

# BExCBGL2-05 LED & Xenon Dual Beacon

The flameproof BExCBGL2-05 dual LED and Xenon beacons are suitable for Zone 1, 2, 21 & 22 applications. Approved to IECEx and ATEX standards.

The BExCBGL2-05D dual LED & 5 Joule Xenon beacons robust construction enables installation in the harshest of environments. The beacons may be connected from a single supply for simultaneous operation or from separate supplies for independent operation.

The BEx range features enclosures manufactured from corrosion proof, marine grade copper free LM6 aluminium with a chromate and powder coat finish. All models have two M20 cable entries, large termination areas containing in & out terminals and an ingress protection of IP66/67.

## Features

- Marine grade, corrosion proof, LM6 aluminium enclosure
- Automatic synchronisation on multi-beacon system.
- Glass lens & Stainless Steel guard
- Very large termination area.
- Dual M20 cable entries – adaptors available.
- Stopping plug included.
- Ratchet adjustable stainless steel 'U' bracket.
- Reverse polarity diode fitted.
- IP66/67 ingress protection.
- 120+160 candela effective light intensity.
- UV stable PC, field replaceable, colour lens filters.
- LED modes:
  - 1Hz flash (60 fpm)
  - 1.5Hz flash (90 fpm)
  - 2Hz flash (120 fpm)
  - Double strike flash
  - Triple strike flash
  - High Power Steady
  - Low Power Steady

## Approvals

- IECEx Certificate: KEM 10.0024X
- ATEX Certificate: KEMA 01ATEX2222X
- TR-CU Ex EAC certificate: RU C-GB.HA65.B.01252\_21
- INMETRO certificate: IEx 19.0092X
- UKCA certificate: UL22UKEX2637X

## Coding

- II 2G Ex db IIB T5 Gb Ta. -50°C to +40°C
- II 2G Ex db IIB T4 Gb Ta. -50°C to +70°C
- II 2D Ex tb IIIC T95°C Db Ta. -50°C to +40°C
- II 2D Ex tb IIIC T110°C Db Ta. -50°C to +55°C
- II 2D Ex tb IIIC T125°C Db Ta. -50°C to +70°C



## Specification

### Xenon Beacon:

Energy:	5 Joules (5Ws)
Flash rate:	1Hz (60 fpm)
Peak Candela:	39,463 cd - 1Hz flash
Eff. Intensity cd:	120 cd - 1Hz flash
<b>LED Beacon:</b>	
Source:	Array of 4 x High Power Cree® LED's
Eff. Intensity cd:	87 cd - High Power Steady
Eff. Intensity cd:	160 cd - 1Hz flash
Lens colours:	Amber, Blue, Clear, Green, Magenta, Red & Yellow
Voltages DC:	24vdc
Voltages AC:	115vac; 230vac
Ingress protection:	IP66/67
Enclosure matl:	Marine grade copper free LM6 Aluminium
Enclosure finish:	Chromate & powder coated finish - anti-corrosion.
Colour:	Red (others available on request)
Cable entries:	Dual M20 ISO (one stopping plug inc)
Terminals:	0.5 - 2.5mm <sup>2</sup> (20-14 AWG)
Enclosure volume:	<2 litres
Line monitoring:	Blocking diode included EOL Min. 500 Ohm 2w, or 3k3 Ohm 0.5w resistor or diode (DC versions) can be fitted
Grounding stud:	M5
Temperature range:	-50° to +70°C (-58°F to +158°F)
Relative humidity:	95% - Additional tropicalisation is recommended for applications where both high relative humidity and high ambient temperatures exist
Tube life:	Emissions are reduced to 70% after 8 million flashes
LED life:	60,000 hours
Weight:	DC: 4.00kg/8.8lbs AC: 4.35kg/9.57lbs
*All candela data is representative of performance with clear lens at optimum voltage.	

## Part Codes

Part Code:	Identifier:	Description:	
Product type:	BExCBGL205	Explosion proof Dual LED & 5J Xenon Beacon	
Type:	DP	Ex d, UV stable PC Colour Lenses	
Voltage:	DC024 AC115 AC230	24V dc 115V ac 240V ac	
Cable entries:[e]	A B C D E F G	2 x M20x1.5mm 2 x 1/2" NPT - adaptors 2 x 3/4" NPT - adaptors 2 x M25x1.5mm - adaptors 1 x 1/2" NPT - adaptor 1 x 3/4" NPT - adaptor 1 x M25x1.5mm - adaptor	
Stopping plug/ adaptor material: [m]	B N S	Brass Nickel Plated Stainless Steel	
Bracket/guard matl & tag: [s]	1 2 3 4	A2 304 Stainless Steel A4 316 Stainless Steel A2 304 St/St with Equip. Tag A4 316 St/St with Equip. Tag	
Product version: [v]A1		Default - IECEx, ATEX	
Enclosure colour: [x]	R S	Red Special - contact E2S	
LED lens colour: [y]	A B	Amber Blue	A Amber B Blue
Xenon lens colour: [y]	C G M R Y	Clear Green Magenta Red Yellow	C Clear G Green M Magenta R Red Y Yellow
Accessories:	SP65-0001-A4 SP65-0003-A4	Pole Mount Bracket Kit St/St A4 (316) Sunshade - St/St A4 (316)	

## Multi-function patterns

LED Stage 1: [On board]	LED Stage 2: [Remote]	LED Stage 3: [Remote]
Steady High Power	Flashing 1Hz	Triple Strike
Steady Low Power	Flashing 1Hz	Triple Strike
Flashing 1Hz	2x Flash 2Hz	Triple Strike
Flashing 1.5Hz	Flashing 2Hz	Double Strike
Flashing 2Hz	Triple Strike	Triple Strike
Double Strike	Steady High Power	Triple Strike
Triple Strike	Flashing 2Hz	Double Strike

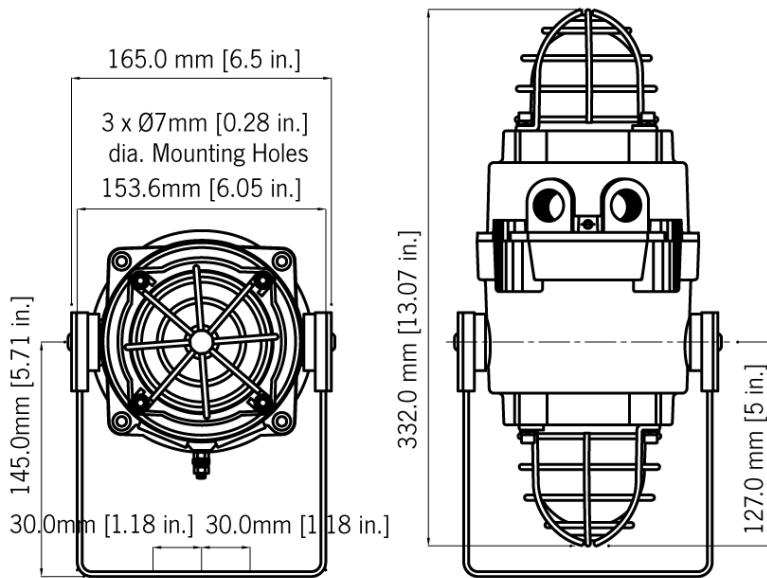
Note: Remote second and third stage on DC units only

Double strike: 150ms on, 150ms off x 2, 600ms off

Triple strike: 150ms on, 150ms off x 3, 600ms off

## Current Consumption

Version:	Voltage:	Steady High Power:	Steady Low Power:	Flashing 1Hz:
LED: 24V dc	18-54V dc	240mA	134mA	110mA
LED: 115V ac	103.5-126.5V ac 50/60Hz	95mA	78mA	90mA
LED: 230V ac	207-253V ac 50/60Hz	48mA	37mA	45mA
Xenon: 24V dc	20-28V dc			300mA
Xenon: 115V ac	50Hz/60Hz +/-10%			140mA
Xenon: 230V ac	50Hz/60Hz +/-10%			55mA



## Assemblies

Assemblies:

The products from the BEx range are available as multiple unit assemblies pre-wired with and without junction boxes. See the BExP data sheet for further info or contact E2S sales.

# BExCBGL2-L2 Ex d Dual LED Beacon

The flameproof BExCBGL2-L2 dual LED beacons are suitable for Zone 1, 2, 21 & 22 applications. Approved to IECEx and ATEX standards.

The BExCBGL2-L2D dual LED beacons robust construction enables installation in the harshest of environments. The beacons may be connected from a single supply for simultaneous operation or from separate supplies for independent operation.

The BEx range features enclosures manufactured from corrosion proof, marine grade copper free LM6 aluminium with a chromate and powder coat finish. All models have two M20 cable entries, large termination areas containing in & out terminals and an ingress protection of IP66/67.

## Features

- Marine grade, corrosion proof, LM6 aluminium enclosure
- Automatic synchronisation on multi-beacon system.
- Beacons can be set to 'flip-flop' alternating mode with other units on multi-beacon systems.
- Xenon tubes mechanically secured against shock & vibration
- Glass lens & Stainless Steel guard
- Very large termination area.
- Dual M20 cable entries – adaptors available.
- Stopping plug included.
- Ratchet adjustable stainless steel 'U' bracket.
- Reverse polarity diode fitted.
- IP66/67 ingress protection.
- 160+160 candela effective light intensity.
- UV stable PC, field replaceable, colour lens filters.

## Approvals

- IECEx Certificate: KEM 10.0024X
- ATEX Certificate: KEMA 00ATEX2222X
- TR-CU Ex EAC certificate: RU C-GB.HA65.B.01252\_21
- INMETRO certificate: IEx 19.0092X
- UKCA certificate: UL22UKEX2637X

## Coding

- II 2G Ex db IIB T6 Gb Ta. -50°C to +55°C
- II 2G Ex db IIB T5 Gb Ta. -50°C to +70°C
- II 2D Ex tb IIIC T65°C Db Ta. -50°C to +40°C
- II 2D Ex tb IIIC T80°C Db Ta. -50°C to +55°C
- II 2D Ex tb IIIC T95°C Db Ta. -50°C to +70°C



## Specification

Source:	Dual arrays of 4 x High Power Cree® LED's
Modes:	1Hz flash (60 fpm) 1.5Hz flash (90 fpm) 2Hz flash (120 fpm) Double strike flash Triple strike flash High Power Steady Low Power Steady
Eff. Intensity cd:	87 cd – High Power Steady (each beacon)
Eff. Intensity cd:	160 cd – 1Hz flash (each beacon)
Lens colours:	Amber, Blue, Clear, Green, Magenta, Red & Yellow
Voltages DC:	24vdc
Voltages AC:	115vac; 230vac
Ingress protection:	IP66/67
Enclosure matl:	Marine grade copper free LM6 Aluminium
Enclosure finish:	Chromate & powder coated finish – anti-corrosion.
Colour:	Red (others available on request)
Cable entries:	Dual M20 ISO (one stopping plug inc)
Terminals:	0.5 – 2.5mm <sup>2</sup> (20-14 AWG)
Enclosure volume:	<2 litres
Line monitoring:	Blocking diode included EOL Min. 500 Ohm 2w, or 3k3 Ohm 0.5w resistor or diode (DC versions) can be fitted
Grounding stud:	M5
Temperature range:	-50° to +70°C (-58°F to +158°F)
Relative humidity:	95% – Additional tropicalisation is recommended for applications where both high relative humidity and high ambient temperatures exist
LED life:	60,000 hours
Weight:	DC: 4.00kg/8.8lbs AC: 4.35kg/9.57lbs
*All candela data is representative of performance with clear lens at optimum voltage.	

## Part Codes

Part Code:	Identifier: Description:		
Product type:	BExCBGL2L2Explosion proof Dual LED Beacon		
Type:	DP	Ex d, UV stable PC Colour Lenses	
Voltage:	DC024	24V dc	
	AC115	115V ac	
	AC230	240V ac	
Cable entries:[e]	A	2 x M20x1.5mm	
	B	2 x 1/2" NPT – adaptors	
	C	2 x 3/4" NPT – adaptors	
	D	2 x M25x1.5mm – adaptors	
	E	1 x 1/2" NPT – adaptor	
	F	1 x 3/4" NPT – adaptor	
	G	1 x M25x1.5mm – adaptor	
Stopping plug/ adaptor material: [m]	B	Brass	
	N	Nickel Plated	
	S	Stainless Steel	
Bracket/guard matl & tag: [s]	1	A2 304 Stainless Steel	
	2	A4 316 Stainless Steel	
	3	A2 304 St/St with Equip. Tag	
	4	A4 316 St/St with Equip. Tag	
Product version: [v]A1	Default – IECEx, ATEX		
Enclosure colour: [x]	R	Red	
	S	Special – contact E2S	
1st LED lens colour: [y]	A	Amber	A Amber
	B	Blue	B Blue
	C	Clear	C Clear
2nd LED lens colour: [y]	G	Green	G Green
	M	Magenta	MMagenta
	R	Red	R Red
	Y	Yellow	Y Yellow
Accessories:	SP65-0001-A4	Pole Mount Bracket Kit 2" St/St A4 (316)	
	SP65-0003-A4	Sunshade – St/St A4 (316)	

## Multi-function patterns

Stage 1: [On board]	Stage 2: [Remote]	Stage 3: [Remote]
Steady High Power	Flashing 1Hz	Triple Strike
Steady Low Power	Flashing 1Hz	Triple Strike
Flashing 1Hz	2x Flash 2Hz	Triple Strike
Flashing 1.5Hz	Flashing 2Hz	Double Strike
Flashing 2Hz	Triple Strike	Triple Strike
Double Strike	Steady High Power	Triple Strike
Triple Strike	Flashing 2Hz	Double Strike

Note: Remote second and third stage on DC units only

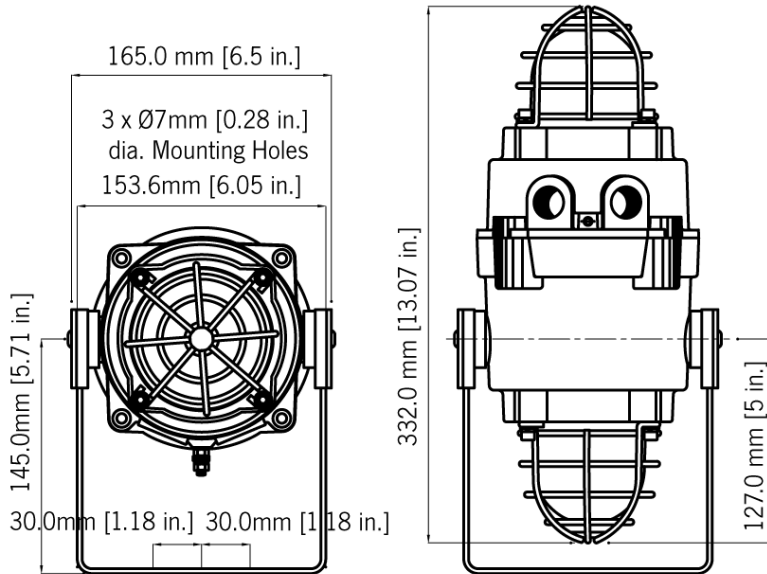
Double strike: 150ms on, 150ms off x 2, 600ms off

Triple strike: 150ms on, 150ms off x 3, 600ms off

## Current Consumption

Version:	Voltage:	Steady High Power:	Steady Low Power:	Flashing 1Hz:
24V dc	18-54V dc	240mA	134mA	110mA
115V ac	103.5-126.5V ac 50/60Hz	95mA	78mA	90mA
230V ac	207-253V ac 50/60Hz	48mA	37mA	45mA

Current listed per beacon



## Assemblies

Assemblies:

The products from the BEx range are available as multiple unit assemblies pre-wired with and without junction boxes. See the BExP data sheet for further info or contact E2S sales.

# BExCBG05-05 Ex d Dual Xenon Beacon 5 Joule

The flameproof BExCBG05-05 dual Xenon beacons are suitable for Zone 1, 2, 21 & 22 applications. Approved to IECEx, ATEX and Ex EAC standards.

The BExCBG05-05D dual 5 Joule beacons robust construction enables installation in the harshest of environments. The beacons may be connected from a single supply for simultaneous operation or from separate supplies for independent operation. Additional features include automatic synchronisation on multi-beacon systems and stainless steel guard and mounting bracket as standard.

The BEx range features enclosures manufactured from corrosion proof, marine grade copper free LM6 aluminium with a chromate and powder coat finish. All models have two M20 cable entries, large termination areas containing in & out terminals and an ingress protection of IP66/67.

## Features

- Marine grade, corrosion proof, LM6 aluminium enclosure
- Automatic synchronisation on multi-beacon system.
- Beacons can be set to 'flip-flop' alternating mode with other units on multi-beacon systems.
- Xenon tubes mechanically secured against shock & vibration
- Glass lens & Stainless Steel guard
- Very large termination area.
- Dual M20 cable entries – adaptors available.
- Stopping plug included.
- Ratchet adjustable stainless steel 'U' bracket.
- Reverse polarity diode fitted.
- IP66/67 ingress protection.
- 120+120 candela effective light intensity.
- UV stable PC, field replaceable, colour lens filters.

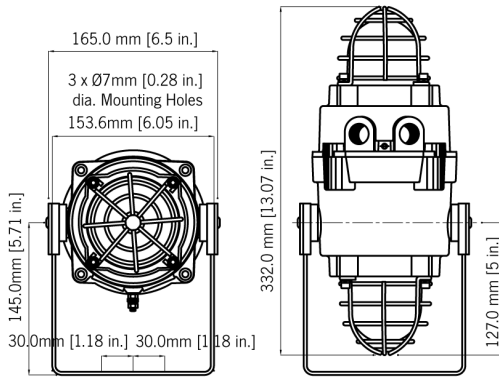
## Approvals

- IECEx Certificate: KEM 10.0024X
- ATEX Certificate: KEMA 00ATEX2222X
- TR-CU Ex EAC certificate: RU C-GB.HA65.B.01252\_21
- INMETRO certificate: IEx 19.0092X
- CCOE PESO certificate: P532974
- UKCA certificate: UL22UKEX2637X

## Coding

- II 2G Ex db IIB T4 Gb Ta. -50°C to +70°C
- II 2D Ex tb IIIC T115°C Db Ta. -50°C to +55°C
- II 2D Ex tb IIIC T130°C Db Ta. -50°C to +70°C





## Specification

Energy:	5 Joules x 2 (5Ws)
Flash rate:	1Hz (60 fpm)
Peak Candela:	500,000 cd x2 – calculated from energy (J)
Eff. Intensity cd:	250 cd x2 – calculated from energy (J)
Peak Candela:	39,463 cd* x2 – measured ref. to I.E.S.
Eff. Intensity cd:	120 cd* x2 – measured ref. to I.E.S.
Lens colours:	Amber, Blue, Clear, Green, Magenta, Red & Yellow
Voltages DC:	12vdc; 24vdc; 48vdc
Voltages AC:	115vac; 230vac
Ingress protection:	IP66/67
Enclosure matl:	Marine grade copper free LM6 Aluminium
Enclosure finish:	Chromate & powder coated finish – anti-corrosion.
Colour:	Red (others available on request)
Cable entries:	Dual M20 ISO (one stopping plug inc)
Terminals:	0.5 – 2.5mm <sup>2</sup> (20-14 AWG)
Enclosure volume:	<2 litres
Line monitoring:	Blocking diode included EOL Min. 500 Ohm 2w, or 3k3 Ohm 0.5w resistor or diode (DC versions) can be fitted
Grounding stud:	M5
Temperature range:	-50° to +70°C (-58°F to +158°F)
Relative humidity:	95% – Additional tropicalisation is recommended for applications where both high relative humidity and high ambient temperatures exist
Tube life:	Emissions are reduced to 70% after 8 million flashes
Weight:	DC: 4.00kg/8.8lbs AC: 4.35kg/9.57lbs

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

## Part Codes

Part Code:	Identifier:	Description:	
Product type:	BExCB0505	Explosion proof Dual 5J Xenon Beacon	
Type:	DP	Ex d, UV stable PC Colour Lenses	
Voltage:	DC024	24V dc	
	AC115	115V ac	
	AC230	240V ac	
Cable entries:[e]	A	2 x M20x1.5mm	
	B	2 x 1/2" NPT – adaptors	
	C	2 x 3/4" NPT – adaptors	
	D	2 x M25x1.5mm – adaptors	
	E	1 x 1/2" NPT – adaptor	
	F	1 x 3/4" NPT – adaptor	
	G	1 x M25x1.5mm – adaptor	
Stopping plug/ adaptor material:	B	Brass	
[m]	N	Nickel Plated	
	S	Stainless Steel	
Bracket/guard matl & tag: [s]	1	A2 304 Stainless Steel	
	2	A4 316 Stainless Steel	
	3	A2 304 St/St with Equip. Tag	
	4	A4 316 St/St with Equip. Tag	
Product version: [v]A1		Default – IECEx, ATEX	
Enclosure colour: [x]	R	Red	
	S	Special – contact E2S	
1st Xenon lens colour: [y]	A	Amber	A Amber
	B	Blue	B Blue
	C	Clear	C Clear
2nd Xenon lens colour: [y]	G	Green	G Green
	M	Magenta	MMagenta
	R	Red	R Red
	Y	Yellow	Y Yellow
Accessories:	SP65-0001-A4	Pole Mount Bracket Kit St/St A4 (316)	
	SP65-0003-A4	Sunshade – St/St A4 (316)	

## Current Consumption

Version:	Voltage:	Current (per beacon):
12V dc	10-14V dc	750mA
24V dc	20-28V dc	300mA
48V dc	42-54V dc	180mA
115V ac	50Hz/60Hz +/-10%	140mA
230V ac	50Hz/60Hz +/-10%	55mA