

CONTENTS MOFLASH

12

and an interest Selection & Application Environmental Factors > Types of Beacons > Levels of Brightness > Lens Colour > Audibility > Installation > Marks & Directives > IP Ratings > Icon Legands P 04-09 Flashing Filament Beacon Range FF125 Series > FF125ES Series > FFA125 Series > FF201-200 Series > FF401-400 Series P 10-16 LED Beacon Range LED02/03 Series > LED125 Series > LEDA125 Series > LEDD125 Series > ₽ 17-25 LED201/200 Series > LED400/401 Series > LEDA600 Spectrum Rotating Beacon Range R201/200 Series > R4201/200 Series > R401/400 Series P 26-28 StaticFilament Beacon Range SF125 Series > SF401/400 Series > SF401/400 Series P **29-33** ₽ 34-44 Xenon Beacon Range Xerion beacon Hange X75 Series > X100 Series > X125 Series > X125ES Series > X195 Series > X201/200 Series > X250 Series > X401/400 Series > X501/500 Series Explosion Proof Range Xenon Beacon > IS Mini LED Beacon > Audible Sounder > UL Explosion Proof Bell > UL Explosion Proof Buzzer ₽ 45-51 Obstacle Marking Light Range ICAO Approved LED501/500 Series > FF98MB Series > FF98SF Series > LED-04-2000-02 P 52-54 Automotive Beacon Range Rotating MB Range > Rotating SF Range > Xenon MB Range > Xenon SF Range P 55-59 Acoustic Range Prezo Ruzzer Range > Industrial & Marine Buzzer Range > Electronic Sounder > Industrial & Marine Air Horn Range >Industrial Hooters Range > Fire Bell > Industrial & Marine Bells P 60-73 Accessories Range Wall Brackets > Cage Guards > Pipe Brackets > Anti Vibration Mounts > Domes P 74-76

11

www.moflash.co.uk T ++44 (0) 121 707 6681

INTRODUCTION MOFLASH

Welcome to the world of Moflash

Moflash Signalling is one of the largest independent manufacturerers 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 1997, the company has grown dramatically over the last 10 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 Homs and Piezo devices for the following markets

industrial signalling process control status indication fire and security hazardous location obstruction marking marine automotive safety and protection

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

⊤ ++44 (0) 121 707 6681

With its programme of development Moflash is in a strong position to keep meeting the increasing demands of a safety conscious world with its dedicated team based in the UK and the excellent distribution partners spread across 30 countries worldwide. Our products are always available to meet the customer's needs.

Motlash 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 you requirements via our contact page on the Motlash web site. 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 10 years ago: it underpins our focus and passion for our industry. We believe the next ten years may be even brighter.



MOFLASH

www.moflash.co.uk

SELECTION & APPLICATION

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 signall 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 mair 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 shopflo 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 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 operat
- · 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 Beacons - 'FF'

Operating through an internal circuit, which simply cycles the bulb On, and Off. These type of beacons generally give a much lower light output as it takes longer for the bulb to fully illuminate itself. These units available with either a filament or tungsten haloger 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 i.e. a control panel, giving the unit more flexibility. These units are available with either a filament of 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 & 501/500 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.

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 bea 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' encols

Level of Brightness

Brightness depends upon the type of beacon chosen the rated power output of the unit i.e.: Watts and Joules, the distance that the signal is observed from and the dome colour of the beacon used. In general if and the other other other of the beacter used, in general in 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 i.e. 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

HALOGEN XENON COLOUR FILAMENT Clear 100% 100% 100%

Different dome colours are used to convey different messages to the observer

RED = Serious danger act now! AMBER = warning proceed with care GREEN = ok proceed as normal BLUE = specific process notice/warning Alternatively Green colour beacons are used by Doctors and Veteriniarns and Blue beacons for Police and Fire departments.

SELECTION & APPLICATION

MOFLASH

Audibility

Simply producing an audible sound 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 ba
- 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 out 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 Jamps 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.

SELECTION & APPLICATION

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 ranging 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.

MOFLASH

IEC 73 - 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.

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 1

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 hazardous 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 Propane Ethylene Hydrogen IIB IIC

IP Ratings

In Fractings 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.

Second Number

IP

0 ly.

1

6

8

ection Against Liquids

Test

No protection

d against vertically rops of water



H Totally protected against dust

6

Ø Protected against direct sprays of water up to 15° from the vertical 2 Protection against sprays 60° from the vertical Ø 3 ◬ Protection against water sprayed from all directions -limited Ingress permitted 4 8 ◬ A Protection against low pressure jets of water sprayed from all directions – limited Ingress permitted 5

otection against strong pressure jets of water eg for se on shipdecks – limited Ingress permitted 4

- Protection against the effects of temporary immersion between 15cm and 1m. Duration of test 30minutes - 8° 🖋
- Protection against long periods of immersion under pressure ° **7**0
- Protection against strong pressure 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) Ø 9K

SELECTION & APPLICATION

MOFLASH

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 suitably qual Envineer and installed according to the relevant standards.

SELECTION & APPLICATION MOFLASH

Buzzers Either Electro Mechanical type where the diaphragm is Either Electro wechanical 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 ouput with low fequency sound and are of robust contruction. Piezo versions are relatively low dB and high frequency and are only suitable for local signaling applications.

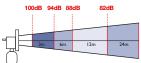
Electronic Sounders

The Electronic Sounder is a versatile acoustic signal incorporating 8 individual tones. It incorporates a medium dB ouput with a distinctive multi-tone requency 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.

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

Bells are a cost effective traditional signalling device with a wide range of signalling applications. They offer medium dB ouput 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 homs producing the unique and never forgotten 'Klaxon' sound used the world over. A serated tortor driven against a hardened steel diaphragm stud creates a high dB unput with low frequency sound. These types of signals are ideal for indoor and outdoor applications where a rugged and durable sounder is required.



m												dE	3 (<i>l</i>	4)												
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

Bells

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	

FPM 60	Single or Double flashes per minute. Shows the unit has a	Flashes Simples o Dobles por minuto. Muestra que la unidad tiene una	Einfacher oder Doppelblitz pro minute. Zeigt, ob das gerat die	Signaux clignotants simples ou doubles par minute. Indigue que l'unite est	Flash singoli o dopp al minuto. Indica che il dispositivo puo fornire flash	
OO FPM	double flash option	opcion de doble flash	Doppelblitzfunktion hat	equipee d'une option de signal clignotant double	doppi	
RPM 120 AC	Revolusions 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 protezior del dispositivo	
° C -40+60	Operating Temperature in Centigrade	Temperatura de funcionamiento	Arbeitstemperatur des gerates	Temperatures de service de l'unite	Temperatura di funzionamento in gradi centigadi	
Kg 0.2 to 0.3	Boxed weight including the Dome	Peso empaquetado incluida la cupula	Verpackungsgewicht einschlieblich haube	Poids conditionne, y compris partie superieure	Peso inscatolato con calotta	
<u>√</u> 50/60 Hz	Operates on a frequency of 50/60 Hz AC	Funciona a una frecuencia 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	
dB 100	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 lautstarke in dB in 1 m entfernung an	Equipe d'um signal sonore. Indique le niveau de decibel a 1 m	Dotato di segnalatore acustic Indica i dB a 1m	
↓ MARINE	Suitable for use in marine applications	Utilizable en aplicaciones marítimas	Geeignet für Anwendungen im Schiffs - und Marinereich	Approprié aux applications en milieu naval	ldonei per applicazioni navali	
🛱 FIRE	Suitable for use in fire alarm systems	Utilizable en sistmas de alarma anti incendios	Geeignet für Anwendungen in Brandmeleanlagen	Approprié aux installations de lutte contre le feu	Idonei per impianti anticendio	
	Suitable for use in industrial applications	Válido para uso en aplicaciones industriales	Geeignet für industrielle Anwendungen	Convient aux applications industrielles	Adatto per impiego nel settore industriale	
	Suitable for use in automotive applications	Válido para uso en aplicaciones de automoción	Geeignet für Anwendungen im Automobilbereich	Convient aux applications automobiles	Adatto per impiego nel settore dell'auto	
OBSTACLE MARKING	Suitable for obstacle marking applications	Válido 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 explosive proof applicatons to ATEX approval	Válido para uso en aplicaciones en zonas de riesgo con certificación ATEX	Geeignet für explosionsgeschützte Anwendungen mit ATEX - Zulassungen	Convient aux applications antidéflagrantes répondant à la norme ATEX	Adatto per impiego in atmosfera esplosiva secondo omologazione ATEX	
EXPLOSION PROOF	Suitable for explosive proof applicatons to UL approval	Válido para uso en aplicaciones en zonas de riesgo con certificación UL	Geeignet für explosionsgeschützt e Anwendungen mit UL - Zulassungen	Convient aux applications antidéflagrantes répondant la norme UL	Adatto per impiegr inatmosfera esplosiva secondo omologazione UL	

SELECTION & APPLICATION

Joon Logondo

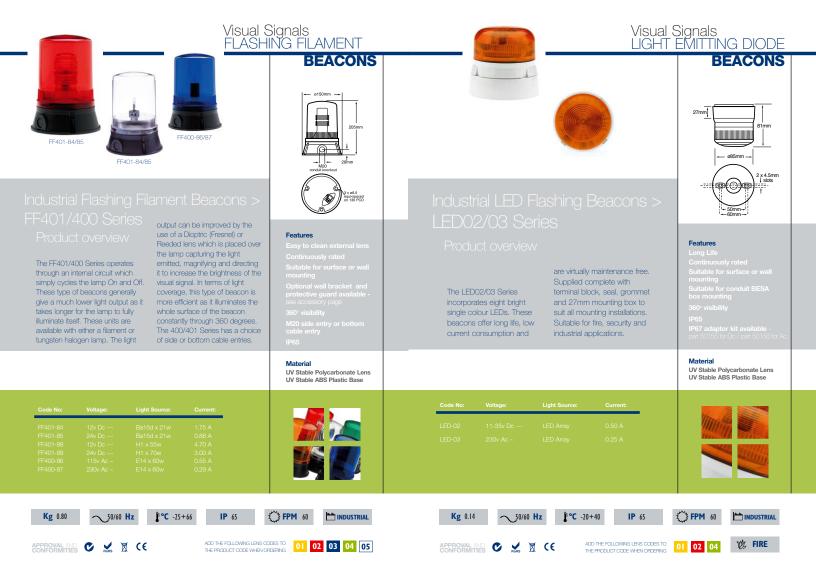


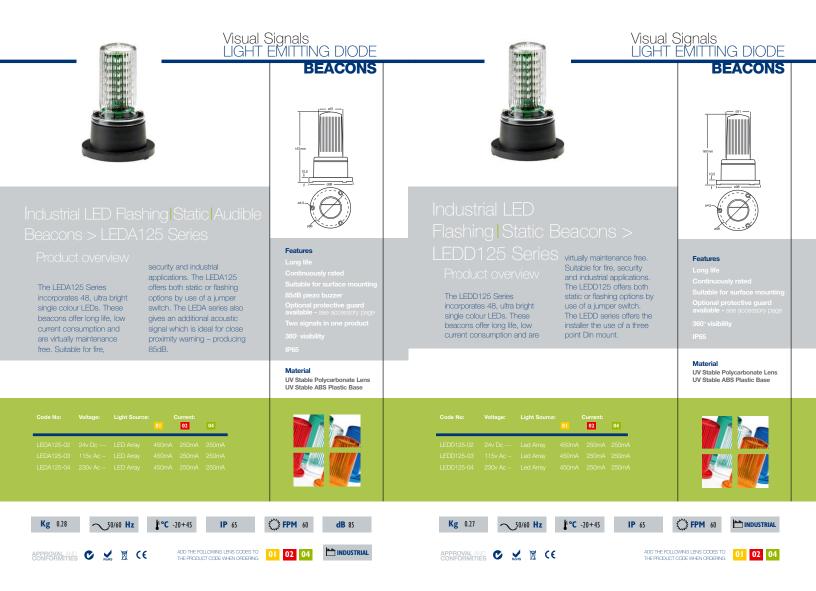
INCANDESCENT TUNGSTEN HALOGEN LED & XENON STROBE TYPE BEACONS

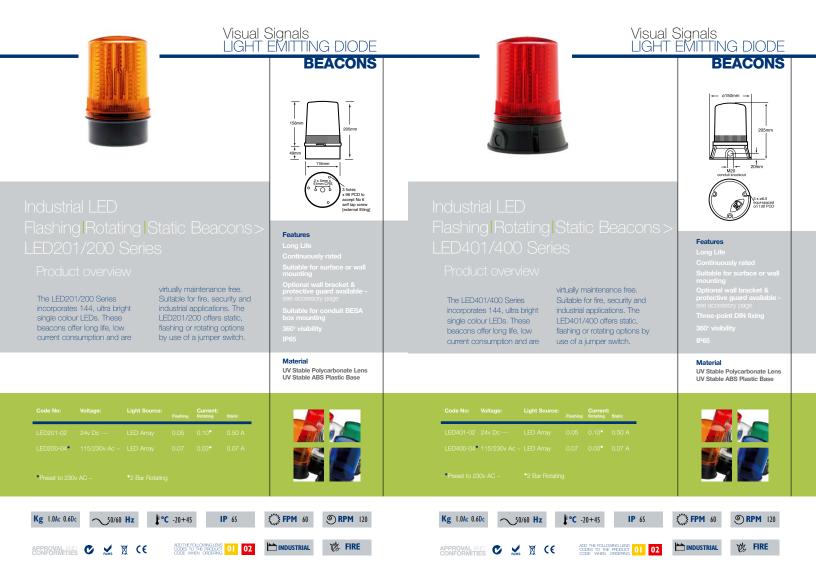




Visual S FLASHI	Signals NG FILAMENT	Visual S FLASHI	Signals NG FILAMENT
		FF201-84/85 - FF200-88/87 FF201-84/85 - FF200-88/87	
Industrial Flashing Filament Beacons > FF125 DIN Base Series		ndustrial Flashing Filament Beacons> F201/200 Series	2 some s 5 tem to 5 tem to 5 to to 6 to to 6 to to 1 to 1 to to 1 to
Product overview the lamp to fully illuminate itself. These units are supplied with a filament lamp. In terms of light coverage, this type of beacon is more efficient as it illuminates the lamp On and Off. These type of beacons generally give a much lower light output as it takes longer for	Features Easy to clean external lens Continuously rated Suitable for surface mounting Optional protective guard available - see accessory page 360° visibility Three-point fix external IP65	Product overview The FF201/200 Series operates simply cycles the lamp On and Off. These type of beacons generally give a much lower light output as it takes longer for the lamp to fully illuminate itself. These units are available with	Features Easy to clean external lens Suitable for use with conduit BESA box Continuously rated Suitable for surface or wall mounting Optional wall bracket & protective guard available - see accessory page 360°: visibility IP65
	Material UV Stable Polycarbonate Lens UV Stable ABS Plastic Base		Material UV Stable Polycarbonate Lens UV Stable ABS Plastic Base
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		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 FF201-85 12v Dc H1 x 55w 4.70 A FF201-89 24v Dc H1 x 75w 3.00 A FF200-86 115v Ac Ba15d x 15w 0.13 A FF200-87 230v Ac Ba15d x 15w 0.07 A	
Kg 0.25 ∼50/60 Hz F°C -25+66 IP 65 \$	FPM 60 EINDUSTRIAL	Kg 0.70 ∼50/60 Hz §°C -25+66 IP 65 \$	FPM 60 DINDUSTRIAL
ADD THE FOLLOWING LEVIS OC CONFORMITIES CO. K. THE FRODUCT CODE WHEN OR	DEES TO 01 02 03 04 05	ADD THE FOLLOWING LENS CO	









Spectrur	600 Series	Visual Signals LIGHT EMITTING DIODE
		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
<section-header><section-header></section-header></section-header>	Features Three colours in one housing – amber 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 – 7 preset signets Ethernet compatible Tough, UV stable polycarbonate housing	<section-header><section-header><text><text><text><text></text></text></text></text></section-header></section-header>
Code No: Voitage: Light Source: Current: Amber Red/Green LEDA600-01 24v Dc/230v Ac Tri-Colour LED 450 mA 265 mA LEDA600-03 24v Dc/115v Ac Tri-Colour LED 450mA 265 mA 60165 Interface 230v Ac 50166 Mounting Pole 50166 Mounting Pole	Material UV Stable Polycarbonate Plastic	Red 4.4 Effective Candela (440 mcd) 285mA Signal Options Continuous ON Show Flash 60 fpm Rapid Rash 1 90 fpm (0.21sec ON, 0.23 OFF) Rapid Rash 2 90 fpm (0.23sec ON, 0.11 OFF) Sounder Type Electronic Piezo Sounders x 2 : 20mA dolit In 90dB ± 33dB (horn covers not installed) Frequency 3.1Hz ± 500Hz Waud and audible signaling options can be combined – audible signaling synchronised with beacon flash Mounting Options
Kg 0.85 IP 65 66 67 69K FFPM 60x90 √ 50/60 Hz dB 90 T MARINE Industrial 688789343442 C 66 67 69K SOURCE SOURCE		Operating Temp -35°C to +55°C Weight 0.85 kg The beacon has three mounting options: Enclosure Material UV Stable Polycarbonate Plastic Surface Mount Plate Sufface Mount Sufface Sufface

Visual Sign	als ROTATING	Visual Signals ROTATING
Industrial Rotating Beacons >	BEACONS	Industrial Rotating Beacons >
R201-200 Series beacon creating a powerful beam of light traveling through 360 degrees. Generally, this type of beacon has a greater degree of light output than other models but this is off-set by the other an electric motor, revolves around a continuously illuminated amp on the vertical axis of the	Features Continuously rated Suitable for use with conduit BESA box Suitable for surface or wall mounting Optional wall bracket & protective guard available – abe accessory page Diode Polarised (DP) options available for fire alarm systems Magnetic base versions available Twin belt drive system IP65 Material UV Stable Polycarbonate Lens	RA201-200 Series Droduct overview The RA201/200 Series uses a parabolic reflector which, driven by an electric motor, revolves around a continuously illuminated lamp on the vertical axis of the beacon creating a powerful beam of light travelling through 360 degrees. Generally, this type of beacon has a greater degree of light output than other models but this is of 5-set by the fact that the parabolic reflector only illuminates one given point at a time. The RA series also incorporates a Piezo Buzzer producing 85ch, giving the user the peace of mind of two signals in one unit. Features Continuously rated Suitable for surface or wall mounting powerful beam of light travelling Difference of the peace of mind of two signals in one unit. Suitable for surface or wall mounting of the series also incorporates a Piezo Buzzer producing 85ch, giving the user the peace of mind of two signals in one unit. Suitable for surface or wall mounting of the series also incorporates a Piezo Buzzer producing 85ch, giving the user the peace of mind of two signals in one unit. Two signals in one unit
Code No: Vottage: 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 Bat 5s x 10w 0.60 A R201-60 12v Dc Bat 5s x 21w 0.95 A R201-61 24v Dc Bat 5s x 21w 0.95 A R201-62 12v Dc Bat 5s x 43w 4.00 A R201-63 24v Dc Bat 5s x 44w 4.00 A R201-64 49v Dc Bat 5s x 44w 4.00 A R201-63 24v Ac ~- Bat 5s x 44w 4.00 A R201-64 49v Dc Bat 5s x 46w 2.00 A R200-03 24v Ac ~- Bat 5s x 46w 2.00 A R200-04 115v Ac ~- Bat 5s x 60w 0.55 A R200-05 230v Ac ~- Bat 5s x 60w 0.29 A R200-05-we 230v Ac ~- Bat 5s x 60w 0.29 A R200-05-we 230v Ac ~- Bat 5s x 60w 0.29 A R200-05-w	UV Stable ABS Mounting Base	Code No: Voltage: Light Source: Current: RA201-20 12V Do H1 x 555w 4.70 A RA201-21 24v Do H1 x 70w 3.00 A RA201-21 24v Do Ba15d x 48w 2.00 A RA200-03 24v Ac Ba15d x 48w 2.00 A RA200-24 4bv Ac Ba15d x 60w 0.55 A RA200-25 230v Ac Ba15d x 60w 0.29 A
Kg 0.83 50 Hz I*C -10+66 IP 65 CONFECTIONALITIES Image: Conference of the second	RPM 160±30 DC RPM 120 AC Industrial	Kg 0.86 50 Hz E°C -10+66 IP 65 RPM 160±30 DC RPM 120 AC ADD THE FOLLOWING INSTALL CONPORTATIONS CONPORTATIONS

Visual Signa	als ROTATING	Visua STA	al Signals TIC FILAMENT
Industrial Rotating Beacons >	BEACONS	Industrial Static Filament Beacons >	BEACONS
R401-400 Series Product overview The R401/400 Din Base Series uses a parabolic reflector which, driven by an electric motor, revolves around a continuously illuminated lamp on the vertical axis of the beacon creating a powerful beam of light travelling through 360	Features Continuously rated Suitable for surface or wall mounting Optional wall bracket & protective guard available – see accessory page Twin belt drive system Optional M20 side-entry conduit knockout IP65 Material	SF125 Series Product overview The SF125 Series is identical to Flashing Flament 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' - often referred to as	Features Continuously rated Suitable for surface or wall mounting Suitable for use with conduit BESA box Optional wall bracket & protective guard available - see accessary page Ideal for local signalling applications 360° visibility IP65
Code No: Voltage: Light Source: Current:	UV Stable Polycarbonate Lens UV Stable ABS Mounting Base		Material UV Stable Polycarbonate Lens UV Stable ABS Plastic Base
R401-13 12v Dc H1 x 55w 4.70 A R401-14 24v Dc H1 x 70w 3.00 A R401-60 12v Dc Bat5d x 21w 3.95 A R401-61 12v Dc Bat5d x 21w 0.95 A R401-62 12v Dc Bat5d x 42tw 1.85 A R401-63 24v Dc Bat5d x 48w 2.00 A R400-03 24v Ac ~ Bat5d x 25w 0.55 A R400-04 16v Ac ~ Bat5d x 25w 0.55 A R400-05 230v Ac ~ E14 x 60w 0.29 A		Code No: Voltage: Light Source: Current: SF126-80 12v Ac/Do ₂ Ba15d x 21w 1.75 A SF126-81 24v Ac/Do ₂ Ba15d x 21w 0.88 A SF126-82 115v Ac ~ Ba15d x 15w 0.13 A SF126-83 230v Ac ~ Ba15d x 15w 0.07 A	
	RPM 160±38 DC RPM 120 AC		
	03 04 05 MINDUSTRIAL	APPROVAL AND C S C ADD THE FOLLOWING LENS COD CONFORMITIES C C THE FFOLLOWING LENS COD	

Visual S STATIC	Signals FILAMENT		Visual Signals STATIC FILAMEI	
Industrial Static Filament Beacons > SFA125 Series Product overview		ndustrial Static Filament Be SF125 DIN Base Series Product overview	eacons >	ACONS
The SFA125 Series is 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' - often main advantage of this type of beacon is that the light can be	Continuously rated Suitable for surface mounting Optional protective guard available - see accessory page Two signals in one unit Ideal for local signalling applications 360° visibility IP65	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' - often referred	y. These units are h either a filament in Base series offers he option of a three g external fixing for local signalling Sector 10 control of a three for local signalling	r surface mounting otective guard see accessory page cal signalling s
	Material UV Stable Polycarbonate Lens UV Stable ABS Plastic Base		Material UV Stable Po UV Stable AE	olycarbonate Lens BS Plastic Base
Code No: Voltage: Light Source: Current: 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		SF125-90 12v Dc Ba15d x 21w SF125-91 24v Dc Ba15d x 21w SF125-92 115v Ac - Ba15d x 15w	Current: 1.75 A 0.88 A 0.13 A 0.07 A	
Kg 0.25 ∼ 50/60 Hz IP 65	dB 85 industrial	Kg 0.22 √50/60 Hz §°C -35+66	IP 65 INDUSTRIAL	
ADD THE FOLLOWING LEASING CONFORMATION OF LEASING LEASING CONFORMATION OF LEASINO OF LEASINO CONFORMATION OF LEASINO CONFORMAT		APPROVALAND 🕑 🔛 🕱 CC	ADD THE FOLLOWING LENS CODES TO 01 02	03 04 05

Visu STA	ual Signals ATIC FILAMENT		Visu STA	ual Signals TIC FILAMENT
SF200-05/09 F201-26/29 SF201-26/29		F401/400-05/09	SF401-62/63	
				M20 conduit Nockout
SF201/200 Series controlled by a separate source,	Features			3 x e6.5 squispaced on 130 PCD
Product overview The SF201-200 Series is 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' - often referred to as steady mode. The main advantage of this type of beacon is that the light can be	Continuously rated Suitable for surface or wall mounting Suitable for use with conduit BESA box Low current consumption models available Optional wall bracket & protective guard available - see accessory page 360° visibility IP65	Product overview The SF401/400 DIN Base Series is identical to Rashing Flament 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' - often referred to as steady mode. The main advantage of this type of beacon	is that the light can be controlled by a separate source, i.e. a control panel, giving the unit more flexibility. These units are available with either a flament or tungsten halogen lamp. The use of the smooth outer lens makes cleaning of the unit easy and less likely to become ineffective due to a build-up of dirt. The Din Base series offers the installer the option of a three point fix using external fixing points.	Features Continuously rated Suitable for surface mounting Optional protective guard available - see accessory page 360° visibility IP65
	Material UV Stable Polycarbonate Lens UV Stable ABS Plastic Base			Material UV Stable Polycarbonate Lens UV Stable ABS Plastic Base
Code No: Voltage: Light Source: Current:				OV Stable ABS Flastic base
SF201-26 12/ AC/DC :: Bat5d x 5w 0.42 A SF201-27 24/ AC/DC :: Bat5d x 5w 0.21 A SF201-28 12/ AC/DC :: Bat5d x 5w 0.21 A SF201-29 12/ AC/DC :: Bat5d x 10w 0.44 A SF201-29 24/ AC/DC :: Bat5d x 10w 0.42 A SF201-62 12/ AC/DC :: H1 x 56w 4.60 A SF201-62 12/ AC/DC :: H1 x 70w 2.90 A SF201-65 12/ AC/DC :: Bat5d x 44w 4.00 A SF201-06 24/ AC/DC :: Bat5d x 44w 2.00 A SF201-06 24/ AC/DC :: Bat5d x 45w 2.00 A SF201-06 24/ AC/DC :: Bat5d x 45w 2.00 A SF201-06 24/ AC/DC :: Bat5d x 45w 2.00 A SF201-07 49/ DC : Bat5d x 60w 0.25 A SF200-08 115/ Ac - Bat5d x 60w 0.29 A SF200-09 230/ Ac - Compact Fluorescent 290/ Ac -		Code No: Voltage: SF401-62 12v Ac/Do m SF401-63 24v Ac/Do m SF401-05 12v Ac/Do m SF401-06 24v Ac/Do m SF401-06 24v Ac/Do m SF401-06 24v Ac/Do m SF401-06 24v Ac/Do m SF400-08 1150 Ac m SF400-09 230v Ac m	Light Source: Current: H1 x 55w 4.60 Å H1 x 70w 2.90 Å Ba15s x 48w 4.00 Å Ba15s x 48w 2.00 Å Ba15d x 35w 0.65 Å E14 x 60w 0.55 Å E14 x 60w 0.29 Å	
Kg 0.76		Kg 0.71 ~50/60 Hz	₿°C -35+66 IP 65	INDUSTRIAL
ADPROVAL AND SIZE STATE FOLLOWING LINS OF THE FOLLOWING LINS OF TH	DDES TO 01 02 03 04 05	APPROVAL AND CONFORMITIES	ADD THE FOLLOWING LENS CO THE PRODUCT CODE WHEN OF	IDES TO 01 02 03 04 05

Visual S	Signals XENON	Visual S	Signals XENON
Xenon Beacons > X501-500 Series	BEACONS	Xenon Beacons > X100 Series	BEACONS
Product overview The X501/500 Extra High Output Series utilises a discharge capaciton and converter circuit to ignite varion gas inside a tube, resulting in a brilliant flash of light. Xenon gas ignites virtually instantaneously so maximum brightness is obtained immediately. Xenon shave an added advantage of low current consumption combined with a reasonable life span. The X501/500 Series provides a 360-degree light oubput and has a Single Flash or Double Flash option. The Double	Features Extra high output Continuously rated Suitable for surface or wall mounting Optional wall bracket & protective guard available - see arConsary rage 360° visibility Double flash option M20 side or bottom cable entry Suitable for local signalling applications IP65	Product overview The X100 Series utilises a discharge capacitor and converter circuit to ignite xenon gas inside a tube, resulting in a brilliant flash of light. Xenon gas ignites virtually instantaneously so maximum brightness is obtained immediately. Xenons	Features Continuously rated Suitable for use with conduit BESA box Suitable for surface or wall mounting 360- visibility IP65 Optional IP67 conversion kit available Suitable for local signalling applications Material
	Material UV Stable Polycarbonate Lens UV Stable ABS Plastic Base		UV Stable Polycarbonate Lens UV Stable ABS Plastic Base
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 • • •		Code No: Voltage: Light Source: Current: X100-02 12/24v Dc Xenon 0.30J 60/45 mA X100-04 230v Ac ~ Xenon 1J 15 mA	
Kg 1.25 ∼50/60 Hz F°C -25+35 IP 65 \$	FPM 60x90	Kg 0.14 ∼50/60 Hz J ^a °C -20+40 IP 65 \$	💭 FPM 60 🛛 🖞 FIRE
ADD THE FROM	OLLOWING LENS CODES TO 01 02	APPROVAL AND O K K C ADD THE FOLLOWING LENS COD	ESTO 01 02 T MARINE

Visual S	Signals XENON	Visual S	Signals XENON
	BEACONS		
Xenon Beacons > X75 Series Product overview maximum brightness is obtained	Tentures	Industrial Xenon Beacons > X125 Series Product overview obtained immediately. Xenons have an added advantage of low	Features
The X75 Series utilises a immediately. Xenons have an discharge capacitor and added advantage of low current converter circuit to ignite consumption and are one of the xenon gas inside a tube, most efficient, effective and resulting in a brillant flash brightest visual signals available. of light. Xenon gas ignites virtually instantaneously so local signalling applications.	Continuously rated Suitable for wall mounting only Suitable for use with conduit BESA box - adaptor supplied	The X125 Series utilises a discharge capacitor and converter circuit to ignite xenon gas inside a tube, resulting in a brilliant flash of light. Xenon gas ignites virtually instantaneously so maximum brightness is	Suitable for use with conduit BESA box Suitable for surface or wall mounting Optional wall bracket & protective guard available - see accessory page 360° visibility IP65
	Material UV Stable Polycarbonate Lens ABS Plastic Base		Material UV Stable Polycarbonate Lens UV Stable ABS Plastic Base
Code No: Voltage: Light Source: Current: X75-24 24v Dc Xenon 0.30J 40 mA X75-115 115v Ac - Xenon 1.0J 35 mA X75-230 230v Ac - Xenon 1.0J 20 mA		Code No: Voltage: Light Source: Current: X125-Ac/Dc 10-100v Dc Xenon 2.0.0 130 mA 20-72v Ac ~ Xenon 2.3.0 30 mA X125-55 115v Ac ~ Xenon 2.7.J 21 mA *at 24v Dc *at 24v Dc *at 24v Dc *at 24v Dc	
Kg 0.13 50/60 Hz ₿°C -20+40 IP 65 3 Approval AND CONFORMEMENTS Image: Solution of the fold of the fol	← FPM 60 🌿 FIRE	Kg 0.17 50/60 Hz F°C -25+66 IP 65	
CODE WHEN C			

Visual Signals	XENON	Visual Signals XENON
Example 2 Series utilises a discharge capacitor and converter circuit to ignite xenon	EACONS	BEACONS BEACONS Seacons >
Material UV Stabl		Material UV Stable Polycarbonate Lens UV Stable ABS Plastic Base
Code No: Voltage: Light Source: Current: X125ES-51 115v Ac ~ Xenon 2.3J 30 mA X125ES-52 230v Ac ~ Xenon 2.7J 21 mA	X125-64 10-100v Dc Xer 20-72v Ac ~ X125-62 115v Ac ~ Xer	ht Source: Current: ton 2.0.J 130 mA* ton 2.3.J 30 mA ton 2.7.J 21 mA
Kg 0.20 50/60 Hz IP C -25+66 IP 65 FPM 60 ADD THE FOLLOWING LENG CODES TO ADD THE FOL	Kg 0.25 ~ 50/60 Hz	
ADD THE FOLLOWING LENS CODES TO CONFORMITIES C IS CC THE FRODUCT CODE WHEN OF DEFINING ON THE FRODUCT CODE WHEN OF DEFINING ON THE FRODUCT CODE WHEN OF DEFINING ON THE FOLLOWING LENS CODES TO	2 03 04 05 ABROVALAND 🕑 📈 🕅 🤆	ADD THE FOLLOWING LENS CODES TO THE PRODUCT CODE WHEN OPDEFING 01 02 03 04 05

Visual Signa	als XENON	Visual Signals XENON
	BEACONS	BEACONS
with a reasonable life span. Xenon The X195 Series utilises a beacons are one of the most discharge capacitor and efficient, effective and brightest Suit converter circuit to ignite xenon visual signals available. The X195 gas inside a tube, resulting in a series offers shallow base and Suit brilliant flash of light. Xenon gas ignites virtually instantaneously base version having side entry as M22	tures this outside or wall with a box b able for surface or wall withing able for surface or wall withing withing able for surface or wall withing able for surface or wall withing	Beacons >
	erial table Polycarbonate Lens Plastic Base	Material UV Stable Polycarbonate Lens UV Stable ABS Plastic Base
Code No: Voitage: Light Source: Current: X195-02WH-SB 15-28V Ac/Dc ~ Xenon 5.0.J 310 mA X195-02WH 15-28V Ac/Dc ~ Xenon 5.0.J 310mA X195-05WH-SB 180-250v Ac ~ Xenon 5.0.J 110 mA X195-05WH 180-250v Ac ~ Xenon 5.0.J 110 mA X195-05WH 180-250v Ac ~ Xenon 5.0.J 110mA	X201-18 12/24v Dc Xenc X201-19* 12/24v Dc Xenc X201-19* 12/24v Dc Xenc X201-88 24v Ac - Xenc X200-88 24v Ac - Xenc X200-21 115 ho a - Xenc X200-22 230v Ac - Xenc	Source: Current: h 10J/7.5J 1.45/0.7 A h 10J/7.5J 1.45/0.7 A h 10J/7.5J 0.45/0.7 A h 10J/7.5J 0.10 A h 10J/7.5J 0.10 A h 10J/7.5J 0.08 A
Kg 0.25 ~ 50 Hz F°C -25+45 IP 65 FPM		***C -25+66 IP 65 FPM 60x90 V/r FIRE ACCOUNT FOLLOWING OF CODE WHEN CHORENON 01 02 03 04 05 Iminoustrial

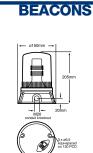
Visual S	Signals XENON	Visual S	Signals XENON
Industrial Xenon Beacons >	BEACONS	Industrial Xenon Beacons >	BEACONS
X201SD-200S Series Product overview The X201SD/200S Series utilese a discharge capacitor and converter circuit to ignite xenon gas inside a tube, resulting in a brilliant flash of light. Xenon gas ignites virtually instantaneously so maximum brightness is obtained immediately. Xenons have an added advantage of low current	Fixing Holes on 35° PCD Features Continuously rated Suitable for surface mounting Ideal for areas of high vibration Very robust construction 360° visibility IP66	X250 Series Product overview The X250 Series utilises a discharge capacitor and converter circuit to ignite xeron gas inside a tube, resulting in a brilliant flash of light. Xerono gas ignites virtually instantaneously so maximum brightness is obtained immediately. Xerono	Features Continuously rated Suitable for surface or wall mounting Optional wall bracket & protective guard available – see accessory page Three-point fix external Anti-vibration protection built-in Ideal for areas of high vibration 360° visibility IP67
	Material UV Stable Polycarbonate Lens Zinc Cast Metal Base		Material UV Stable Polycarbonate Lens UV Stable ABS Plastic Base
Code No: Voltage: Light Source: Current: X201SD-12 12-48v Dc Xenon 11J 1.50 A* X200S-240 240v Ac ~ Xenon 11J 0.05 A *At 24v Dc		Code No: Voltage: Light Source: Current: X250-18 10-100v Da 20-75v Ac ~ Xenon 10J 0.05-0.16 A X250-22 230v Ac ~ Xenon 10J 0.08 A	
Kg 0.92 ∼50/60 Hz ₿°C -35+66 IP 66 \$			C FPM 60 U MARINE
ADD THE FOLLOWING LENS CODES THE PRODUCT CODE WHEN ORDERS			02 03 04 🖿 INDUSTRIAL

Visual Signals XENON



The X401/400 Din Base Series utilises a discharge capacitor and converter circuit to ignite xenon gas inside a tube, resulting in a brilliant flash of light. Xenon gas ignites virtually instantaneously so maximum brightness is obtained immediately. Xenons have an added advantage of low current consumption combined with a reasonable life span. The X401/400 Series provides a 360-

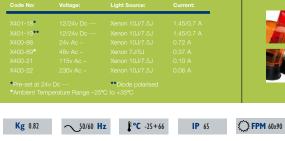
X401-400 Series degree light output and has a Single Fash or Double Flash option. The Double Flash option extends the signal duration making it more noticeable to the human eye. Brightness is increased by the use of a Dioptric (Freenel) lens which magnifies the light output. This series also incorporates both bottom and side entry cabling access and mounting is achieved via external three point fixing. Xenon beacons are one of the most efficient, effective and brightest visual signals available.



Features

Material

UV Stable Polycarbonate Lens UV Stable ABS Plastic Base



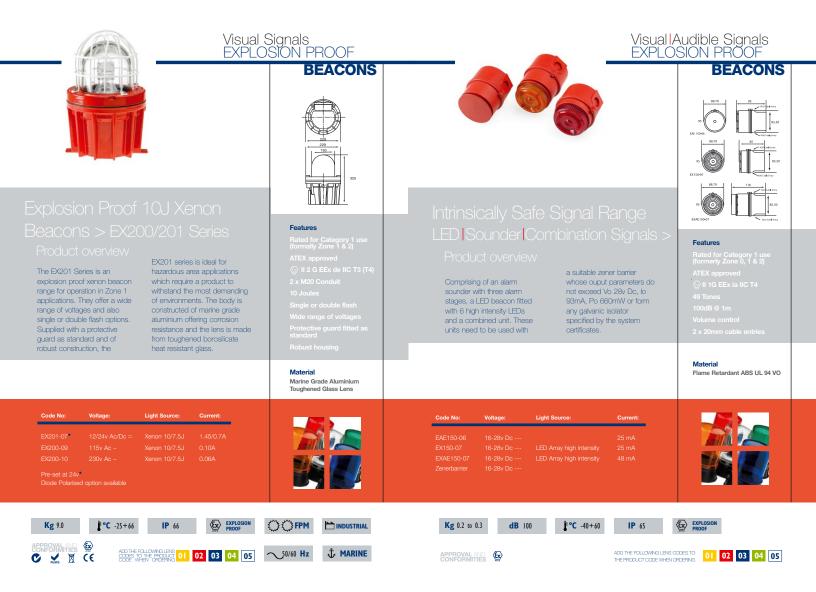
ADD THE FOLLOWING LINS CONFORMUTIES C IN CONFORM



🗱 FIRE



AUDIBLE & VISUAL SIGNALS FOR USE IN POTENTIALLY EXPLOSIVE **ATMOSPHERES**



Audible) Signals SION PROOF	(F)	Visual Au EXPLOS	udible Signals ION PROOF
Explosion Proof Audible	SOUNDERS	Explosion Proof Xeno		BEACONS
Sounders > Product overview Product overview This high decibel 32 tone selectable electronic sounder gives the user a choice of the 1st stage alarm tone with stage 2 and 3 fixed at manufacture. The tones include those covering the PFEER/UKOOA requirements.	Features Rated Category 1 use (formerly Zone 1 & 2) ATEX approved ↓ I 2 G EExd IIC T4 117dB @ 1m 2 x 20mm cable entries 4mm terminals for ease of connection	Sounders > EXAE Se Product overview The comb beacon/sc installer bc signals in visual com operated f	ries ned xenon under offers the th visual and acoustic one unit. The audio- ponents can be rom a single power separately, offering	Features Rated Category 1 use (formerly Zone 1 & 2.) ATEX approved
	Material Marine Grade LM6 Aluminium			Material Marine Grade LM6 Aluminium
Code No: Voltage: Current: EAE100-24 24v Dc 250 mA EAE100-115 115v Ac ~ 110 mA EAE100-230 230v Ac ~ 56 mA		Code No: Voltage: Light Source: EXAE100-24 24v Dc Xenon 5J EXAE100-115 115v Ac Xenon 5J EXAE100-230 230v Ac Xenon 5J	Current: 250 mA 140 mA 56 mA	
	EXPLOSION PROOF	Kg 4.80C 5.0 AC dB 117 ₿°C -50	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	FPM 60 EXPLOSION PROOF
		APPROVAL AND CONFORMITIES	ADD THE FOLLOWING LENS CODES THE PRODUCT CODE WHEN ORDER	

Audible EXPLO	signals SION PROOF		Audible Signals EXPLOSION PROOF	
UL Explosion Proof Bells >	BELLS	JL Explosion Proof Buz	ZZEYS >	
Product overview The Adaptabel range of explosion proof, UL approved bells produce a distinctive, loud and clear ringing that is free of mechanical clatter. The striker hits the gong in a continuous, rapidi-fire action as long as	Features UL Listed for Class I Divisions 1& 2 Groups B, C & D Class II Divisions 1 & 2 Group E, F & G Class III UL 1203 Listed 102dB @ 1m	explosion proof, UL approved drain, ensuring	ed version Class III locations	
current is applied and the low power drain ensures efficient operation over longer periods. using 3/8" (10mm) fasteners.	Diode polarized on 24v Dc Loud, clear ring 6-inch gong Material Cast Zinc 'Zamak'		Material Cast Zinc 'Zamak'	
Code No: Voltage: Current: EA6B-K435EX-6E1 12v Dc 0.52 A EA6B-K435EX-6G1 24v Dc 0.21 A EA6B-K340EX-6N5 120v Ac ~ 0.041 A EA6B-K340EX-6R5 240v Ac ~ 0.021 A		Code No: Voltage: Frequency: EABK879EX-E1 12v Dc 350-400Hz EABK879EX-G1 24v Dc 350-400Hz EABK878EX-N5 120v Ac ~ 350-400Hz EABK878EX-R5 240v Ac ~ 350-400Hz	Current: Image: Current in the image: Current in	
Kg 3.2 dB 102 F°C 0+49 IP 65 <		Kg 4.0 ~50/60 Hz dB 109	₿°C 0+49 IP 55 ∞continuous	
ADRESIMATES 🕲	(EXPLOSION PROOF	



Kg 0.45

°C -20+50

APPROVAL AND ICAO S ICA

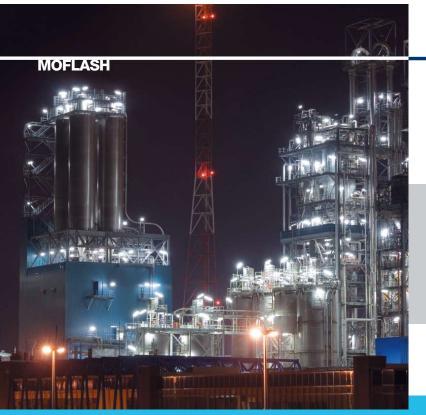
IP 65

ADD THE FOLLOWING LENS CODES TO THE PRODUCT CODE WHEN ORDERING

Visual Signals OBSTACLE MARKING	
BEACONS	MOFLASH
Obstacle Marking : Medium	
Product overview LED pentagon shaped tower, incorporating 800 high power Conforms to ICAO regulation Annex 14 Volume	
The LED 2000 Series LEDs, allows for a perfect 360° 1 for steady, medium intensity Type C beacons conforms to the requirements beacon which can be visible 1 for steady, medium intensity Type C beacons of the ICAO for aviation over 15 miles in optimum 167 obstruction marking. weather conditions. 3 meters of IP67 Designed for use on tall 1.5 SY steel braided cable is Low maintenance buildings, masts and pylons supplied attached to the beacon Long life making it ideal for remote or beacon unnecessary. 360° visibility	
Material Cast Aluminium UV Stable Polycarbonate Lens	
Code No: Voltage: Light Source: Effective CD: LED-04-2000-02 230v Ac ~ LED output 2000cd	AUTOMOTIVE
Kg 19 €°C -40+55 ~50/60 Hz IP 67 💥 OBSTACLE 🔂 MARINE	



Visual Signa	als AUTOMOTIVE	Visual Signals	s AUTOMOTIVE	
Automotive Rotating Beacons > Rotaconstruct Rotating Beacons and the models but this is off-set by the fact that the parabolic reflector will luminates and ignet rawing iluminates and on the vertical axis of the beacon creating a powerful beam of light trawing through 360 degrees. General this type of beacon has a	BEACONS	<image/> <section-header> Automotive Xenon Beacons > X88 Series Doduct overview Discrete relation of light Xenon gar sinside a tube, resulting in a brillant flash of light. Xenon gar sinside a tube, resulting in a brillant flash of light. Xenon gar sinside a tube, resulting in a brillant flash of light. Xenon gar sinside a tube, resulting in a brillant flash of light. Xenon gar sinside a tube, resulting in a brillant flash of light. Xenon gar sinside a tube, resulting in a brillant flash of light. Xenon gar sinside a tube, resulting in a brillant flash of light. Xenon gar sinside a tube, resulting in a brillant flash of light. Xenon gar sinside a tube, resulting in a brillant flash of light. Xenon gar sinside a tube, resulting in a brillant flash of light. Xenon gar sin is ideal for when the beacon in the prillant flash of light. Xenon gar sin ideal for when the beacon in the prillant flash of light. Xenon gar sin ideal for when the beacon in the prillant flash of light. Xenon gar sin ideal for when the beacon in the prillant bash of the prillant flash of light. Xenon gar sin ideal for when the beacon in the prillant bash of the prillant flash of the prillant bash of the prilant bash of the prillant bash of the prillan</section-header>	BEACONS Intervention of the second s	
	Material Acrylic Lens ABS Plastic Base		Material UV Stable Polycarbonate Lens Acetal Base with Neoprene Cover	
Code No: Voltage: Light Source: Current: RTOMB-12 12/24v Dc H1 x 55w 4.70 A H1 x 70w 3.00 A		Code No: Voltage: Light Source: Current: XENON MB (Magnetic Base) X88-72 12/24v Dc Xenon 10J/7.5J 1.40/0.7 A X88-75 12/24v Dc Xenon 10J/7.5J 1.40/0.7 A Y88-76 12/24v Dc Xenon 10J/7.5J 1.40/0.7 A Pre-set at 24v Dc Xenon 10J/7.5J 1.40/0.7 A		
Kg 0.97 ₿°C -30+66 IP 65 RPM 160±30		Kg I.II MB Kg 0.67 SF ₿°C -25+66 IP 65 \$	ЭFPM 60×90 🚔 АИТОМОТІУЕ	
APPROVALAND 🕐 📈 🕅 CE	ADD THE FOLLOWING LENS CODES TO THE PRODUCT CODE WHEN ORDERING	APPROVAL AND CONFORMITIES C ADD THE FOLLOWING LANS CO		



The AE20M Piezo Buzzer Series offers an economical and cost effective solution for local area applications. At only

43mm diameter, the buzzer offers the installer an unobtrusive acoustic signal in a wide range of voltages with most voltages offering pulsed or continuous tone capability.

Material ABS Plastic

Features

PIEZO BUZZERS

ACOUSTIC

PI PI 20mm

Tone Terminals Pulsed A + B ntinuous A + C

+ - 7.7mm

	Voltage:	Frequency:			
AE20M-12*					~0
				Q	
					5000
• Pulsed tone o					
Kg 0.08	~_50/60 Hz	₿°C -20+	60 IP 55	dB 90	

INDUS	STRIAL BUZZERS	MA	ARINE BUZZER
	Features Industrial buzzer	Acoustic Signals Industrial Marine Buzzer > ABHF8 Series Product overview	
box. The AE95 is suitable for a wide range of applications output low frequency mechanical buzzer. The IP emergency alarms, process protection can be increased to IP55 by use of the mechanical handling optional weatherproof back machinery.	Wide voltage range Low frequency tone 10 minute rating IP53 (IP55 with back box) 110dB @ 1m Rated 10 min On / 10 min Off	sound, it is particularly suitable for use on small boats and canal The ABHF8 Series buzzer is barges as well as for industrial a weatherproof signalling uses such as time signalling and hom designed for both process control alarms. With a industrial and light marine wide voltage range and rugged applications. Producing a metal casting, it is suitable in high output penetrating almost any environment.	Features Industrial/marine buzzer High output penetrating sound IP65 111dB @ 1m Rated 10 min On / 10 min Off
	Material Mild Steel		MATERIAL Brass
Code No:Voltage:Frequency:Current:AE95-0524/49v Ao/Do _335 Hz0.8 AAE95-06115/230v Ao/Do _335 Hz0.4/0.2AAE95-BBWeatherproof back box		Code No: Voltage: Frequency: Current: ABHF8-1437 24/48v Ao/Do II. 335 Hz 0.20 A ABHF8-1436 115/230v Ao/Do II. 335 Hz 0.80 A	
Kg 0.5 ~50/60 Hz \$"°C -20+66 IP 53/55" <	∞ OFF 10 MINS DIFF 10 MINS	Kg 2.10 ∼50/60 Hz №°C -20+40 IP 65 ⊂	∞ ON 10 MIN OFF 10 MIN INDUSTRIAL
ebreathair 😎 📈 🔇	dB 110	APPROVALAND 🕑 📈 🕅 CC	∯ MARINE dB III

INDUSTF	RIAL BUZZERS	E	LECTRONIC
Acoustic Signals Industrial Buzzers > Adaptahorn Series			dann
Product overview mounting options, they can be used in almost any application, both indoors and outdoors. Adaptahoms are a powerful output giving a penetrating, low frequency sound. With a variety of weatherproof version.	Features High output penetrating sound Durable, long life mechanism Continuously rated	Product overview The AE40M Series is an 8- tone electronic sounder available in 10-30V Dc and 230V Ac versions. This product is ideal for fire alarm and close proximity industrial applications. The Dc version is available in both deep base or shallow base, with deep base offering side entry and increased IP protection. The Ac version is deep base as standard.	Features Low current consumption IP54 or 65 Selectable tones (8) Suitable for use with the Easy AVR upgrade LED
	Material Zinc Alloy		Material ABS Plastic
Code No: Voltage: Frequency: Current: ABK875-G1 24v Dc 350-400 Hz 0.16 A ABK874-R5 120v Ac 350-400 Hz 0.18 A ABK874-R5 230v Ac 350-400 Hz 0.06 A Weatherproof Type ABK877-G1 24v Dc 350-400 Hz 0.16 A ABK876-N5 120v Ac 350-400 Hz 0.16 A ABK876-N5 120v Ac ABK876-R5 230v Ac 350-400 Hz 0.13 A ABK876-R5 230v Ac 350-400 Hz 0.06 A		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-24R 10-30v Dc 800-2580 Hz 32 mA* AE40M-230R 230v Ac 800-2580 Hz 50 mA • Current at 24v Dc * 800-2580 Hz 50 mA	
Kg 1.2/1.6 [*]	CONTINUOUS INDUSTRIAL	Kg 0.32 F°C -20+45 IP 54/65° C -20+45 IP 54/65°	₩ FIRE dB 100
eorpokalines 🕐 📈 🕅 CC	dB 112	APPROVALAND 🕑 📈 🕅 CC	

INDUSTR	RIAL AIRHORNS	MARINE I INDU	ISTRIAL AIRHORNS
Acoustic Signals Industrial	2 x obum Fixing Heles @ 150mm AP 80 + 450mm 2 x obum Fixing Heles @ 150mm contres 144 roch 680	Acoustic Signals Industrial	
Airhoms > AP Series Product overview The AP Series of air homs are suitable for general purpose signaling where high output is required such as foundries, steelworks and petrochemical plants. Operated from a	Features Continuous signal Optional compressor if no direct air supply available 125dB @ 1m Robust construction	Air Homs > SK Series Product overview The SK Series of air homs are manufactured from non-ferrous materials which offer high corrosion and weatherproof resistance for use in railway and marine applications as well	SK2 SK6 Features Continuous signal Optional compressor if no direct air supply available 120-134dB at 1m Robust construction Easy to install
	MATERIAL Aluminium Body Brass Horn		Material Brass/Phosphur bronze
Code No: Air Consumption: Air Pressure: Frequency: AP198M 50-133 L/min 55-140 psi 660 Hz AP360M 50-133 L/min 55-140 psi 387 Hz AP450M 50-133 L/min 55-140 psi 387 Hz AP450M 50-133 L/min 55-140 psi 307 Hz AP450M 50-133 L/min 55-140 psi 307 Hz APTD-Compressor 24v Do (90mm O/D x 165mm L 50PSI) 5000000000000000000000000000000000000		Code No: Length: dB: Air Consumption: Air Pressure: Rating: APSK6-GM 341mm 132 50-100 L/min 50-100 psi Continuous APSK2-GM 358mm 120 50-100 L/min 10-30 psi Continuous APSK2-EM 435mm 134 50-100 L/min 10-30 psi Continuous APSK6-EM 437mm 124 50-100 L/min 50-100 psi Continuous APSK6-EM 437mm 124 50-100 L/min 50-100 psi Continuous APSK-Compressor for SK2 only (49mm o/d, 116mm L, 0.41kg, 14 PSI, 24v DC) APSK-Compressor for SK2 only (49mm o/d, 116mm L, 0.41kg, 14 PSI, 24v DC) APSK-Compressor for SK2 only (49mm o/d, 116mm L, 0.41kg, 14 PSI, 24v DC)	
Kg 1.4 €°C -30+90 IP 66 dB 125 Ĕ		Kg 1.80 ~GM 370 Hz ~EM 315 Hz IP 66	dB 120 -134 Tindustrial.

	HOOTERS		HOOTERS
			ACOUSTIC 2000
Acoustic Signals Industrial Hooters > A1 Series Product overview it can cut through background noise	2 x 7mm dia hole 90 90 10 10 20mm x 1.5 mm	Acoustic Signals Industrial Hooters > Klaxet Series Product overview applications. The Klaxet is ideal for time signaling, process	
in almost any environment and is ideal for use as a time signalling 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,	Features Powerful, high output 120dB Robust construction Weatherproof to IP65	The Klaxet is a motor driven hooter giving the unique 'Klaxon' sound. The high output, changing frequency note gives a powerful warning tone which can be heard above background noise in industrial use in all situations.	Features Powerful, high output 111dB Robust construction Weatherproof to IP54
	Material Die cast aluminium & zinc Mild steel ABS Plastic		Material Cast iron / mild steel
Code No: Voltage: Frequency: Current: AHA1-2000 12v Dc 420 Hz 5.0 Å AHA1-2001 24v Dc 420 Hz 2.30 Å AHA1-2002 48v Dc 420 Hz 1.30 Å AHA1-2004 115v Ac 420 Hz 0.84 Å AHA1-2003 230v Dc 420 Hz 0.80 Å AHA1-2004 15v Ac 420 Hz 0.80 Å AHA1-2006 230v Ac 420 Hz 0.76 Å		Code No: Voltage: Frequency: Current: AHKLAXET-1000 12v Dc 470 Hz 2.50 A AHKLAXET-1001 24v Dc 470 Hz 1.00 A AHKLAXET-1008 115v Ac 470 Hz 0.50 A AHKLAXET-1010 230v Ac 470 Hz 0.33 A	
Kg 2.0 ~50/60 Hz I°C -35+66 IP 65 <	∞ ON 2 MIN OFF 5 MIN INDUSTRIAL	Kg 1.60 ~50/60 Hz Ji °C -20+40 IP 54 ~	
abrevanines 🕑 🔜 🕱 CC	dB 120 🗘 MARINE	opprovanistic 🕑 🔜 🗹 CC	dB 111

	HOOTERS		FIRE BELL
	ACOUSTIC		
Acoustic Signals Industrial Hooters > ES Manual Series			
Product overview applications include small boats, canal barges, mine boats, canal barges, mine trucks and fork lift trucks. The ES gives a powerful sound which, with its low frequency tone, makes it an effective warning device.	Features Manual operation – no power supply required Lightweight and compact Robust and reliable	Product overview The A6FB is an economy bell suitable for fire alarm signalling applications. It produces the traditional alarm bell sound and offers easy installation. The bell	Features Diode polarized 98+-3 dB Terminal allows for 2+ and 2- cabling, up to 2.5mm ²
	Material Mild steel		Material Steel Gong Plastic Back Box
Code No: Frequency: AHES-1290 150-350 Hz		Code No: Voltage: Current: A6FB-24DC-DP 18-28v Dc 15mA at 24v Dc	
Kg 1.20 dB 103 IP 54		Kg 0.5 FIRE	dB 98±3
APPROVAL AND 🕑 🔜 🕅 CC			

INDUSTRIAL	MARINE BELL	INDUSTRIAL BELL
	ACOUSTIC	
Acoustic Signals Industrial &		Acoustic Signals Industrial Bells
Marine Bells > IP66 Series Product overview	() ↓ ↓ ↓	 > Adaptabel Series Product overview a clear, loud ring which is free from mechanical clatter. The bigger the Features Supplied with a universal mounting plate for all installation options Rugged die-cast
exposed outdoor locations, The IP66 bell is a fully enclosed marine applications and signal bell. It is suitable for wash/hose down areas. The areas where harsh weather solenoid driven mechanism conditions exist, such as produces a clear, loud tone.	Features High quality penetrating sound Weatherproof to IP66	The Adaptabel range is a high quark gong, the deeper, louder and more quality solenoid driven bell penetrating the sound. When fitted Robust and reliable designed for use in commercial, with the optional back box, the units industrial and transportation are weatherproof and suitable for available for applications. With a choice of mounting in exposed locations. Red three gong sizes, this unit delivers version available in 6° 24v Dc. Robust and reliable with the optional back box, the units weatherproof back box weatherproof back box
	Material	Material Steel gong
Code No: Voltage: Current: A6B-12DC-IP66 12v Dc 0.06 A A6B-24DC-IP66 24v Dc 0.03 A A6B-115AC-IP66 115v Ac - 0.90 A A6B-230AC-IP66 230v Ac - 0.50 A	Steel gong	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 Ac - 101mm/4" 99dB - A4B-K-24DC 24v Ac - 101mm/4" 99dB - A4B-K-21DAC 101vc 101mm/4" 99dB 22 mA A6B-K-21DC 12v Dc 101mm/4" 99dB 22 mA A6B-K-22DC 12v Dc 152mm/6" 101dB - A6B-K-24DC 24v Dc 152mm/6" 101dB - A6B-K-22DC 24v Dc 152mm/6" 101dB - A6B-K-22DC 24v Dc 152mm/6" 101dB - A8B-K-23DAC
Kg 1.00 dB 103 Ĵ°C -30+50 IP 66 ⊂	CONTINUOUS	Кg 1.0/1.4/2.3 dB 99 - 102 ₿°С -35+66 IP 44/65° ∞ сонтичиоиз Пилиистия
eerboxahmes 🕑 🔜 🕱 CC	🗘 MARINE	ebradianes 🕑 📈 🗹 CC



ACCESSORIES

ÊA

Miscellaneous		NOTES	
ANTI - VIBRATIO 50080	ON MOUNT 50080 Anti-Vibration Mount Suitable for use with 88, 125, 201/200 series beacons		MOFLASH
SPARE LENS COVERS 50018>50022	50018 Red Lens 50019 Amber Lens 50020 Blue Lens 50021 Green Lens 50022 Clear Lens All suitale for use with 125 series beacons only		
SPARE LENS COVERS 50064>50068	50064 Red Lens 50065 Amber Lens 50066 Blue Lens 50067 Green Lens 50068 Clear Lens All suitable for use with 88, 98, 201/200, 401/400 & 501/500 series beacons		