

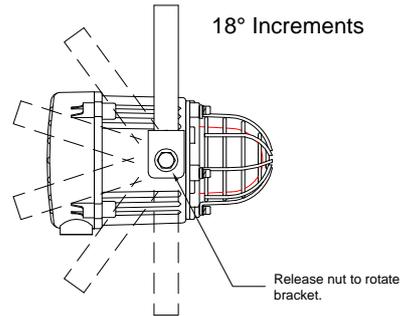
- Xenon 21 & 15 Joule Beacons in PPS housing
- Flashing : 15J : 1Hz  
21J : 1Hz ; 2Hz ; Double Strike
- IP 67/66 & Type 4 / 4X / 13
- Operating Temperature Range  
-20°C to +55°C
- CE Approved

### Housing Material :

The MB021P & MB015P units feature enclosures that are manufactured from lightweight, high performance PPS which, with its corrosion properties, is suitable for the harshest environments.

### Mounting:

The MB021P & MB015P beacons must be mounted using the rotating bracket as shown.



Unit Type Code.	Voltage	Range	Current
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21 Joule Beacon Range

MB021PDC024B-P**	24Vdc	20-28Vdc	1.2A
MB021PDC048B-P**	48Vdc	42-54Vdc	600mA
MB021PAC115B-P**	115Vac	+/-10%	560mA
MB021PAC230B-P**	230Vac	+/-10%	280mA

\*\* replace with lens colour see table below

15 Joule Beacon Range

MB015PDC024B-P**	24Vdc	20-28Vdc	860mA
MB015PDC048B-P**	48Vdc	42-54Vdc	480mA
MB015PAC115B-P**	115Vac	+/-10%	360mA
MB015PAC230B-P**	230Vac	+/-10%	170mA

\*\* replace with lens colour see table below

**Input Voltages:** DC Units 24V or 48V  
AC Units 115V or 230V 50/60Hz

### Lens colour options :

All coloured lenses are painted for full product code replace \*\* with colour reference

AM (Amber)	BL (Blue)	CL (Clear)
GN (Green)	RD (Red)	YW (Yellow)
GC (half Green / Half Clear)		

### Wiring Installation:

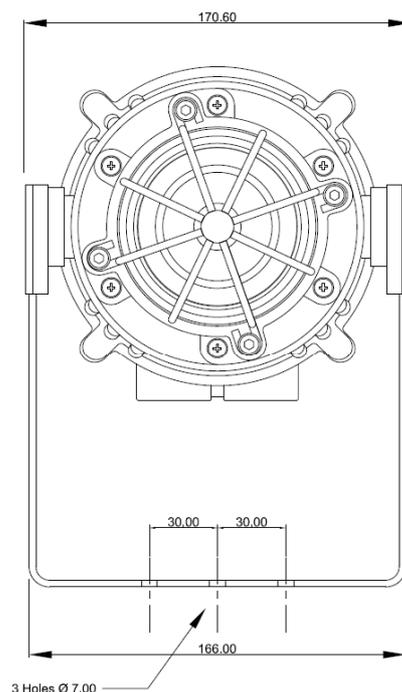
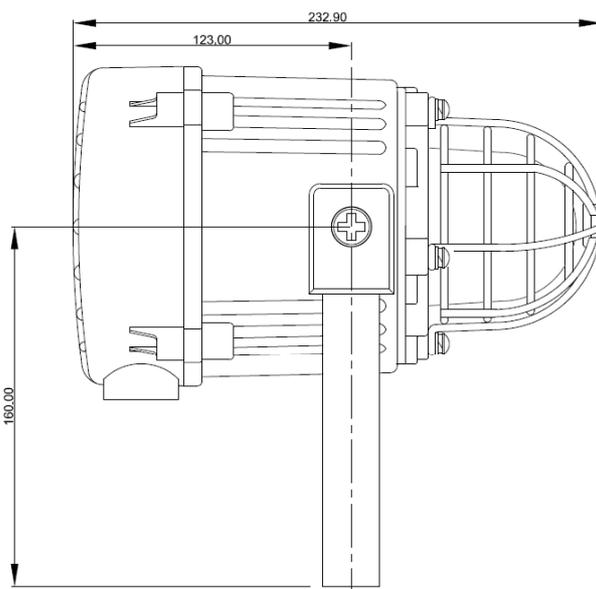
The MB021P & MB015P beacons are provided with

- 2 off M20 x 1.5 cable entries
- 1 x M20 stopping plug

**ATTENTION - Installation must be carried out by an electrician in compliance with the latest codes and regulation.**

**ATTENTION - Disconnect from power source before installation or service to prevent electric shock.**

**ATTENTION - On Strobe beacons allow a minimum of 5 minutes for the hazardous high voltage to discharge from unit.**



## Installation of electrical connection and cable glands

The cable connections are made into the beacons terminal blocks on the electronic PCB assembly.  
Terminal blocks are suitable for field wiring 0.5 to 4.0mm<sup>2</sup> (AWG 18-12). Strain relief has to be ensured by installation with a suitable cable gland.  
Follow the markings for the terminals on the PCB.

Cable glands need to be rated with a suitable IP rating if particular IP (Ingress Protection) rating is required.

## Power Supply Selection:

It is important that a suitable power supply is used to run the beacons. The power supply selected must have the necessary capacity to provide the input current to all of the beacons connected to the system.

## EOL Monitoring Resistor

On MB021P & MB015P DC units, dc reverse line monitoring can be used if required. All DC beacons have a blocking diode fitted in their supply input lines. An end of line monitoring resistor can be connected across the +ve and -ve terminals.

## Synchronised Operation:

All MB021P and MB010P beacons that are connected to the same supply line will have synchronised flash patterns provided that they are set to the same flash pattern.

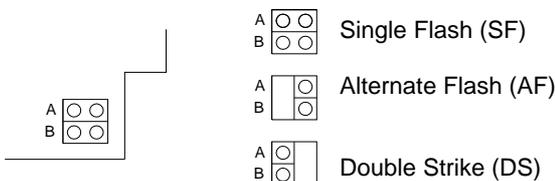
## MB021P Units Flash Pattern Options:

The MB021P beacons have two xenon tubes and can produce three different flash patterns as listed below. The flash patterns are set internally by the selection of pin headers.  
On the DC beacons the flash pattern set can be changed externally to produce a second stage by connecting terminal S2 to -ve supply line.  
The AC beacons do not have a second stage.

## DC Beacons

## Stage 2

Single Flash @ 1Hz (Both tubes flashing together)	AF
Alternate Flash @ 2Hz (Tubes flashing alternately)	SF
Double Strike @ 1Hz (One Tube flashing immediately after the other)	SF

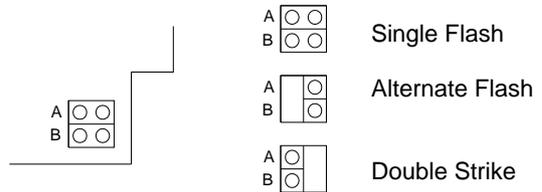


## AC Beacons

Single Flash @ 1Hz (Both tubes flashing together)

Alternate Flash @ 2Hz (Tubes flashing alternately)

Double Strike @ 1Hz (One Tube flashing immediately after the other)



## MB015P Only Flip Flop Flash Pattern Options:

Two MB015P beacons can be mounted close to each other to form a flip-flop operation, where the beacons will flash alternately.  
To achieve this mode of operation, fit a pin header to the flipflop header pins on the electronics board, i.e. the two header pins are shorted together, on one of the two beacons.  
The first flash on the beacon that has the header fitted will be delayed by 1/2 second. The two beacons will then flash alternately every 1/2 a second.