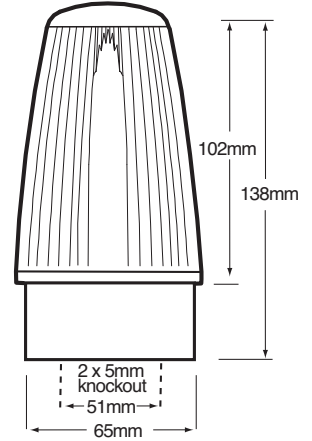




Visual Signals FLASHING FILAMENT

BEACONS



Industrial Flashing Filament Beacons > FF125 Series

Product overview

The FF125 Series operates through an internal circuit which 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 supplied with a filament lamp. 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. The FF125 series is ideal for low cost, local signal applications.

Features

- Continuously rated
- Easy to clean external lens
- 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



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

Kg 0.20
50/60 **Hz**
°C -25+55
IP 65
FPM 60
INDUSTRIAL

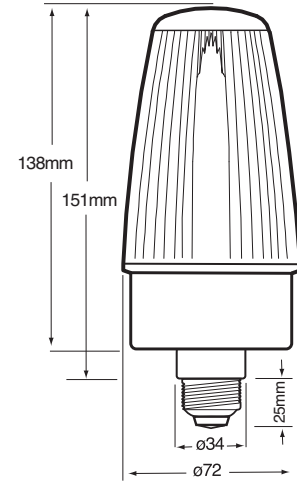


ADD THE FOLLOWING LENS CODES TO THE PRODUCT CODE WHEN ORDERING



Visual Signals FLASHING FILAMENT

BEACONS



Industrial Flashing Filament Beacons > FF125ES Series

Product overview

The FF125ES Series operates through an internal circuit which 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 supplied with a filament lamp. 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. The ES Series is ideal for easy or temporary installation due to the E27 screw base.

Features

- Continuously rated
- Easy to clean external lens
- 360° visibility
- Simple and quick installation
- IP65

Material

- UV Stable Polycarbonate Lens
- UV Stable ABS Plastic Base



Code No:	Voltage:	Light Source:	Current:
FF125ES-76	115v Ac ~	Ba15d x 15w	0.13 A
FF125ES-77	230v Ac ~	Ba15d x 15w	0.07 A

Kg 0.22

50/60 **Hz**

°C -25+55

IP 65

FPM 60

INDUSTRIAL



ADD THE FOLLOWING LENS CODES TO THE PRODUCT CODE WHEN ORDERING



Visual Signals FLASHING FILAMENT

BEACONS

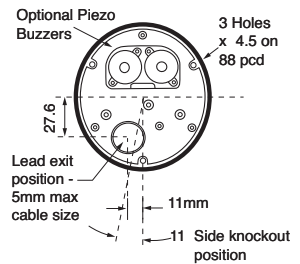
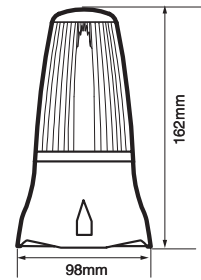


Industrial Flashing Filament Beacons > FF125 DIN & FFA125 Series

Product overview

Suitable for fire, security & light industrial applications, these beacons are of the Flashing Mode type. Once the unit is energised the lamp will flash through a

standard cycle of 60 FPM. The FFA version incorporates two Piezo sounders situated in the base that are synchronised to the flash rate. An M12 sealing gromet in the base allows for cable entry and termination inside the enclosure.



Features

- Continuously rated
- Combined audible & visual signal
- 360° visibility
- Cage guard option available - see accessory page
- Simple and quick installation
- 3 Point fix

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
For Audible Option			
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

Kg 0.25

50/60 Hz

°C -25+55

dB 90

IP 65

FPM 60

APPROVAL AND CONFORMITIES



ADD THE FOLLOWING LENS CODES TO THE PRODUCT CODE WHEN ORDERING



Visual Signals FLASHING FILAMENT

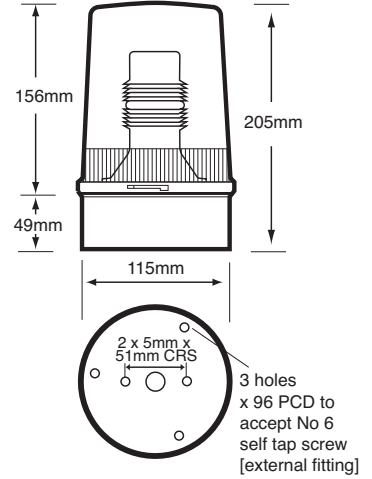
BEACONS



FF201-84/85 - FF200-86/87



FF201-88/89



Industrial Flashing Filament Beacons > FF201/200 Series

Product overview

The FF201/200 Series operates through an internal circuit which 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

either a filament or tungsten halogen lamp. The light output can be improved by the use of a Dioptic (Fresnel) or Reeded lens which is placed over the lamp 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.

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



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

Kg 0.70

50/60 Hz

°C -25+55

IP 65

FPM 60

INDUSTRIAL



ADD THE FOLLOWING LENS CODES TO THE PRODUCT CODE WHEN ORDERING



Visual Signals FLASHING FILAMENT BEACONS



FF401-84/85



FF401-88/89



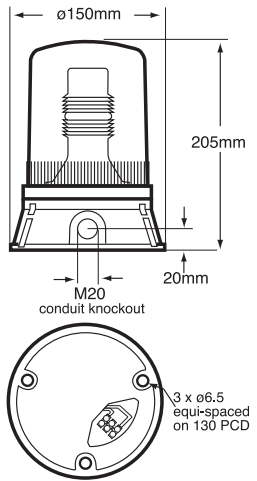
FF400-86/87

Industrial Flashing Filament Beacons > FF401/400 Series

Product overview

The FF401/400 Series operates through an internal circuit which 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 either a filament or tungsten halogen lamp. The light

output can be improved by the use of a Dioptic (Fresnel) or Reeded lens which is placed over the lamp 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. The 400/401 Series has a choice of side or bottom cable entries.



Features

- Easy to clean external lens
- Continuously rated
- Suitable for surface or wall mounting
- Optional wall bracket and protective guard available - see accessory page
- 360° visibility
- M20 side entry or bottom cable entry
- IP65

Material

- UV Stable Polycarbonate Lens
- UV Stable ABS Plastic Base



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

Kg 0.80
50/60 Hz
°C -25+55
IP 65
FPM 60
INDUSTRIAL



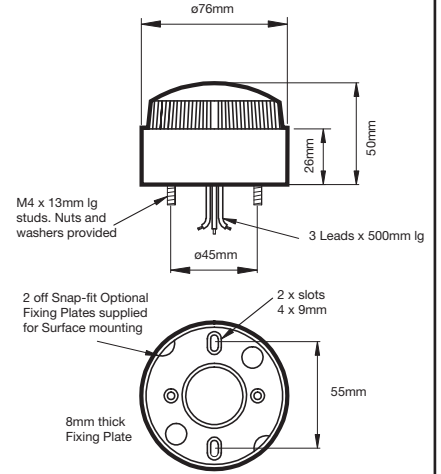
Visual Signals XENON BEACONS

Industrial Xenon Beacon > X80 Series

Product overview

The X80 series incorporates a discharge capacitor and converter circuit to ignite xenon gas inside a glass tube, resulting in a flash of light. This beacon offers an economic solution for general signalling applications where local signal indication is

required. 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.



Features

- Continuously Rated
- Wide operating voltage
- Energy efficient
- 180° Visibility
- Economical

Material

- UV Stable Polycarbonate Lens
- UV Stable Polycarbonate Base



Code No:	Voltage:	Light Source:	Current:
X80-01	24v Dc ---	Xenon 0.30J	40 mA
X80-02	10-100v Dc --- 20-72v Ac ~	Xenon 1.0J	110mA # at 24v Dc
X80-04	85-265v Ac ~	Xenon 2.0J	50 mA # at 230v Ac

Kg 0.13

°C -20+55

IP 67

FPM 60/65

INDUSTRIAL

FIRE

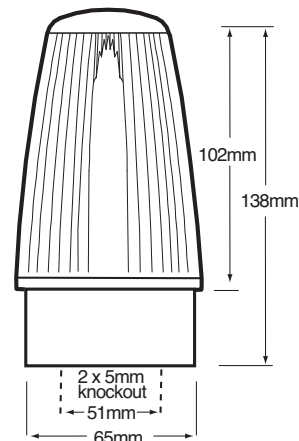


ADD THE FOLLOWING LENS CODES TO THE PRODUCT CODE WHEN ORDERING



Visual Signals XENON

BEACONS



Industrial Xenon Beacons > X125 Series

Product overview

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

obtained immediately. Xenons have an added advantage of low current consumption combined with a reasonable life span. The design of the X125 series ensures a 360-degree light output. Xenon beacons are one of the most efficient, effective and brightest visual signals available.

Features

- Continuously rated
- 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
- UV Stable ABS Plastic Base

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

•at 24v Dc ---



Kg 0.17

50/60 **Hz**

°C -25+55

IP 65

FPM 60

INDUSTRIAL



ADD THE FOLLOWING LENS CODES TO THE PRODUCT CODE WHEN ORDERING



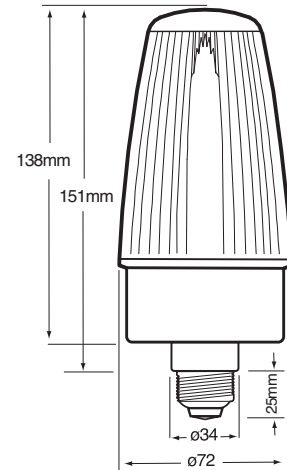


Industrial Xenon Beacons > X125ES Series

Product overview

The X125ES 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 design of the X125ES series ensures a 360-degree light output. The ES Series is ideal for temporary installation due to the ES27 screw base. Xenon beacons are one of the most efficient, effective and brightest visual signals available.



Features

Continuously rated

360° visibility

Simple and quick installation

IP65

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



Kg 0.20

50/60 **Hz**

°C -25+55

IP 65

FPM 60

INDUSTRIAL

APPROVAL AND
CONFORMITIES



ADD THE FOLLOWING LENS CODES TO
THE PRODUCT CODE WHEN ORDERING

01

02

03

04

05

Visual Signals XENON

BEACONS

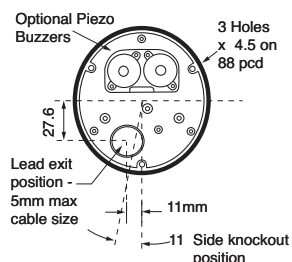
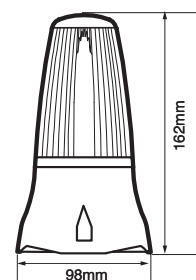


Industrial Xenon Beacons > X125 DIN Base Series

Product overview

The X125 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 design of the X125 Din Base Series ensures a 360-degree light output. Xenon beacons are one of the most efficient, effective and brightest visual signals available.



Features

- Continuously rated
- Suitable for surface mounting
- Optional protective guard available - see accessory page
- 360° visibility
- Three-point fix external
- IP65

Material

- UV Stable Polycarbonate Lens
- UV Stable ABS Plastic Base

Code No:	Voltage:	Light Source:	Current:
X125-64	10-100v Dc --- 20-72v Ac ~	Xenon 2.0J	130 mA [•]
X125-62	115v Ac ~	Xenon 2.3J	30 mA
X125-63	230v Ac ~	Xenon 2.7J	21 mA

[•]at 24v Dc ---



Kg 0.25

50/60 Hz

°C -25+55

IP 65

FPM 60

INDUSTRIAL



ADD THE FOLLOWING LENS CODES TO THE PRODUCT CODE WHEN ORDERING



Visual Signals XENON BEACONS



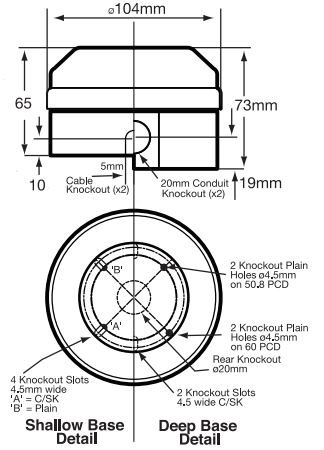
Industrial Xenon Beacons > X195 Series

Product overview

The X195 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. Xenon beacons are one of the most efficient, effective and brightest visual signals available. The X195 series offers shallow base and deep base options - the deep base version having side entry as well as bottom entry. Synchronized version available.

BEACONS



Features

Continuously rated

Suitable for surface or wall mounting

Suitable for use with conduit BESA box

M20 side entry [deep base only] or bottom cable entry

IP65

Material

UV Stable Polycarbonate Lens
ABS Plastic Base



Code No:	Voltage:	Light Source:	Current:
X195-02WH-SB	15-28v Ac/Dc \sim	Xenon 5.0J	310 mA
X195-02WH	15-28v Ac/Dc \sim	Xenon 5.0J	310mA
X195-05WH-SB	180-250v Ac \sim	Xenon 5.0J	110 mA
X195-05WH	180-250v Ac \sim	Xenon 5.0J	110mA

Kg 0.25

50 Hz

°C -25+45

IP 65

FPM 60

FIRE

APPROVAL AND CONFORMITIES



ADD THE FOLLOWING LENS CODES TO THE PRODUCT CODE WHEN ORDERING

01

02

03

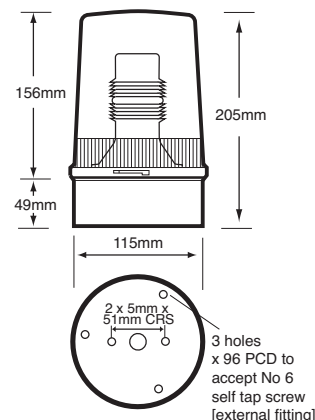
04

05

INDUSTRIAL

Visual Signals XENON

BEACONS



Industrial Xenon Beacons > X201-200 Series

Product overview

The X201/200 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 X201/200 Series provides a 360-degree light output and has a Single Flash 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 (Fresnel) lens which magnifies the light output. Xenon beacons are one of the most efficient, effective and brightest visual signals available.

Features

- Continuously rated
- Suitable for use with conduit BESA box
- Suitable for surface or wall mounting
- Optional wall bracket & protective guard available – see accessory page
- Single or Double flash option
- Diode polarised [DP] options available for fire alarm systems
- 360° visibility
- IP65

Material

- UV Stable Polycarbonate Lens
- UV Stable ABS Plastic Base

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



Kg 0.72

50/60 Hz

°C -25+55

IP 65

FPM 60x90

FIRE

APPROVAL AND CONFORMITIES



ADD THE FOLLOWING LENS CODES TO THE PRODUCT CODE WHEN ORDERING

01

02

03

04

05

INDUSTRIAL

Visual Signals XENON

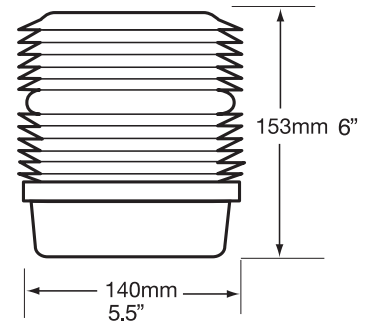
BEACONS

Industrial Xenon Beacons > X201SD-200S Series

Product overview

The X201SD/200S 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 X201SD/200S Series provides a 360-degree light output. The series are IP66 rated making them ideal for marine applications. The X201SD has double flash as standard. Xenon beacons are one of the most efficient, effective and brightest visual signals available.



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

Features

- Continuously rated
- Suitable for surface mounting
- Ideal for areas of high vibration
- Very robust construction
- 360° visibility
- IP66

Material

UV Stable Polycarbonate Lens
Zinc Cast Metal 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 ---



Kg 0.92

50/60 **Hz**

°C -35+66

IP 66

FPM 120DC
60AC

MARINE

APPROVAL AND
CONFORMITIES



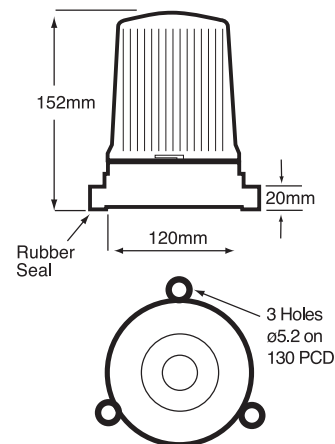
ADD THE FOLLOWING LENS CODES TO
THE PRODUCT CODE WHEN ORDERING

01 **02**

INDUSTRIAL

Visual Signals XENON

BEACONS



Industrial Xenon Beacons > X250 Series

Product overview

The X250 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 X250 Series provides a 360-degree light output and is rated at IP67 making it ideal for marine applications. It also has built-in vibration protection making it suitable for machinery and plant where excessive vibration is evident. Xenon beacons are one of the most efficient, effective and brightest visual signals available.

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
- UV Stable ABS Plastic Base



Code No:	Voltage:	Light Source:	Current:
X250-18	10-100v Dc ---	Xenon 10J	0.05-0.16 A
	20-75v Ac ~	Xenon 10J	0.10-0.16 A
X250-22	230v Ac ~	Xenon 10J	0.08 A

Kg 0.45

50 Hz

°C -25+50

IP 67

FPM 60

MARINE

APPROVAL AND CONFORMITIES



ADD THE FOLLOWING LENS CODES TO THE PRODUCT CODE WHEN ORDERING

01

02

03

04

INDUSTRIAL

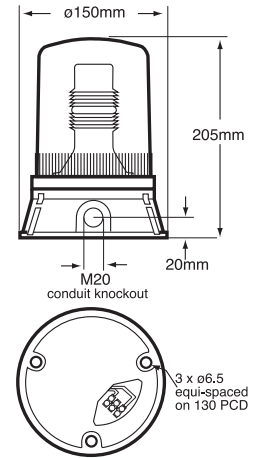


Industrial Xenon Beacons > X401/400 Series

Product overview

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 degree light output and has a Single Flash 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 Dioptic (Fresnel) 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

- Continuously rated
- Suitable for surface or wall mounting
- Optional wall bracket & protective guard available - see accessory page
- 360° visibility
- Single or double flash option
- Diode polarised [DP] options available for fire alarm systems
- M20 side or bottom cable entry
- IP65

Material

- UV Stable Polycarbonate Lens
- UV Stable ABS Plastic Base



Code No:	Voltage:	Light Source:	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

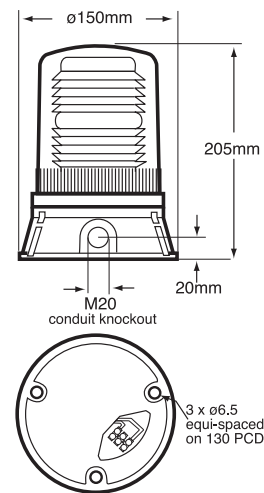
- Pre-set at 24v Dc ---
- Diode polarised
- Ambient Temperature Range -25°C to +35°C

Kg 0.82
50/60 **Hz**
°C -25+55
IP 65
FPM 60x90
INDUSTRIAL

APPROVAL AND CONFORMITIES
ADD THE FOLLOWING LENS CODES TO THE PRODUCT CODE WHEN ORDERING
01 02 03 04 05
 FIRE

Visual Signals XENON

BEACONS



Xenon Beacons > X501-500 Series

Product overview

The X501/500 Extra High Output 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 X501/500 Series provides a 360-degree light output and has a Single Flash or Double Flash option. The Double

Flash option extends the signal duration making it more noticeable to the human eye. The Extra High Output capability of this series makes it suitable for the more demanding of visual applications. Brightness is increased by the use of a Dioptic (Fresnel) 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

- Extra high output
- Continuously rated
- Suitable for surface or wall mounting
- Optional wall bracket & protective guard available - see accessory page
- 360° visibility
- Double flash option
- M20 side or bottom cable entry
- Suitable for local signalling applications
- IP65

Material

- 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 ---

Kg 1.25

50/60 Hz

°C -25+35

IP 65

FPM 60x90

APPROVAL AND CONFORMITIES



ADD THE FOLLOWING LENS CODES TO THE PRODUCT CODE WHEN ORDERING



Visual Signals AUTOMOTIVE BEACONS

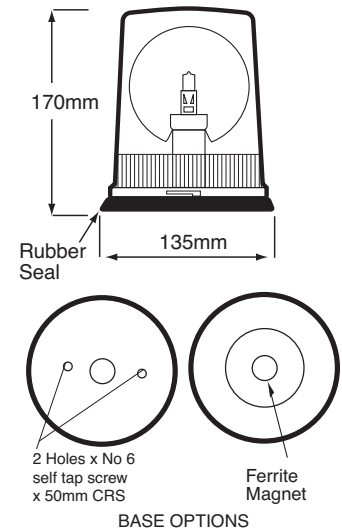


Automotive Rotating Beacons > R88 Series

Product overview

The R88 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 off-set by the fact that the parabolic reflector only illuminates one given point at a time. The R88 is available as either a permanent fixed unit or with a magnetic base and vehicle lighter socket lead for temporary and occasional use. This is ideal for when the beacon is not required to be fixed permanently to the roof of the vehicle.



Features

Continuously rated

Choice of magnetic or fixed mounting options

Worm drive system

IP65

Material

UV Stable Polycarbonate Lens
Acetal Base with Neoprene Cover

Code No:	Voltage:	Light Source:	Current:
ROTATING MB (Magnetic Base)			
R88-34	12v Dc ---	H1 X 55w	4.70 A
R88-38	24v Dc ---	H1 X 70w	3.00 A
ROTATING SF (Fixed Base)			
R88-37	12v Dc ---	H1 X 55w	4.70 A
R88-39	24v Dc ---	H1 X 70w	3.00 A

ROTATING MB (Magnetic Base)

R88-34	12v Dc ---	H1 X 55w	4.70 A
R88-38	24v Dc ---	H1 X 70w	3.00 A

ROTATING SF (Fixed Base)

R88-37	12v Dc ---	H1 X 55w	4.70 A
R88-39	24v Dc ---	H1 X 70w	3.00 A



Kg 1.11 MB

Kg 0.67 SF

°C -25+55

IP 65

FPM 160±30

AUTOMOTIVE

APPROVAL AND
CONFORMITIES



ADD THE FOLLOWING LENS CODES TO
THE PRODUCT CODE WHEN ORDERING

01

02

03

04

05