

# D1xB2X10 Explosion Proof Xenon Strobe Beacon 10J

The D1xB2X10 is a globally approved explosion proof 10 Joule Xenon beacon. The robust Type 4/4X corrosion proof LM6 marine grade aluminium alloy enclosure ensures suitability for all Class I/II Div 1, Zone 1, 2, 21 & 22 applications.

Approved to UL1638 and CAN/ULC S526 for fire alarm use the D1xB2X10 beacons produce a high output Xenon flash required for effective signalling in environments with elevated levels of ambient light. The field replaceable colour filter enhances the strobe and is constructed from UV stable PC. The robust enclosure features a threaded flame path, four cable entries. Mounting options include surface via integrated lugs, pendant or by addition of optional multi direction stainless steel bracket. SIL1 compliant to IEC61508 (2010) as standard – SIL2 version available.

## Features

- Four flash rates: 1Hz, 1.3Hz, 1.5Hz & double flash
- Automatic synchronisation on multi-beacon system
- A4 316 Stainless Steel guard included as standard
- UV stable polycarbonate lens colour filter – field replaceable
- 4 x side, 1 x pendant cable entries – stopping plugs included
- Corrosion proof marine grade aluminium enclosure
- UL 1638 & CAN/ULC S526 signaling device for Fire Alarm

## Approvals

- UL/cUL/ULC – File ref: E245313
- IECEx Certificate: IECEx ULD 19.0006X
- ATEX Certificate: DEMKO 19 ATEX 2009X
- UKCA certificate: UL21UKEX2130X
- TR CU Ex EAC certificate: EAC RU C-GB.AA.71.B.00273/20
- PESO CCOE certified: P493433-1
- CSFM listing: 7300-2279:0508
- CCCEx certificate: 2022122309114969
- SIL1 & SIL2 compliant to IEC61508 (2010)

## Coding

- NEC Class / Zone  
Class I Zone 1 AEx db IIC T4 Ta -55°C to +80°C (AC: +65°C) T5 to +45°C  
Class I Zone 1 AEx db IIC T5 Ta -55°C to +45°C  
Zone 21 AEx tb IIIC T132°C Ta -55°C to +80°C (AC: T153°C +70°C)
- CEC Class / Zone  
Ex db IIC T4 Ta -55°C to +80°C (AC: +65°C) T5 to +45°C  
Ex tb IIIC T132°C Ta -55°C to +80°C (AC: T153°C +70°C)
- NEC / CEC Class / Div  
Class I Div 1 Group ABCD T4 Ta -55°C to +80°C (AC: +70°C)  
Class I Div 1 Group ABCD T4A Ta -55°C to +70°C (AC: +55°C)  
Class I Div 1 Group ABCD T5 Ta -55°C to +50°C  
Class II Div 1 Group EFG T4 Ta -55°C to +80°C (AC: +40°C)  
Class II Div 1 Group EFG T4A Ta -55°C to +65°C / T5 to +45°C  
Class III Div 1 Ta -55°C to +80°C (AC: +40°C)
- IECEx / ATEX  
II 2G Ex db IIC T4 Gb Ta -55°C to +80°C (AC: +65°C) T5 to +45°C  
II 2D Ex tb IIIC T135°C Db Ta -55°C to +80°C (AC: T139°C +70°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:  | 69.81cd UL 1638 Private mode fire  |
| Eff. Intensity cd:  | 645.21cd 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   |
| 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: | Marine grade LM6 aluminium alloy   |
| Enclosure colour:   | Red or Grey, custom colours available on request   |
| Enclosure finish:   | Chromate & powder coated finish  |
| Cable entries:      | Side: 2 × 3/4"NPT & 2 x M20x1.5mm<br>Pendant: 1 × 3/4"NPT<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:  | M5   |
| 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:  | -55 to +80°C [-67° to +176°F]  |
| Storage temp:       | -55 to +80°C [-67° to +176°F]  |
| Relative humidity:  | 95% – Additional tropicalisation is recommended for applications where both high relative humidity and high ambient temperatures exist |
| MTBF DC:            | 198.88 years / 1,742,161 hours – MIL 217   |
| MTBF AC:            | 253.68 years / 2,222,223 hours – MIL 217   |
| Weight:             | 3.2kg/7.1lbs   |

\*All candela data is representative of performance with clear lens at optimum voltage.

## Part Codes

| Part Code:                          | Identifier:                      | Description:   |
|-------------------------------------|----------------------------------|--|
| Product type:                       | D1xB2                            |  |
| Type:                               | X10                              | Xenon Strobe 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]                  | M<br>B<br>E                      | 2 × 3/4"NPT, 2 x M20, 1 × 3/4"NPT<br>2 × 1/2"NPT – adaptors, 2 × 3/4"NPT, 1 × 3/4"NPT<br>1 × 1/2"NPT – adaptors, 1 x M20, 2 × 3/4"NPT, 1 × 3/4"NPT |
| Stopping plug/<br>adaptor material: | B<br>N<br>S                      | Brass<br>Nickel plated brass<br>Stainless steel  |
| Guard material:                     | 1<br>3                           | A4 316 Stainless Steel<br>A4 316 St/St with Equip. Tag   |
| Product version:                    | A<br>S                           | UL, cUL, ULC, IECEx, ATEX, CCCEX, Ex EAC, PESO, CSFM<br>SIL2 – UL, cUL, ULC, IECEx, ATEX, CCCEX, Ex EAC, PESO, CSFM (24Vdc only)                   |
| Product option:                     | 1<br>T<br>X                      | Standard product<br>Tropicalisation<br>Custom configuration – contact E2S  |
| Enclosure colour:                   | R<br>G<br>S                      | Red<br>Grey<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:

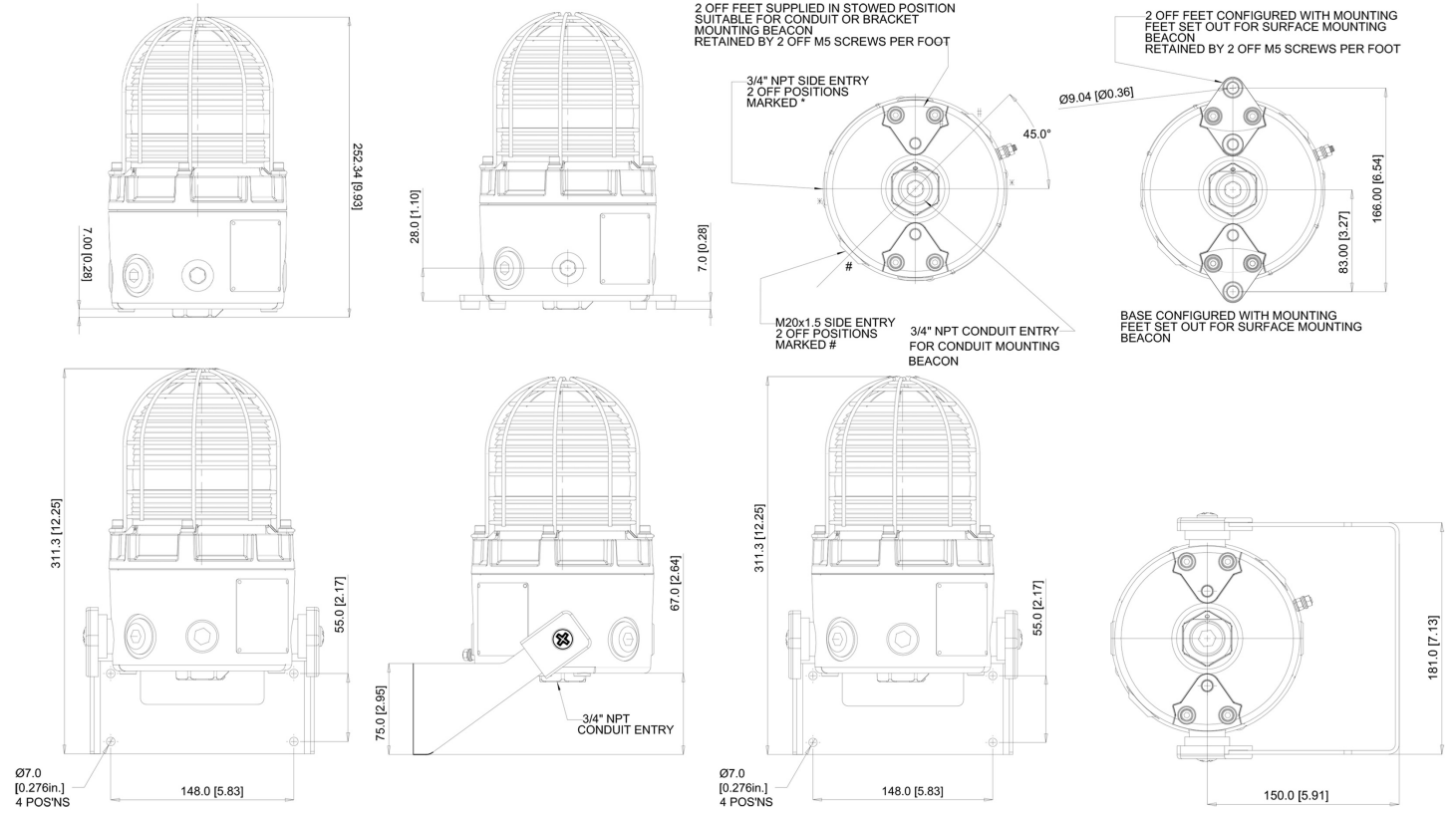
|                |   |
|----------------|---|
| SP77-0001-A4-R | Multi angle bracket A4 (316) for Red enclosure  |
| SP77-0001-A4-G | Multi angle bracket A4 (316) for Grey enclosure |
| SP65-0001-A4   | Pole Mount Bracket Kit 2" St/St A4 (316)        |
| SP65-0003-A4   | Sunshade – St/St A4 (316)                       |

## Spares:

|             |  |
|-------------|--|
| SP77-0002   | Xenon flash tube assembly                  |
| SP77-0015-R | Pack of 2 x Mounting Lugs – Red enclosure  |
| SP77-0015-G | Pack of 2 x Mounting Lugs – Grey enclosure |

## 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 D1x2X10 is available as a plated assembly configured with a D1x type alarm horn sounder and additional D1x type Xenon strobe or LED beacons with or without a D1xJ2 Ex d junction box. Contact E2S for further information.