

# GNExB2X10 Xenon Strobe Beacon

**The GNExB2X10 is a globally approved explosion proof 10 Joule Xenon beacon. The robust corrosion proof GRP enclosure and extended temperature range ensures suitability for all Zone 1, 2, 21 & 22 and Class I Div 2 hazardous location applications.**

The GNExB2X10 beacon produces over 479cd effective – a very high output Xenon strobe flash as required for efficient signalling over greater distances and in high ambient light. The optically enhanced field replaceable colour filter optimises the strobe output and is constructed from UV stable PC. The GRP enclosure features a threaded flame path, triple cable entries and a large termination area – all of which significantly reduce installation time. SIL1 & SIL2 Route 2H compliant to IEC61508 (2010) as standard, with optional diagnostic module for Route 1H SIL2 compliance.

## Features

- Four flash rates: 1Hz, 1.3Hz, 1.5Hz & double flash
- Automatic synchronisation on multi-beacon systems
- User replaceable Xenon tube secured against shock & vibration
- A4 316 Stainless Steel guard included as standard
- UV stable polycarbonate lens colour filter – field replaceable
- 3 x cable entries
- Stopping plugs included
- Robust corrosion proof GRP (glass reinforced polyester) enclosure

## Approvals

- UL/cUL – File ref: E245313
- IECEx Certificate: IECEx ULD 15.0003X
- ATEX Certificate: DEMKO 15 ATEX 1448X
- UKCA certificate: UL21UKEX2136X
- TR-CU Ex EAC certificate: RU C-GB.HA65.B.01252\_21
- PESO CCOE certified: P579164
- INMETRO IEx 20.0049X
- SIL1 & SIL2 compliant to IEC61508 (2010)

## Coding

- IECEx / ATEX
  - II 2G Ex db IIC T4 Gb Ta -50°C to +70°C
  - II 2G Ex db IIC T5 Gb Ta -50°C to +45°C (AC: +40°C)
  - II 2D Ex tb IIIC T117°C Db Ta -50°C to +70°C (AC: T122°C)
- NEC Class / Zone
  - Class I Zone 1 AEx db IIC T4 Ta -50°C to +70°C
  - Class I Zone 1 AEx db IIC T5 Ta -50°C to +45°C (AC: +40°C)
- CEC Class / Zone
  - Ex db IIC T4 Ta -50°C to +70°C
  - Ex db IIC T5 Ta -50°C to +45°C (AC: +40°C)
- NEC / CEC Class / Div
  - Class I Div 2 Group ABCD T4 Ta -50°C to +70°C
  - Class I Div 2 Group ABCD T5 Ta -50°C to +45°C (AC: +40°C)



**Specification**

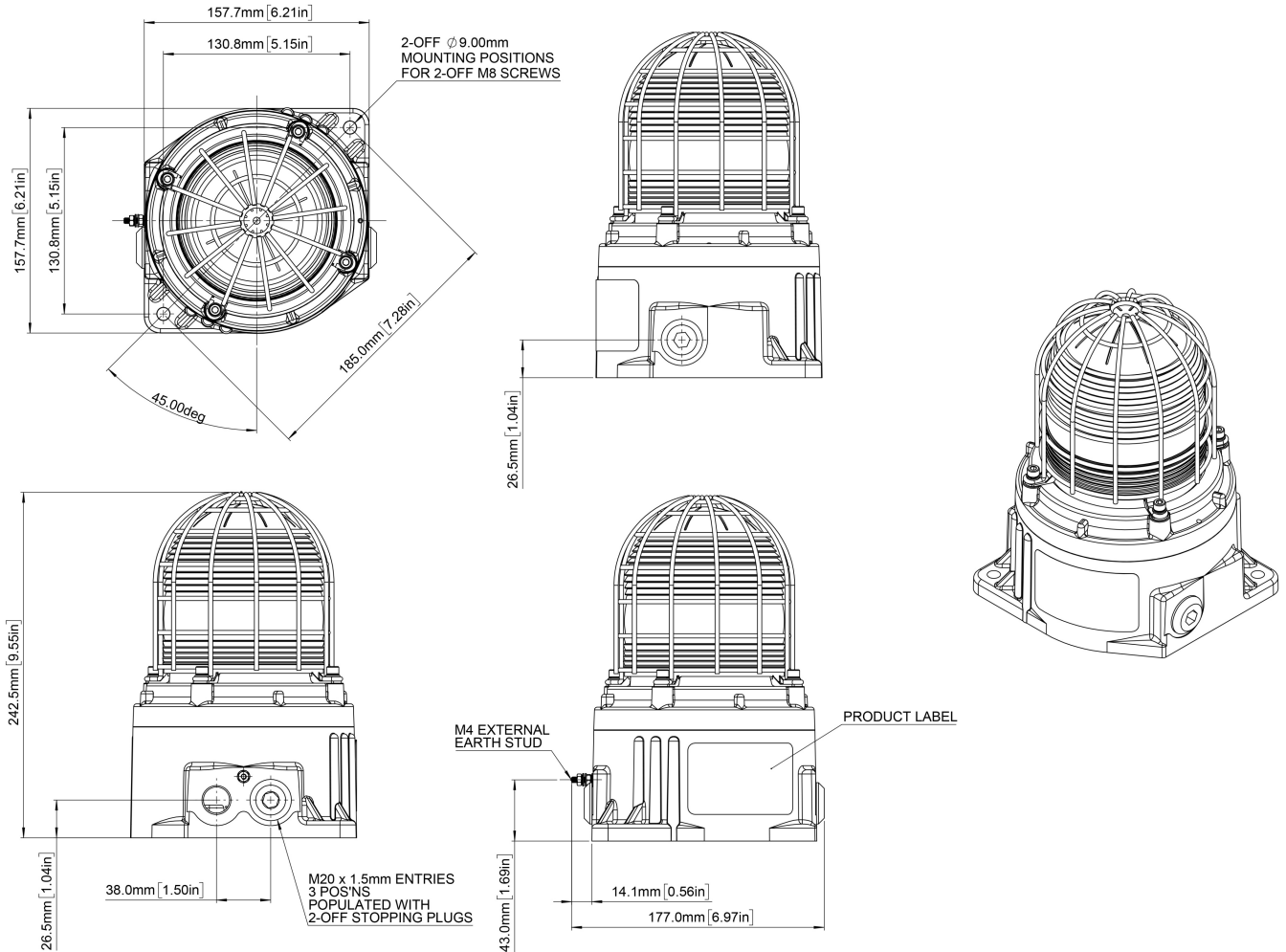
|  |   |
|--|---|
| Source:  | Xenon Strobe  |
| Energy:  | 10 Joules (10Ws)  |
| Flash rates:   | 1Hz flash (60 fpm)<br>1.3Hz flash (80 fpm)<br>1.5Hz flash (90 fpm)<br>Double flash (120 fpm)  |
| Eff. Intensity cd:   | 479.39 cd – measured ref to I.E.S   |
| Peak Candela:  | 110,243 cd – measured ref to I.E.S  |
| Eff. Intensity cd:   | 500 cd – calculated from energy (J)   |
| Peak Candela:  | 1,000,000 cd – calculated from energy (J)   |
| Lens colours:  | Amber, Blue, Clear, Green, Magenta, Red & Yellow  |
| Voltage DC:  | 24V dc (20-28Vdc), 48Vdc (42-54Vdc)   |
| Voltage AC:  | 115Vac (110-120Vac), 230Vac (220-240Vac)  |
| In-rush:   | 813mA within 6ms @ 24Vdc  |
| Safety Integrity Level:  | Product version A: SIL1 and SIL2 Route 2H<br>Product version S: SIL2 Route 1H with diagnostics SFF: >99%<br>See install manual for reliability & functional safety data |
| Ingress protection:  | IP rating per EN60529:IP66/67<br>Type rating per UL50E/NEMA250:4/4X/3R/13   |
| Lens material:   | High impact Borosilicate glass  |
| Enclosure material:  | UV stable GRP (glass reinforced polyester)  |
| Enclosure colour:  | Natural Red   |
| Enclosure finish:  | Natural – can be painted in alternative colours   |
| Cable entries:   | Side: 3 x M20x1.5mm<br>Stopping plugs included  |
| Stopping plugs:  | Brass, Nickel Plated or Stainless Steel   |
| Terminals:   | 0.5 – 2.5mm <sup>2</sup> (20-14 AWG)<br>Duplicated terminals  |
| Line monitoring:   | Blocking diode included<br>EOL Min. 500 Ohm 2W, or 3k3 Ohm 0.5W resistor<br>or diode (DC versions) can be fitted  |
| Ground/Earth stud:   | M4  |
| Line monitoring:   | Blocking diode included<br>EOL Min. 500 Ohm 2w, or 3k3 Ohm 0.5w resistor<br>or diode (DC versions) can be fitted  |
| Enclosure volume:  | <2 litres   |
| Installation temp:   | -50° to +70°C (-58°F to +158°F)   |
| Storage temp:  | -50° to +70°C (-58°F to +158°F)   |
| Relative humidity:   | 99% – tropicalised/conformal coated electronics   |
| MTBF DC:   | 198.88 years / 1,742,161 hours – MIL 217  |
| MTBF AC:   | 253.68 years / 2,222,223 hours – MIL 217  |
| Weight:  | 3.5kg/7.7lbs  |
| *All candela data is representative of performance with clear lens at optimum voltage. |   |

**Part Codes**

| Part Code:                              | Identifier:                                    | Description:   |
|---|--|--|
| Product type:                           | GNExB2   |  |
| Type:                                   | X10  | Xenon Beacon – 10 Joule  |
| Voltage:                                | DC024<br>DC048<br>AC115<br>AC230               | 24Vdc (20-28Vdc)<br>48Vdc (42-54Vdc)<br>115Vac (110-120Vac)<br>230Vac (220-240Vac)   |
| Cable entries: [e]                      | A<br>B<br>C<br>D<br>E<br>F<br>G<br>H<br>I<br>J | 3 x M20x1.5mm<br>2 x 1/2" NPT – adaptors<br>2 x 3/4" NPT – adaptors<br>2 x M25x1.5mm – adaptors<br>1 x 1/2" NPT – adaptor<br>1 x 3/4" NPT – adaptor<br>1 x M25x1.5mm – adaptor<br>3 x 1/2" NPT – adaptors<br>3 x 3/4" NPT – adaptors<br>3 x M25x1.5mm – adaptors |
| Stopping plug/<br>adaptor material: [m] | B<br>N<br>S                                    | Brass<br>Nickel plated brass<br>Stainless steel  |
| Guard material: [s]                     | 1<br>3<br>5                                    | A4 316 Stainless Steel<br>A4 316 St/St with Equip. Tag<br>A4 316 St/St with Equip. Tag and Duty Label  |
| Product version: [v]                    | A<br>S   | UL, cUL, IECEX, ATEX, Ex EAC, PESO, INMETRO – SIL1 & SIL2 Route 2H<br>UL, cUL, IECEX, ATEX, Ex EAC, PESO, INMETRO (24Vdc only) – SIL2<br>Route 1H with diagnostics SFF: >99%   |
| Product option: [o]                     | 1<br>X   | Standard product<br>Custom configuration – contact E2S   |
| Enclosure colour: [x]                   | R<br>S   | Red<br>Special colour – contact E2S  |
| Lens colour: [y]                        | A<br>B<br>C<br>G<br>M<br>R<br>Y                | Amber<br>Blue<br>Clear<br>Green<br>Magenta<br>Red<br>Yellow  |
| Accessories:                            | SP65-0001-A4<br>SP65-0003-A4                   | Pole Mount Bracket Kit St/St A4 (316)<br>Sunshade – St/St A4 (316)   |

## Current Consumption

| Nominal Voltage: | Voltage range:     | Nominal current: | Max. current: | In-rush:   |
|------------------|--------------------|------------------|---------------|------------|
| 24Vdc            | 20-28Vdc           | 605mA            | 710mA         | 813mA <6ms |
| 48Vdc            | 42-54Vdc           | 230mA            | 250mA         | -          |
| 115Vac           | 110-120Vac 50/60Hz | 220mA            | 300mA         | -          |
| 230Vac           | 220-240Vac 50/60Hz | 130mA            | 180mA         | -          |



## Assemblies

The GNExB2X10 is available as a plated assembly configured with a GNEx type alarm horn sounder and additional GNEx type Xenon strobe or LED beacons with or without a GNExJ2 Ex d junction box. Contact E2S for further information.