blue x 0.12, Green x 0.49, Clear x 0

**Mechanical Specifications** 

MATERIAL: Enclosure: Stainless Steel 316

Lens: Tempered Glass

LENS COLOURS: Yellow (Amber), Red, Blue, Green, Clear or Other (specify)

ENCLOSURE COLOUR: Red (RAL3001), Yellow (RAL1003)

Blue (RAL5005), Black (RAL9004)

**WEIGHT:** 5.4 Kg / 11.9 lb

DIMENSIONS: Length/Width: 125mm / 4.92" Height: 181.2mm / 7.13"

INGRESS PROTECTION: IP 66 & 67

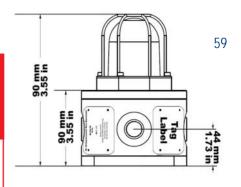
AMBIENT TEMPERATURE: -40 to +70HUMIDITY:  $\leq 95\% \text{ RH}$ 

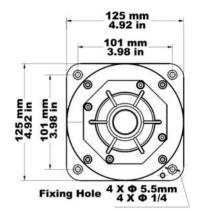
**Electrical Specifications** 

**POWER SUPPLY:** 12-48v Dc, 12-48v Ac or 100-240v Ac

**TERMINATION**: Accepts upto ≤ 2.5mm<sup>2</sup> incorporating rising clamp protectors

CABLE ENTRY: 4 x M20, M25, 1/2"NPT, 3/4"NPT or Other (Specify)





Spare	parts	& Acc	essories

Cage Guard S/S	05/50060110109
Xenon PCB (DC)	05/50060400621
Xenon PCB (AC)	05/50060400622
LED PCB (DC)	05/50060400611
LED PCB (AC)	05/50060400612
M20 Stainless Steel Exd Blind Plug	05/55100110920
M25 Stainless Steel Exd Blind Plug	05/55100110925
1/2" NPT Stainless Steel Exd Blind Plug	05/55100110821
3/4" NPT Stainless Steel Exd Blind Plug	05/55100110843
M20 Stainless Steel Exd Cable Gland	05/CG SM020X
M25 Stainless Steel Exd Cable Gland	05/CG SM025X
1/2" NPT Stainless Steel Exd Cable Gland	05/CG SN012X
3/4" NPT Stainless Steel Exd Cable Gland	05/CG SN034X
	-

### BC125 Series > Working Current

### Xenon

ENERGY	12v Dc	24v Dc	48v Dc	110v Ac	220v Ac
5 J	460 mA	280 mA	140 mA	60 mA	35 mA
10 J	850 mA	490 mA	250 mA	100 mA	60 mA
15 J	1200 mA	700 mA	360 mA	140 mA	80 mA
21 J	N/A	960 mA	480 mA	180 mA	110 mA

#### LED

POWER	12v Dc	24v Dc	48v Dc	110v Ac	220v Ac
5 W	530 mA	260 mA	120 mA	80 mA	40 mA
10 W	1100 mA	530 mA	240 mA	160 mA	80 mA



### Audible Signals EXPLOSION PROOF **Stainless Steel SOUNDER**

### Explosion Proof Sounder > Stainless Steel SD125 Series

The SD125 electronic sounder range has been approved for use in potentially explosive atmospheres and very harsh environmental conditions

Typical applications are Oil and Gas, On-shore and Offshore, Chemical, Petrochemical, Refineries & Marine locations etc.

The unit incorporates a three stage alarm option with sixty three tones to choose from which includes four tones that can be mounting bracket as standard.

recorded or customised by the installer. All tones can be pre-set during installation.

The units also have the ability to be fitted with a telephone initiation function and can be used as the second ring output indicator for telephones when installed in very noisy environments.

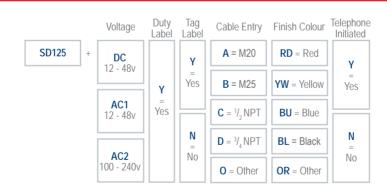
The design allows for termination inside the enclosure.

The sounder is supplied with a

- Approved by ATEX and CQST • IMETRO and IECEX (Pending)
- ATEX: II 2G Exd IIC T4 T6 (incorporating IIA & IIB)
- Zones 1&2, Zones 21&22 (Pending)
- Conforms to EN (IEC) 60079-0 EN (IEC) 60079-1 and EN54
- Volume control
- Dustproof & Weatherproof

### SD125 Series > Ordering Information

Follow the chart (right) to generate your part code.



MODEL CONFIGURATOR (By using the table above, complete this box sequence to select your required sounder).



Note: All customers orders will be confirmed in writing. Care should be taken that the correct code has been ordered as be-spoke manufactured products cannot be returned for exchange or credit later.

**Kg** 6.2



**IP** 66/67

**dB** 115





APPROVALS and **CONFORMITIES** 



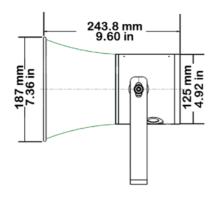


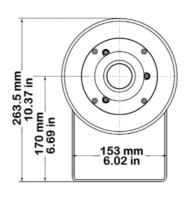












## Explosion Proof Sounder > Stainless Steel **SD125 Series**

### General Information

EX CODE: Exd IIC T4 - T6

CERTIFICATION: ATEX, CQST TYPE: Electronic Sounder

SOUNDER: 3 Stage alarm with 63 Selectable tones

POWER RATING: 5-20 Watts Adjustable SOUND OUTPUT: Up to 115 dB at 1 metre

AMBIENT TEMPERATURE: -40 to +70HUMIDITY:  $\leq 95\% \text{ RH}$ 

**Mechanical Specifications** 

MATERIAL: Enclosure & Bracket: Stainless Steel 316

ENCLOSURE COLOUR: Red (RAL3001), Yellow (RAL1003)

Blue (RAL5005), Black (RAL9004)

**WEIGHT:** 6.2 Kg / 13.7 lb

DIMENSIONS: Length: 243.8mm / 9.65"

See outline drawing for other dimensions

INGRESS PROTECTION: IP 66 & 67

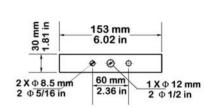
**Electrical Specifications** 

POWER SUPPLY: 12-48v Dc, 12-48v Ac or 100-240v Ac

**TERMINATION**: Accepts upto ≤ 2.5mm<sup>2</sup> incorporating rising clamp protectors

CABLE ENTRY: 4 x M20, M25, 1/2"NPT, 3/4"NPT or Other (Specify)

CURRENT CONSUMPTION: Sounder 250 mA - 1500 mA (Adjustable by tone selection)



Fixing Holes for Mounting Bracket



### SD125 Series > Working Current

12v Dc	24v Dc	48v Dc	110v Ac	220v Ac
910 mA (Max 10W)	960 mA	500 mA	210 mA	100 mA

## Audible Signals EXPLOSION PROOF

### Stainless Steel SOUNDER/BEACON

### Explosion Proof Sounder/Beacon> Stainless Steel SB125-1 Series

The SB125-1 electronic combined sounder beacon range has been approved for use in potentially explosive atmospheres and very harsh environmental conditions.

Typical applications are Oil and Gas, On-shore and Offshore, Chemical. Petrochemical, Refineries & Marine locations etc.

The unit incorporates a four stage alarm option with sixty three tones to choose from which includes four tones that can be inside the enclosure. The unit can be recorded or customised by the installer.

All tones can be pre-set during installation. In addition, the unit also incorporates a visual warning signal with a choice of two types of light source: either xenon (strobe) with multiple flash rates and power ratings or an LED array with three status type indication options.

The units also have the ability to be fitted with a telephone initiation function and can be used as the second ring output indicator for telephones when installed in very noisy environments.

The design allows for termination bracket mounted only.

#### Features/Certifications

- Approved by ATEX and CQST • IMETRO and IECEX (Pending)
- ATEX: II 2G Exd IIC T4 T6 (incorporating IIA & IIB)
- Zones 1&2, Zones 21&22 (Pending)
- Conforms to EN (IEC) 60079-0 EN (IEC) 60079-1 and EN54
- Volume control
- 360° light output around the vertical axis
- Dustproof & Weatherproof

### SB125-1 Series > Ordering Information



\* These accessories need to be ordered separately.

MODEL CONFIGURATOR (By using the table above, complete this box sequence to select your required sounder beacon).



\*\* These accessories need to be ordered separately. \* Choose either Xenon power or LED power only

Note: All customers orders will be confirmed in writing. Care should be taken that the correct code has been ordered as be-spoke manufactured products cannot be returned for exchange or credit later.

**Kg** 8.0

°C -40+70

**IP** 66/67

**dB** 115





APPROVALS and **CONFORMITIES** 













## Explosion Proof Sounder/Beacon > Stainless Steel **SB125-1 Series**

### **General Information**

EX CODE: Exd IIC T4 - T6

CERTIFICATION: ATEX, CQST

TYPE: Xenon or LED Audible and Visual Signal Warning Device

SOUNDER: 4 Stage alarm with 63 Selectable tones

POWER RATING: 5-20 Watts Adjustable SOUND OUTPUT: Up to 115 dB at 1 metre

Xenon Working Status		Xenon - Flashing			
Flash Rate		Selectable from 60-180 Flashes per Minute			
Power Rating	2.5 J (4W) Max	5 J (10W) Max	10 J (15W) Max	15 J (20W) Max	21 J (25W) Max
Effective Candela	67	109	293	395	424

LED Working Status	LED - Flashing / Rotating / Static		
Flash Rate	Selectable from 60-120 Flashes per Minute		
Rotation Rate	Selectable from 60-120 Revolutions per Minute		
Static Mode	Permanently ON (ie Steady)		
Power Rating	5 W		
Effective Candela	128		

#### MULTIPLYING FACTOR FOR COLOURED LENSES:

Yellow (Amber) x 0.51, Red x 0.15, Blue x 0.12, Green x 0.49, Clear x 0

**Mechanical Specifications** 

MATERIAL: Enclosure & Bracket: Stainless Steel 316

Lens: Tempered Glass

LENS COLOURS: Yellow (Amber), Red, Blue, Green, Clear or Other (specify)

ENCLOSURE COLOUR: Red (RAL3001), Yellow (RAL1003)

Blue (RAL5005), Black (RAL9004)

AMBIENT TEMPERATURE: -40 to +70HUMIDITY:  $\leq 95\% \text{ RH}$ WEIGHT: 8 Kg / 17.6 lb

**DIMENSIONS:** Length: 333mm / 13.1" No Lens Guard Fitted

See outline drawing for other dimensions

INGRESS PROTECTION: IP 66 & 67

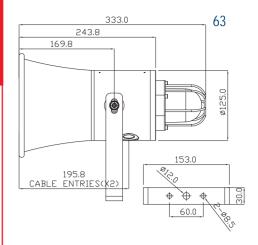
**Electrical Specifications** 

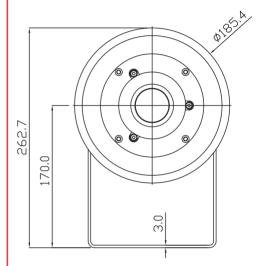
POWER SUPPLY: 12-48v Dc, 12-48v Ac or 100-240v Ac

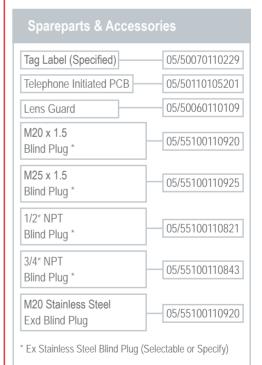
**TERMINATION:** Accepts upto ≤ 2.5mm<sup>2</sup> incorporating rising clamp protectors

CABLE ENTRY: 4 x M20, M25, 1/2"NPT, 3/4"NPT or Other (Specify)

CURRENT CONSUMPTION: Sounder 250 mA - 1500 mA (Adjustable by tone selection)







### SB125-1 Series > Power Consumption & Working Current

Power Consumption: Sounder: 5-20W & LED: 5W

Working Current: Sounder: 250 mA - 1500 mA & LED: 220 mA (Max)

Xenon

2.5 Joule	5 Joule	10 Joule	15 Joule	21 Joule
4 W (Max)	10 W (Max)	15 W (Max)	20 W (Max)	25 W (Max)

Xenon

2.5 Joule	5 Joule	10 Joule	15 Joule	21 Joule
160 mA	320 mA	650 mA	1A (Max)	1.4A (Max)



### Visual Signals EXPLOSION PROOF **Stainless Steel PUSH BUTTON**

### Explosion Proof Push Button > Stainless Steel PB125 Series

The PB125 push button range has been approved for use in potentially explosive atmospheres and harsh environmental conditions.

Typical applications are Oil and Gas, On-shore and Offshore, Chemical, Petrochemical, Refineries & Marine locations etc.

It is compatible for use with a PLC. DCS and ESD systems via 4-20mA output. It is ideally suited for use in fire alarm systems and an addressable option with diode fitted is available.

The unit has the option for either a key reset or self reset. The range also offers an additional visual LED indication option; red, green (or both) can be fitted. When fault or alarm status arises the green LED will be overridden by the red LED. The design allows for termination inside the unit.

- Approved by ATEX and CQST • IMETRO and IECEX (Pending)
- ATEX: II 2G Exd IIC T4 T6 (incorporating IIA & IIB )
- Zones 1&2. Zones 21&22 (Pending)
- Conforms to EN (IEC) 60079-0 EN (IEC) 60079-1 and EN54
- Dustproof & Weatherproof

### PB125 Series > Ordering Information

LED Indicator Duty Label Tag Label Switch Reset Features Cable Entry Finish Colour PB125 L = Red A = M20RD = Red S Υ S & Green Lift Flap Yes Self R = Single B = M25YW = Yellow Υ Switch Resistor  $\mathbf{R} = \text{Red}$ Follow the chart (right) to Reset (specify) Yes C = 1/2 NPT **BU** = Blue generate your part code. D = Diode G = Green D (specify) K  $D = \frac{3}{4} NPT$ RI = Black Double No Key N = NoN = NoO = Other OR = Other Features

\* These accessories need to be ordered separately.

MODEL CONFIGURATOR (By using the table above, complete this box sequence to select your required push button).

PB125 Switch Tag LED Cable Label Label Indicator Entry

\* These accessories need to be ordered separately

Note: All customers orders will be confirmed in writing. Care should be taken that the correct code has been ordered as be-spoke manufactured products cannot be returned for exchange or credit later.

**Kg** 4.9



**IP** 66











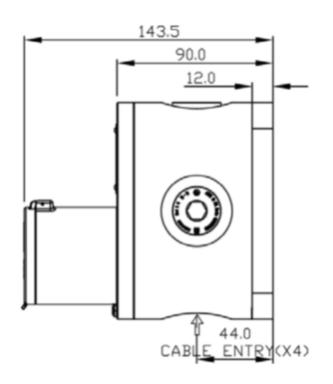


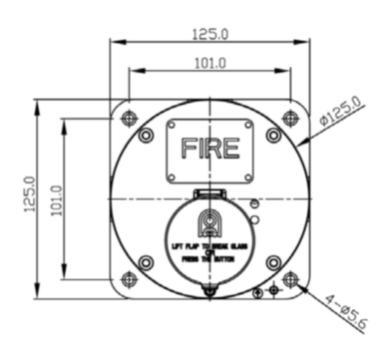












## Explosion Proof Push Button > Stainless Steel **PB125 Series**

### General Information

EX CODE: Exd IIC T4 - T6

CERTIFICATION: ATEX, CQST TYPE: Push Button

### **Mechanical Specifications**

MATERIAL: Enclosure: Stainless Steel 316
ENCLOSURE COLOUR: Red (RAL3001), Yellow (RAL1003)
Blue (RAL5005), Black (RAL9004)

AMBIENT TEMPERATURE: -40 to +70HUMIDITY:  $\leq 95\% \text{ RH}$ WEIGHT: 4.9 Kg / 10.8 lb

DIMENSIONS: Width/Length: 125mm / 4.92" Height: 143mm / 5.65"

INGRESS PROTECTION: IP 66

### **Electrical Specifications**

SWITCH RATING: 30v Dc: 6A (Resistive), 6A (Inductive)

250v Ac: 11A (Resistive), 6A (Inductive)

OUTPUT: On-Off Output (NC/NO)

**TERMINATION:** Accepts upto ≤ 2.5mm<sup>2</sup> incorporating rising clamp protectors

CABLE ENTRY: 4 x M20, M25, 1/2"NPT, 3/4"NPT or Other (Specify)





## Visual Signals EXPLOSION PROOF

### Stainless Steel MANUAL CALL POINT

## Explosion Proof Manual Call Point > Stainless Steel CP125 Series

### Product overview

The CP125 manual call point range has been approved for use in potentially explosive atmospheres and harsh environmental conditions.

Typical applications are Oil and Gas, On-shore and Offshore, Chemical, Petrochemical, Refineries & Marine locations etc. It is compatible for use with a PLC, DCS and ESD systems via 4-20mA output. It is ideally suited for use in fire alarm systems and an addressable option with diode fitted is available.

The range also offers an additional visual LED indication option; red, green (or both) can be fitted. When fault or alarm status arises the green LED will be overridden by the red LED. The design allows for termination inside the unit.

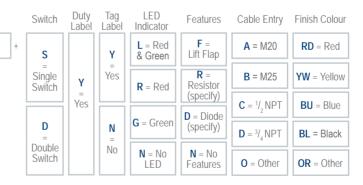
#### Features/Certifications

- Approved by ATEX and CQST
   IMETRO and IECEX (Pending)
- ATEX: II 2G Exd IIC T4 T6 (incorporating IIA & IIB)
- Zones 1&2, Zones 21&22 (Pending)
- Conforms to EN (IEC) 60079-0 EN (IEC) 60079-1 and EN54
- Dustproof & Weatherproof

### CP125 Series > Ordering Information

CP125

Follow the chart (right) to generate your part code.



MODEL CONFIGURATOR (By using the table above, complete this box sequence to select your required manual call point).

Note: All customers orders will be confirmed in writing. Care should be taken that the correct code has been ordered as be-spoke manufactured products cannot be returned for exchange or credit later.

**Kg** 4.9

**₽ °C** -40+70

**IP** 66











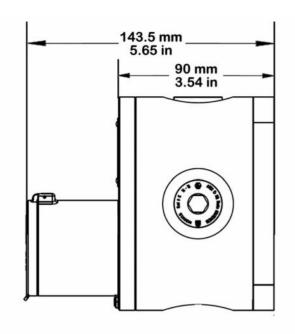


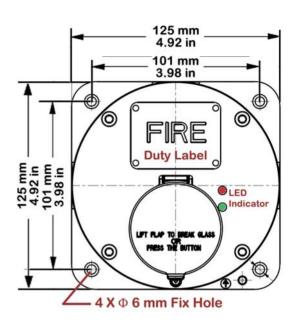












## Explosion Proof Manual Call Point > Stainless Steel CP125 Series

### General Information

EX CODE: Exd IIC T4 - T6

CERTIFICATION: ATEX, CQST
TYPE: Manual Call Point

**Mechanical Specifications** 

MATERIAL: Enclosure: Stainless Steel 316
ENCLOSURE COLOUR: Red (RAL3001), Yellow (RAL1003)
Blue (RAL5005), Black (RAL9004)

AMBIENT TEMPERATURE: -40 to +70HUMIDITY:  $\leq 95\% \text{ RH}$ WEIGHT: 4.9 kg / 10.8 lb

DIMENSIONS: Width/Length: 125mm / 4.92" Height: 143mm / 5.65"

INGRESS PROTECTION: IP 66

**Electrical Specifications** 

SWITCH RATING: 30v Dc: 6A (Resistive), 6A (Inductive)

250v Ac: 11A (Resistive), 6A (Inductive)

OUTPUT: On-Off Output (NC/NO)

**TERMINATION:** Accepts upto ≤ 2.5mm<sup>2</sup> incorporating rising clamp protectors

CABLE ENTRY: 4 x M20, M25, 1/2"NPT, 3/4"NPT or Other (Specify)





### Visual Signals **EXPLOSION PROOF BEACONS**

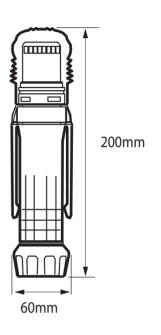
### Explosion Proof > **HZ610 LED Portable Beacon**

The HZ610 series portable LED beacon has been designed for use in Zone 2, Potentially Explosive Atmospheres.

The beacon is ideally suited for marking/warning of temporary hazards in an explosion proof environment.

It is of robust construction and can be set for either a Flashing or Static (Steady On) light mode by twisting the lens to the left or to the right.

The beacon comes with a wide range of accessories making the product extremely versatile in a wide range of applications. The beacon requires two 'D' cell Alkaline batteries for operation (not supplied).



- LED long life
- Zone 2 (Ex) II 3G EX 11C T4 Gc



- Low battery indicator
- Shock resistent
- Ultra quick installation
- Versatile accessory options
- 40 hours life
- 360° light output around the vertical axis
- Dustproof & Waterproof

UV Stable Polycarbonate Lens

UV Stable ABS Body

### HZ610 Series > Ordering Information

Code No:	Voltage:	Light Source:
Amber LED-P-HZ610-01	3v Dc	8 LEDs
Red LED-P-HZ610-02	3v Dc	8 LEDs

#### **Accessories**





Magnetic Clip







Suction Cup



Daylight Hood



50178 Carry Bag

Standard Base

50170



Magnetic Base









APPROVALS and **CONFORMITIES** 

**Kg** 0.35













### **OBSTACLE MARKING**



## Visual Signals OBSTACLE MARKING BEACONS



### Product overview

These portable marking lights are powered by a maintenance free 3.6v Nickel Metal Hydride battery. A mono crystal solar module fitted inside the lens keeps the battery fully charged and can provide enough power to keep the beacon operating non stop for 400 hours

in continuously cloudy and rainy days. A built in photocell switches the beacon on & off at dusk and dawn. The On/Off level is between 70/100 lux and is automatic. The unit incorporates an automatic switch after 18 hours in the dark to protect the battery life.

# nuously cloudy and rainy built in photocell switches con on & off at dusk and The On/Off level is between

### 10 Candela > Ordering Information

Code No:	Voltage:	Light Source:	Effective Cd:	
OLF-PS-10-02	3.6v / 10AH	LED	10	

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING

02

#### Features

- Conforms to ICAO
   Annexe 14 Volume 1,
   Low Intensity Type A
- LED Long life and low maintenance
- · Rugged construction
- 360° light output around the vertical axis
- Dustproof and Weatheproof

#### Materia

Cast Aluminium with UV Stable

Polycarbonate Lens

**Kg** 2.3









APPROVALS and CONFORMITIES











# Obstacle Marking : Low Intensity Mobile Obstacles > **40 Candela**

# Product overview

This range of beacons has been designed primarily for use on vehicles. There are two mounting options, either a permanent fix by two screws into the base of the beacon or a magnetic base. Both beacons are pulsed through an

internal circuit to generate an On/ Off cycle to product the required flash rate. The typical application is for marking mobile obstacles in or around aerodromes.

Emergency & Security vehicles are designated with Blue lenses and all others shall be Amber. The minimum light output for each colour is 40 Cd.

# 40 Candela > Ordering Information

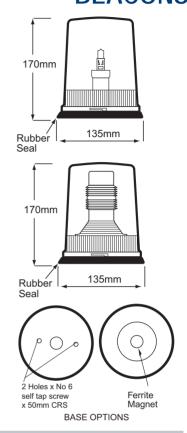
Code No:	Voltage:	Light Source:	Current:	Effective Cd
Magnetic Bas	e			
FF98-34-01	12v Dc	Ba15d x 21w	1.75 A	40
FF98-38-01	24v Dc	Ba15d x 21w	0.88 A	40
FF98-35-03	12v Dc	H1 T/H x 70w	4.70 A	40
FF98-40-03	24v Dc	H1 T/H x 70w	3.00 A	40
Permanent Fi	x			
FF98-37-01	12v Dc	Ba15d x 21w	1.75 A	40
FF98-39-01	24v Dc	Ba15d x 21w	0.88 A	40
FF98-36-03	12v Dc	H1 T/H x 55w	4.70 A	40
FF98-41-03	24v Dc	H1 T/H x 70w	3.00 A	40

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING





# Visual Signals OBSTACLE MARKING BEACONS



## **Features**

- Conforms to ICAO Annexe 14 Volume 1, Low Intensity Type C
- Magnet base provides a 35
   Newton force calculated to provide a fix on flat surfaces of upto

   80 MPH (subject to conditions)
- Permanent fix base is supplied with 140mm of flying lead with male & female bullet connectors
- 360° light output around the vertical axis
- 180º light output above the horizontal axis
- Dustproof and Weatherproof

## Materia

UV Stable Polycarbonate Lens Acetal Base with Neoprene Cover

























# Visual Signals OBSTACLE MARKING BEACONS

# Obstacle Marking: Low Intensity Lights > 10 & 32 Candela Series

# Product overview

This range of Obstacle Lights have been designed to offer a more cost effective option for compliance to the low intensity ICAO regulations. The 10 and 32 Candela both incorporate low consumption Red LED arrays. A power rating of 8 watts for the 10 Cd and 12 watts for the 32Cd

lend themselves for use with photocell control if required. The typical application is marking fixed objects in or around aerodromes where the object is a less extensive one and its height above the surrounding ground is less than 45m. These beacons can be used in conjunction with medium and high intensity lights.

# 10 & 32 Candela > Ordering Information

Code No:	Voltage:	Light Source:	Mode:	Current:	Effective Candela:
OLS-02-10-02	24v Ac/Dc .~_	LED	Static	0.33 A	10
OLS-03-10-02	48v Ac/Dc .~_	LED	Static	0.16 A	10
OLF-02-10-02	24v Ac/Dc .~_	LED	Flashing	0.33 A	10
OLS-04-10-02	230v Ac/Dc	LED	Static	0.04 A	10
OLF-04-10-02	230v Ac/Dc -~-	LED	Flashing	0.04 A	10
OLS-02-32-02	24v Ac/Dc .~.	LED	Static	0.50 A	32
OLS-03-32-02	48v Ac/Dc .~_	LED	Static	0.24 A	32
OLF-02-32-02	24v Ac/Dc .~_	LED	Flashing	0.50 A	32
OLS-04-32-02	230v Ac/Dc	LED	Static	0.05 A	32

156mm

205mm

205mm

115mm

3 holes

x 96 PCD to
accept No 6
self tap screw
[external fitting]

## Features

- Conforms to ICAO Annexe 14
   Volume 1, Low Intensity
   Type A (10Cd) & Type B (32Cd)
- Continuously rated
- LED long life and extra bright
- Suitable for surface, conduit box or wall mounting
- Optional wall bracket & guard available - see accessories
- 2 point fix
- 360° light output around the vertical axis
- Dustproof and Weatherproof

## Materia

**UV** Stable Polycarbonate

Lens & Base

Stainless Steel Sealing Band

**Kg** 0.6

√50/60 **Hz** 



**IP** 66

















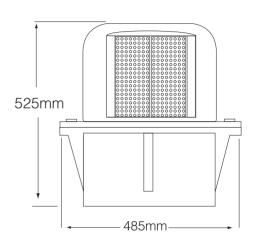
# Visual Signals OBSTACLE MARKING BEACONS

# Obstacle Marking: Medium Intensity Lights > 2000 Candela

# Product overview

The LED 2000 Series conforms to the requirements of the ICAO for aviation obstruction marking. Designed for use on tall buildings, masts and pylons making it ideal for remote or inaccessible locations. The LED pentagon

shaped tower incorporating 800 high power LEDs, allows for a perfect 360° beacon which can be visible over 15 miles in optimum weather conditions. 3 metres of 1.5 SY steel braided cable is supplied attached to the beacon assembly making entry to the beacon unnecessary.



# 2000 Candela > Ordering Information

Code No:	Voltage:	Light Source:	Effective:	
LED-04-2000-02	230v Ac ~	LED output	2000	

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING

02

## eatures

- Conforms to ICAO regulation Annex 14 Volume 1 for steady, Medium intensity Type C beacons
- LED long life and extra bright
- Suitable for surface mounting
- 360° light output around vertical axis
- · Dustproof and weatherproof

## Materia

Cast Aluminium

UV Stable Polycarbonate Lens

**Kg** 19

√50/60 **Hz** 



**IP** 66













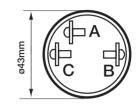




# **ACOUSTIC**



# Acoustic Signals Piezo BUZZERS



Connections for 115v & 230v Tone Terminals Pulsed A + B Continuous A + C

Connections for 12v to 48v Tone Terminals Pulsed B + A Continuous B + C

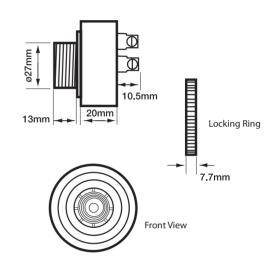
# Acoustic Signals Piezo Buzzers > **AE20M Series**

# Product overview

The AE20M piezo miniature buzzer range is a compact, low cost audible signalling solution for local indication where very low current consumption may be a requirement. A threaded

locking ring allows for easy installation for all panel mount installations.

The unit offers a single stage alarm, either a fast pulsed or continuous tone selectable by a three pin connection combination.



# AE20M Series > Ordering Information

Code No:	Voltage:	Frequency:	Current:	dB:
AE20M-12	10-20v Dc	2900 Hz	25 mA	90
AE20M-24	10-28v Dc	2900 Hz	25 mA	85
AE20M-48	6-48v Dc	2900 Hz	35 mA	82
AE20M-115	60-120v Ac ~	2900 Hz	25 mA	90
AE20M-230	130-240v Ac ~	2900 Hz	25 mA	90
Frequency +/- 50	00 dB at prime v	oltage +/- 3dB		

## Features

- · Continuously rated
- Economical
- Suitable for panel mounting only
- Two tone sound option
- Wide operating voltage
- Compact design
- Locking ring allows for easy installation

LV W / I		al Ka
1144		

ABS Plastic

**Kg** 0.08

 $\sim$  50/60 Hz



**IP** 55

dB 80/90









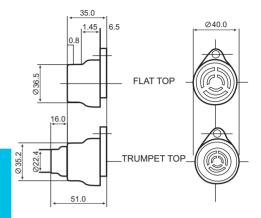








# Acoustic Signals INDUSTRIAL BUZZERS



# Acoustic Signals Industrial Buzzers > **AE30M Series**

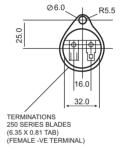
# Product overview

The AE30M Flat top & Trumpet top miniature buzzers are suitable for automotive, security and light industrial applications where local indication is required.

The buzzers offer a single stage alarm and produce a rich, high quality and low frequency signal when compared to other piezo type alarms.

The slightly lower dB is more than compensated by lower frequency of sound output produced. The single point fix and compact design allows for installation in most locations. The units are colour coded, Black = 12vDc & Red = 24vDc. These products were formerly supplied by Klaxon.

Current:



## **Features**

- Continuously rated
- Economical
- Suitable for panel or surface mounting
- Produces a high quality sound
- Termination by male & female spade terminals
- Wide operating voltage
- Compact design

Flat Top			
AE30M-FT-01	6-14v Dc	450Hz	30 mA •
AE30M-FT-02	10-28v Dc	450Hz	25 mA ••
Trumpet Top			
AE30M-TT-01	6-14v Dc	450Hz	30 mA •
AE30M-TT-02	10-28v Dc	450Hz	25 mA ••

• at 12v Dc --- at 24v Dc ---

Frequency +/- 20 Hz dB at prime voltage +/- 3dB

AE30M Series > Ordering Information

Voltage:

## Materia

**ABS Plastic** 

**Kg** 0.28

Code No:



**IP** 34

Frequency:

**dB** 80/90













# Acoustic Signals INDUSTRIAL BU77FRS

AE36M





46.00 60.35 CRS

60.35 CRS

LEAD LENGTH
150,00 ± 10.00

AE35M

AE35M

AE36M

# Acoustic Signals Industrial Buzzers > AE35M & AE36M Series

# Product overview

The AE35M (P40) and AE36M (P60) are piezo buzzers designed for use in security, process control and a wide range of industrial applications where a compact but more powerful acoustic signal is required.

The units offer a single stage alarm and can either be pulsed or continuous, selection made by a third wire. The AE35M is installed using the external mounting lugs. The AE36M uses a separate mounting plate where the main buzzer can be snap fitted into place allowing for termination inside the enclosure. These products were formerly supplied by Klaxon.

# 83.0 63.0 83.0 83.0

# AE35M & AE36M Series > Ordering Information

Code No:	Voltage:	Frequency:	Current:
AE35M-02	6-28v Dc	3200Hz	50 mA •
AE36M-02	6-28v Dc	3200Hz	57 mA •

• At 24v Dc ---

Frequency +/- 500 dB at prime voltage +/- 3dB

## **Features**

- Continuously rated
- Higher sound output
- Economical
- AE35M: Suitable for panel or surface mounting
- AE36M: Suitable for panel, conduit box or surface mounting
- Wide voltage range

## Materia

**ABS Plastic** 

Kg 0.06 AE35M 0.10 AE36M



**IP** 30

dB 98 AE35M 105 AE36M











# AE95M

# Acoustic Signals INDUSTRIAL BUZZERS



ABHF8

# Acoustic Signals Industrial Buzzers > AE95 & ABHF8 Series

# Product overview

The AE95 and ABHF8 series are electrical/mechanical buzzers suitable for a wide range industrial signalling applications where a low frequency and penetrating audible signal is required.

The units offer a single stage alarm, once energised an electromagnet causes the diaphragm to vibrate creating a unique acoustic tone.

They can also be pulsed via a remote source (ie control panel/plc etc) to give an intermittent signal if required.

The AE95 can also be used in automotive applications (reversing alarm/forklift trucks etc) and has an optional back box that will be required for weatherproof applications which allows for termination inside the protected enclosure.

The ABHF8 is a weatherproof unit also suitable for light marine applications (small boats/barges etc) and is encased in a brass enclosure making it suitable for corrosive environments. Design allows for termination inside the enclosure.

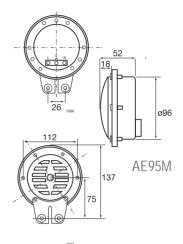
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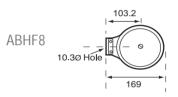
0.8 A

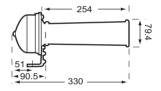
0.4/0.2 A

0.80 A

0.4/0.2 A







## Features

- Rugged construction
- Wide voltage range
- These units are rated
   15 mins On max / 1 min Off minimum
- AE95 Suitable for 2 point automotive fix and Weatherproof when fitted with AE95-BB back box
- ABHF8 Suitable for surface single point fix
- Dustproof and Weatherproof

## Matoria

AE95 Powder Coated Mild Steel

**ABHF8** Powder Coated Mild Steel in a Brass outer enclosure

Kg 0.68 (AE) 2.10 (AB)

Code No:

AE95-05

AE95-06

AE95-BB

ABHF8-1437

ABHF8-1436

AE95 Series (AE)

**ABHF8 Series (AB)** 

√ 50/60 Hz

AE95 & ABHF8 Series > Ordering Information

24/48v Ac/Dc .~.

115/230v Ac/Dc.~.

24/48v Ac/Dc ~~

115/230v Ac/Dc ~

Weatherproof back box •

Voltage:



Frequency:

420 Hz

420 Hz

420 Hz

420 Hz



dB 111

MARINE



ON 15 MINS







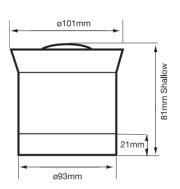




# Acoustic Signals **ELECTRONIC SOUNDERS**







# Acoustic Signals Electronic Sounders > **AE40M Series**

# Product overview

The AE40M range of electronic sounders are suitable for a wide range of fire and Industrial signalling applications where a low cost, energy efficient and flexible signalling solution is required.

The DC unit offers a two stage alarm with a choice of eight separate

tones, selectable in the unit via a dip switch.

The shallow base design allows for termination inside the enclosure through the rear of the base only. The deep base design allows for termination via two M20 knockouts on the side & two 10mm entries in the rear. The AC unit offers a single stage alarm with a choice of eight separate tones.

# 40mm Fixing Options

# AE40M Series > Ordering Information

Code No:	Voltage:	Frequency:	Current:
AE40M-24R-SB	10-30v Dc	800-2580 Hz	32 mA •
AE40M-24R ●●	10-30v Dc	800-2580 Hz	32 mA
AE40M-230R ••	98-260v Ac ~	800-2580 Hz	50 mA

• Current at 24v Dc --- •• Deep Base

Note: Decibels are subject to prime voltage and tone selected

## Features

- Continuously rated
- · Higher sound output
- Economical
- Suitable for panel, conduit box or surface mounting
- Deep base version Dustproof and Weatherproof

## Materia

**ABS Plastic** 

**Kg** 0.35 DC 0.40 AC























# Acoustic Signals **ELECTRONIC SOUNDER**

# Acoustic Signals Electronic Sounder > **AE100M Series**

The AE100M series is suitable for Industrial & marine signalling applications where an audible signal is required to operate in very harsh enviromental conditions.

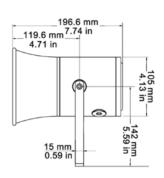
The unit incorporates a three stage alarm option with sixty three tones to choose from which includes four tones that can be The sounder is supplied with a recorded or customised by the installer.

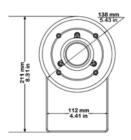
All tones can be pre-set during installation.

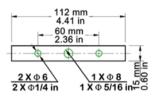
The units also have the ability to be fitted with a telephone initiation function and can be used as the second ring output indicator for telephones when installed in very noisy environments.

The design allows for termination inside the enclosure.

mounting bracket as standard.







- Continuously rated
- · Very high sound output
- 5-20 W power consumption
- Termination up to 2.5 mm<sup>2</sup>
- 2 x M20 cable entry options
- Deep base version Dustproof & Weatherproof

# AE100M Series > Ordering Information

Code No:	Voltage:	Frequency:	Current:
AE100M-02	12-48v Dc	300 - 2900 Hz	0.91 / 0.96 / 0.50 A
AE100M-04	100-240v Ac ~	300 - 2900 Hz	100 mA •
• at 230v Ac ~			

Enclosure: UV Stable,

Flame retardent polycarbonate

Bracket: Stainless 316

**Kg** 1.5

 $\sim$  50/60 Hz



**IP** 66

**dB** 123







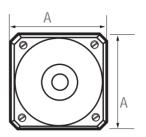








# Acoustic Signals ELECTRONIC SOUNDERS



# Electronic Sounders > Klaxon AE105, AE110 & AE120

# Product overview

The AE105, 110 & 120 'NEXUS' range of electronic sounders are suitable for a wide range of fire and Industrial signalling applications where a high degree of signalling versatility is required in the environment.

The units offer a three stage alarm with sixty four separate tone options that are automatically synchronised on multi unit

installations, selectable inside the unit via a six way dip switch. The range has been designed to allow a 'first fix' wiring solution. Connections are made in the base during initial wiring phase which results in faster and more reliable installation.

The 'sounder head' is then fixed into position using four captive, quarter turn fasteners, giving accurate seal compression for weatherproofing.

There are five cable entry options allowing for termination inside the enclosure.

## **Dimensions** 105 REF 110&120 136.2 166.3 В 124.5 149.5 C 35.0 38.6 D 118.0 99.5 76.5 145.0 5.0 6.0

Fixing Holes

Note: 105 Fixing detail is shown

# AE105, AE110 & AE120 Series > Ordering Information

Code No:	Voltage:	Current:	dB at 1m:
AE105-02	10-60v Dc	8-40 mA	100-113
AE105-04	115/230v Ac ~	40 mA	100-113
AE110-02	10-60v Dc	10-50 mA	104-116
AE110-03	24-48v Ac ~	10-50 mA	104-116
AE110-04	115/230v Ac ~	40 mA	104-116
AE120-02 AE120-04	10-60v Dc 115/230v Ac ~	120-550 mA 200 mA (max)	110-120 110-120

Note: Decibels and current are subject to voltage and tone selected

## Features

- Continuously rated
- Suitable for surface, conduit box or wall mounting
- Wide operating voltage
- Volume control adjustment (-20dB)
- EN54-3 Type B approved for Fire Alarm use (Dc Only)
- Vds & NF approved (Dc Only)
- Dustproof and Weatherproof

## Materia

Flame Retardent ABS

**Kg** 0.8, 1.2, 2.0





**IP** 66



















# Visual & Acoustic Signals ELECTRONIC SOUNDER & BEACON COMBINED

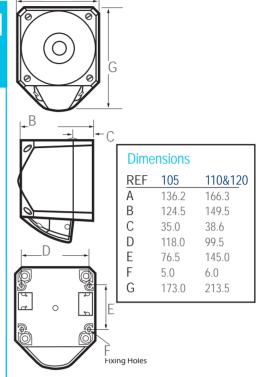
# **Electronic Sounder & Beacon Combined** Klaxon > AE L/X 105, 110, 120

The AE L/X 105, 110 & 120 'NEXUS' range of electronic sounder/beacons are suitable for a wide range of fire and Industrial signalling applications where a high degree of signalling versatility is required in the environment.

The units offer a three stage alarm with sixty four separate tone options that are automatically synchronised on multi unit installations, selectable inside the unit via a six way dip switch.

The range has been designed to allow a 'first fix' wiring solution. Connections are made in the base during initial wiring phase which results in faster and more reliable installation. The 'sounder head' is then fixed into position using four captive, quarter turn fasteners, giving accurate seal compression for weatherproofing. There are five cable entry options allowing for termination inside the enclosure.

This range offers a choice of either LED or Xenon visual warning. LED being the more power efficient option, Xenon giving a more industrial warning signal.



# AE L/X 105, 110, 120 Series > Ordering Information

Code No:	Voltage:	Light Source:	Current:	dB at 1m:
AEL105-02	10-60v Dc	LED	26-58 mA •	100-113
AEX105-02	10-60v Dc	Xenon	358-390 mA •	100-113
AEX105-04	115/230v Ac ~	Xenon	110 mA	100-113
AEL110-02	10-60v Dc	LED	28-68 mA •	104-116
AEX110-02	10-60v Dc	Xenon	360-400 mA •	104-116
AEX110-04	115/230v Ac ~	Xenon	110 mA	104-116
AEL120-02	10-60v Dc	LED	138-568 mA •	110-120
AEX120-02	10-60v Dc	Xenon	470-900 mA •	110-120
AEX120-04	115/230v Ac ~	Xenon	110 mA	110-120

Subject to voltage, tone selection and LED beacon set to flash mode.

ADD THE FOLLOWING LENS CODES TO THE PRODUCT WHEN ORDERING











Note: 105 Fixing detail is shown

- Continuously rated
- Suitable for surface, conduit box or wall mounting
- · Wide operating voltage
- Audible & visual warning signal
- Volume control adjustment (-20dB)
- EN54-3 Type B approved for Fire Alarm use - Dc Only
- Vds & NF approved Dc Only
- · Dustproof and Weatherproof

Flame Retardent ABS

**Kg** 0.8, 1.2, 2.0





**IP** 66



A MARINE











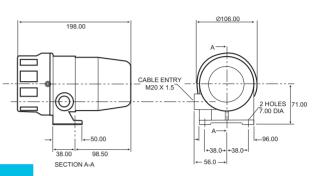


# Acoustic Signals INDUSTRIAL SIDENS









# Acoustic Signals Industrial Sirens > AS100M & AS200M Series

# Product overview

The AS100M & AS200M sirens were designed for a wide range of industrial signalling applications where a powerful high output signal is required.

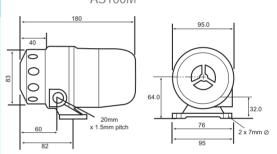
The sirens incorporate a fractional horse power motor that drives an internal impellor at high RPM forcing air through the slotted front cover creating its unique penetrating sound.

The units offer a single stage alarm when energised but may be pulsed or modulated by simply turning the power on/off to produce the classic 'wailing' siren sound.

The units are of robust construction and suitable for use in harsh environmental conditions.

Design allows for termination inside the enclosure via 1 x M20 conduit entry.

# AS100M



- Continuously rated
- Suitable for wall or pole mounting
- Omni-directional 360° coverage
- · Very high sound output
- Dustproof and Weatherproof (when mounted with impellor below black ABS casing)

## Motoria

Cast Aluminium Body

ABS Rotor, Stator and Cover

# $AS100M \ \& \ AS200M \ Sirens > {\tt Ordering \ Information}$

Code No:	Voltage:	Frequency:	Current:	
AS100M (Klaxon Mono	72)			
AS100M-115	115v Ac/Dc	1800 Hz	1 A	
AS100M-230	230v Ac/Dc_~_	1800 Hz	0.5 A	
AS200M (Klaxon Duplo	<b>)</b> )			
AS200M-115	115v Ac/Dc -=-	1600 Hz	2.7 A	
AS200M-230	230v Ac/Dc	1600 Hz	1.2 A	

Kg <sup>1.7</sup> AS100M <sub>2.0</sub> AS200M

 $\sim$ 50/60 **Hz** 

°C -30+45

**IP** 65

dB 120dB AS100M 127dB AS200M







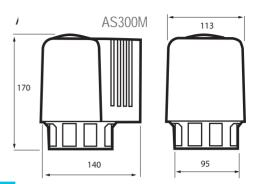




# AS300M



# Acoustic Signals INDUSTRIAL SIRFNS



# Acoustic Signals Industrial Sirens > AS300M & AS400M Series

# Product overview

The AS300M & AS400M range of sirens were designed for a wide range of industrial signalling applications where a very powerful high output signal is required.

The sirens incorporate a fractional horse power motor that drives an internal impellor at high RPM forcing air through the slotted front cover creating its unique penetrating sound.

The units offer a single stage alarm when energised but may be pulsed or modulated by simply turning the power on/off to produce the classic 'wailing' siren sound. The units are of robust construction and suitable for use in harsh environmental conditions.

The AS400M siren produces a low frequency sound that is ideally suited for signalling over medium size areas. For maximum coverage it is advised that the unit be raised above the surrounding buildings. Design allows for termination inside the enclosure. The AS300M is supplied with a 1m flying lead.

# 250 Cable entry 20mm Type 3 Posns AS400M 3 Holes ø7.10 Equi-spaced on a PC ø195.20

## **Features**

- · Continuously rated
- Suitable for wall or pole mounting
- Omni-directional 360° coverage
- Very high sound output
- Dustproof and Weatherproof (when mounted as per instructions)

# AS300M & AS400M Sirens > Ordering Information

Code No:	Voltage:	Frequency:	Current:
AS300M-115	115v Ac/Dc_~_	1680 Hz	2.7A
AS300M-230	230v Ac/Dc_~_	1680 Hz	1.0A
AS400M-24 •	24v Dc	900 Hz	8.0A
AS400M-115 •	115v Ac/Dc _~_	900 Hz	3.0A
AS400M-230 •	230v Ac/Dc_~_	900 Hz	1.4A

# V 2 3 U U V

AS300M

ABS Construction

**AS400M** 

Cast Aluminium Body & Noryl Rotor

Kg 1.8 AS300M 4.5 AS400M √ 50/60 Hz

°C -30+45

**IP** 55/65 •













# Acoustic Signals INDUSTRIAL

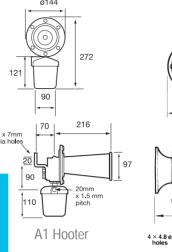
# **HOOTERS**

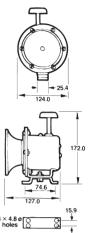






ES Manual Hooter





ES Manual Hooter

# Acoustic Signals Industrial Hooters > ES Manual & A1 Series

# Product overview

The ES is a manually operated hooter producing the unique 'Klaxon' sound for applications where a power supply is unavailable.

Typical applications include small boats, canal barges, mine trucks and fork lift trucks.

The ES gives a powerful sound which, with its low frequency tone, makes its an effective warning device.

The A1 is a powerful motor driven hooter giving the unique 'klaxon' sound.

The high output, low frequency resonating sound gives a powerful warning tone.

With a sound output of 120dB, it can cut through background noise in almost any environment and is ideal for use as a time signalling alarm or process alarm in the noisiest factory.

In addition, the A1 can be used on barges, work boats and dock sides and for other similar marine applications.

## **Features**

## A1 Hooter

- Powerful, high output
- 120 dB
- Robust construction
- Weatherproof to IP65

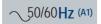
## **ES Manual Hooter**

- Manual operation no power supply required
- Lightweight and compact
- Robust and reliable
- IP54

# ES Manual & A1 Series > Ordering Information

Code No:	Voltage:	Frequency:	Current:	
A1 Hooter (A1)				
AHA1-2000	12v Dc	420 Hz	5.0 A	
AHA1-2001	24v Dc	420 Hz	2.30 A	
AHA1-2002	48v Dc	420 Hz	1.30 A	
AHA1-2004	115v Ac ~	420 Hz	0.84 A	
AHA1-2003	230v Dc	420 Hz	0.80 A	
AHA1-2006	230v Ac ~	420 Hz	0.76 A	
ES Manual Hooter	(ES)			
AHES-1290	n/a	150-350 Hz	n/a	

Kg <sup>2.0</sup> (A1) (ES)





IP 65 (A1) 54 (ES)



## A1 Hooter

Die cast aluminium & Zinc

Mild Steel

**ABS Plastic** 

**ES Manual Hooter** 

Mild steel



















# AP Series SK Series

# Acoustic Signals Industrial Air Horns > AP and SK Series

# Product overview

The AP range of air horns are suitable for industrial environments where very high sound and very low frequency outputs are required for signalling over medium to larger size areas.

Operated from a compressed air supply, being non electrical, the units produce the classic 'fog horn' sound.

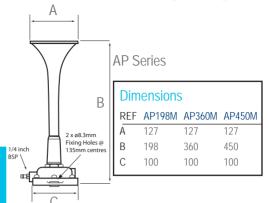
The SK range of air horns are suitable for marine and very harsh environments where a very high sound and very low frequency outputs are required for signalling over medium to larger size areas.

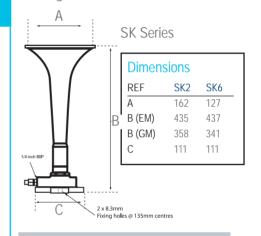
Operated from a compressed air supply, being non electrical, the units produce the classic 'fog horn' sound.

The SK also offers a mini compressor for locations without a compressed air supply, suitable for SK2 version only.

# Acoustic Signals INDUSTRIAL

# **AIR HORNS**





## **Features**

- · Continuously rated
- Robust construction
- Very high sound output
- Very low frequency tone
- Wide operating air pressure
- Suitable for wall or pole mounting
- Dustproof and Weatherproof

# AP and SK Series > Ordering Information

Code No:	Air Pressure:	Air Consumption:	Frequency	: dB:
AP198M	55-140 psi	50-133 L/min	660 Hz	125
AP360M	55-140 psi	50-133 L/min	387 Hz	125
AP450M	55-140 psi	50-133 L/min	307 Hz	125
APSK6-GM •	50-100 psi	50-100 L/min	370 Hz	132
APSK2-GM •	10-30 psi	50-100 L/min	370 Hz	120
APSK2-EM •	10-30 psi	50-100 L/min	315 Hz	134
APSK6-EM •	50-100 psi	50-100 L/min	315 Hz	124
Code No:	Air Pressure:	Voltage:	Current:	
<ul> <li>APSK-Compresso</li> </ul>	or 14 psi	24v Dc	36 A	
(49mm o/d, 116mm L, 0.41 kg) To obtain optimum dB performance the				

**AP Series** 

Aluminium, Brass & Phosphur Bronze

**SK Series** 

Brass/Phosphur bronze

Kg <sup>0.85</sup> (AP) Average 1.95 (SK) Average

°C -30+70 (AP)

**IP** 66





APPROVALS and CONFORMITIES



airhorn may require fine tuning when used with a compressor.









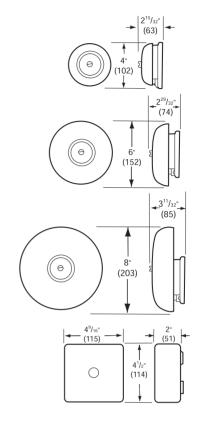
# Acoustic Signals Industrial BFLLS



# Product overview

The Adaptabel range is a high quality solenoid driven bell designed for use in commercial, industrial and transportation applications. With a choice of three gong sizes, this unit delivers a clear, loud ring which is free from

mechanical clatter. The bigger the gong, the deeper, louder and more penetrating the sound. When fitted with the optional back box, the units are weatherproof and suitable for mounting in exposed locations. Red version available in 6" 24v Dc.



# Adaptabel Series > Ordering Information

Code No:	Voltage:	Size:	Db:	Current:
A4B-K-12DC	12v Dc	101mm/4"	99dB	125 mA
A4B-K-24AC	24v Ac ~	101mm/4"	99dB	-
A4B-K-24DC	24v Dc	101mm/4"	99dB	62 mA
A4B-K-115AC	115v Ac ~	101mm/4"	99dB	34 mA
A6B-K-24AC	24v Ac ~	152mm/6"	101dB	-
A6B-K-24DC	24v Dc	152mm/6"	101dB	125 mA
A6B-K-24DCR	24v Dc	152mm/6"	101dB	-
A6B-K-115AC	115v Ac ~	152mm/6"	101dB	34 mA
A6B-K-230AC	230v Ac ~	152mm/6"	101dB	22 mA
A8B-K-24DC	24v Dc	203mm/8"	102dB	62 mA
A8B-K-230AC	230v Ac ~	203mm/8"	102dB	22 mA
ABK-WPBB	Weatherproof	f backbox•	50180 Cage	guard

Note: These bells are available until stocks are exhausted.

(This information is correct as of December 2012).

## Features

- Supplied with a universal mounting plate for all installation options
- Rugged die-cast construction
- Robust and reliable
- Wide range of voltages available
- Cabling entries x 3 (3/4"NPT or M20)
- Optional IP65 weatherproof back box

## Materia

Steel Gong

**Kg** 1.0/1.4/2.3

°C -35+66

**IP** 44/65 •

**dB** 99-102







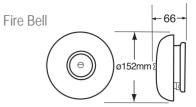




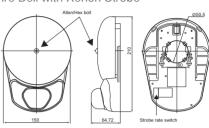




# Acoustic Signals FIRE BELLS



Fire Bell with Xenon Strobe



# Acoustic Signals Fire Bell > A6FB Series

# Product overview

The A6FB fire bell is an economy bell suitable for fire alarm signalling applications. It produces the traditional alarm bell sound and offers easy installation. The bell has the following mounting options: 50mm and 60mm pitch holes suitable for BESA box mount; 4" square or single mount Gang Box.

The Fire Bell with Xenon Strobe is a combined bell and xenon strobe with high sound and light output to assist in the design of DDA-compliant fire systems.

Fire Bell with Xenon Strobe

Using the market leading aluminium gong for excellent sound output and a clear lens to maximise light output. The A6FB-S is ideal for installations that call for a traditional bell tone but require visual alarm indication as well.

## **Features**

## Fire Bell

- Diode polarised
- 98+3 dB
- Terminal allows for 2+ and 2- cabling, up to 2.5mm<sup>2</sup>
- IP42

## Fire Bell with Xenon Strobe

- Bright strobe in clear lens for maximum light output
- Selectable flash rate 30/60 per min
- Low current consumption
- Single point of installation minimises wiring and associated costs
- IP21

# A6FB Series > Ordering Information

Code No:	Voltage:	Current:		
Fire Bell (F)				
A6FB-24DC-DP	18-28v Dc	15mA		
		at 24v Dc		
Fire Bell with Xenon Strobe (FX)				
A6FB-S-24-05	24v Dc	See below •		
Current consumption				
<ul><li>Bell only</li></ul>		11 mA		
Combined Bell and Xenon Strobe		30 flashes / min 30 mA		
		60 flashes / min 50 mA		

## Materia

## Fire Bell

Steel gong and plastic back box

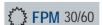
# Fire Bell with Xenon Strobe

Aluminium gong

Kg 0.5 (F) 0.58 (FX)

oC -20+45 (F) 20+55 (FX) IP 42 (F)

dB 98±3 (F) (FX)

















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