1-21-203 / Class I Div 1 Haz Loc

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 for effective visual signalling. The field replaceable colour filter enhances the strobe and is constructed from UV stable PC. The robust enclosure features a threaded flame path and multiple cable entries. Mounting options include surface via integrated lugs, pendant or multi directional by addition of the optional stainless steel bracket. SIL1 & SIL2 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 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) 1.3Hz flash (80 fpm) 1.5Hz flash (90 fpm) Double flash (120 fpm)
Eff. Intensity cd:	69.81cd UL1638 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 colous:	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 Product version S: SIL2 Route 1H with diagnostics SFF: >99% See install manual for reliability & functional safety data
Ingress protection:	IP rating per EN60529:IP66/67 Type rating per UL50E/NEMA250:4/4X/3R/13
Lens material:	High impact Borosilicate glass
Enclosure material:	Marine grade LM6 aluminium alloy
Enclosure color:	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 Pendant: 1 × 3/4"NPT Stopping plugs included
Stopping plugs:	Brass, Nickel Plated or Stainless Steel
Terminals:	0.5 – 2.5mm² (20-14AWG) – 12AWG solid core conductor Duplicated terminals
Line monitoring:	Blocking diode included EOL Min. 500 Ohm 2W, or 3k3 Ohm 0.5W resistor or diode (DC versions) can be fitted
Ground/Earth stud:	M5
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:	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:	3.2kg/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 DC048 AC115 AC230	24Vdc (20-28Vdc) 48Vdc (42-54Vdc) 115Vac (110-120Vac) 230Vac (220-240Vac)
Cable entries: [e]	M B E	2 × 3/4"NPT, 2 x M20, 1 × 3/4"NPT 2 × 1/2"NPT – adaptors, 2 × 3/4"NPT, 1 × 3/4"NPT 1 × 1/2"NPT – adaptors, 1 x M20, 2 × 3/4"NPT, 1 × 3/4"NPT
Stopping plug/ adaptor material: [m]	B N S	Brass Nickel plated brass Stainless steel
Guard material: [s]	1 3 5	A4 316 Stainless Steel A4 316 St/St with Equip. Tag A4 316 St/St with Equip. Tag and Duty Label
Product version: [v]	A S	UL, cUL, ULC, IECEx, ATEX, CCCEx, Ex EAC, PESO, CSFM – SIL1 & SIL2 Route 2H UL, cUL, ULC, IECEx, ATEX, CCCEx, Ex EAC, PESO, CSFM (24Vdc only) – SIL2 Route 1H with diagnostics SFF: >99%
Product option: [o]	1 X	Standard product Custom configuration – contact E2S
Enclosure color: [x]	R G S	Red Grey Special colour – contact E2S
Lens color: [y]	A B C G M R Y	Amber Blue Clear Green Magenta Red Yellow

Accessories:

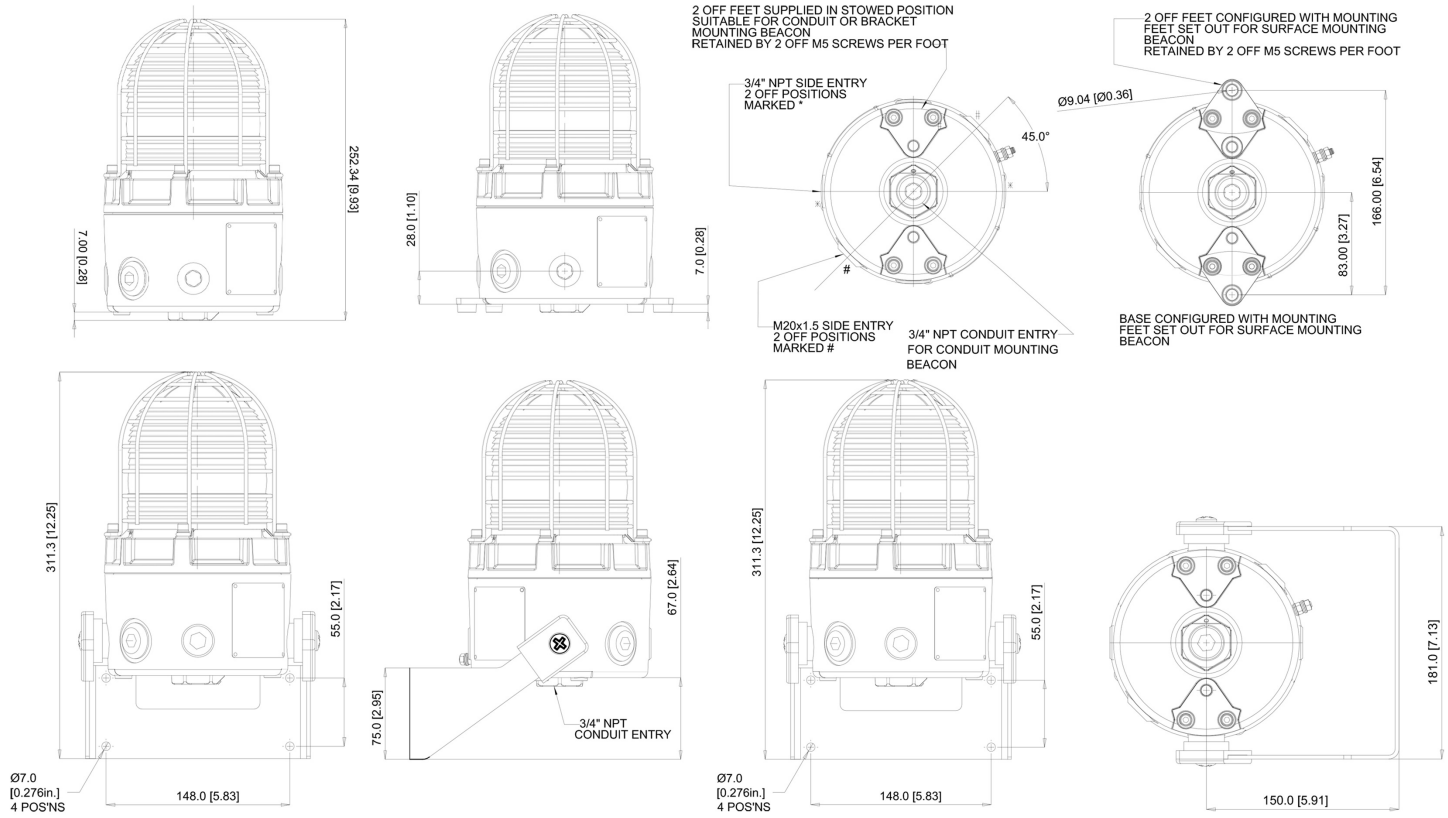
SP77-0001-A4-R	Multi angle bracket A4 (316) for Red enclosure
SP77-0001-A4-G	Multi angle bracket A4 (316) for Grey enclosure
SP65-0001-A4	Pole Mount Bracket Kit St/St A4 (316)
SP65-0003-A4	Sunshade – St/St A4 (316)

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 D1xB2X10 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 The SignalSource for further information.

Brooks Equipment • 10926 David Taylor Dr, Suite 300 • Charlotte, NC 28262 • 800.826.3473 (P) • 800.433.9265 (F)
Sales@BrooksEquipment.com • www.BrooksEquipment.com