

# LD15 range high intensity LED beacon

Ex d, weatherproof



## Overview

These certified LED strobes have been designed for use in potentially explosive atmospheres and harsh environmental conditions. The enclosures are suitable for use offshore or onshore where light weight combined with corrosion resistance is required. The housings are manufactured completely from a UV stable glass reinforced polyester. Stainless steel screws and mounting bracket are incorporated ensuring a totally corrosion free product. The LD15 incorporates a low maintenance, innovative LED array, which has a life of up to 54,000 hours. The low current consumption design allows an energy efficient solution without compromising light output. Units can be painted to customers specification and supplied with identification labels.

## Features

- Zone 1, 2, 21 & 22
- Ex d IIC T6/T5
- ATEX Certified Ex II 2GD
- IECEx Certified Gb, Db
- UL certified for USA and Canada
  - Hazardous locations:
    - Class I, Div. 2, Groups A\*, B\*, C & D
    - Class II, Div. 2 Groups F & G
    - Class I, Zone 1, AExd IIB & IIC\* T4/T5/T6
  - Ordinary locations: visual-signal device
- TR CU certified
- CQST certified
- INMETRO certified
- IP66 & 67
- SIL 1 certified
- Certified temperature -55°C to +70°C
- Corrosion-free GRP
- Optional stainless steel backstrap
- Various lens colours
- Optional cast aluminium or wire stainless steel guard
- Up to 3 x M20 or 3 x M25 entries
- 5 user selectable functions:
  - 60 fpm
  - 80 fpm
  - 120 fpm
  - Double flash
  - Steady
- Remote and local function selection

\*Not applicable for Canada



**ATEX IECEx**



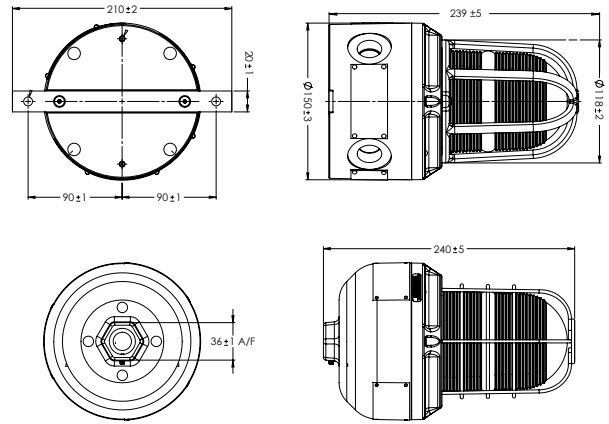
## Certifications

<b>ATEX Ex d</b>	Cert. no. Baseefa 04ATEX0009X Certified to: EN60079-0, EN60079-1, EN60079-28, EN60079-31 Ex II 2GD Ex db op is IIC T5/T6 Gb, Ex tb op is IIIC T85°C/T100°C Db
<b>IECEX Ex d</b>	Cert. no. IECEX BAS 05.0048X Certified to: IEC60079-0, IEC60079-1, IEC60079-28, IEC60079-31 Ex db op is IIC T4/T5/T6 Gb. Ex tb op is IIIC T85°C/T100°C/T135°C Db
<b>TR CU Ex d</b>	1Ex d IIC T5/T6 Gb, Ex tb IIIC T85°C/T100°C Db Russian Fire Alarm approved
<b>INMETRO Ex d</b>	Ex d IIC T5/T6 Gb, Ex tb IIIC T85°C/T100°C Db
<b>CQST Ex d</b>	Ex II 2GD Ex db op is IIC T5/T6 Gb, Ex tb op is IIIC T85°C/T100°C Db
<b>UL Haz Locs</b>	Cert. no. E187894
<b>UL Ord Locs/Marine</b>	Cert. no. S8128. Visual signal device
<b>ULC</b>	Cert. no. CE133
<b>UL certified for use in USA</b>	Class I, Div. 2, Groups A, B, C & D Class II, Div. 2, Groups F & G Class I, Zone 1, Aex d IIB & IIC T4/T5/T6
<b>UL/ULC certified for use in Canada:</b>	Class I, Div. 2, Groups C & D Class II, Div. 2, Groups F & G Class I, Zone 1, Ex d IIB T4/T5/T6
<b>SIL</b>	SIL1 certification to IEC61508. Cert. No. Sira FSP 13005 (All DC versions. Does not include telephone initiate version) SIL1 certification to IEC61508. Cert. No. 20151123-4787006958 (All AC versions. Does not include telephone initiate version)

## Specifications

<b>Material</b>	Body: glass reinforced polyester Lens: borosilicate glass Backstrap: stainless steel 316 Wire guard (optional): stainless steel wire Cast guard (optional): aluminium LM25M
<b>Finish</b>	Natural black or painted to customer specification
<b>Voltage</b>	12V d.c. to 48V d.c., 110V a.c. to 254V a.c. (UL DC only)
<b>LED life</b>	Up to 54,000 hours
<b>Function</b>	Steady, 60, 80 & 120 fpm, double flash
<b>Certified temp</b>	-55°C to +70°C (T5) -55°C to +55°C (T6)
<b>Weight</b>	Pipe mount: 3.1kg Direct mount: 3.5kg
<b>Ingress protection</b>	IP66 & IP67
<b>Entries</b>	ATEX version: Standard: 2 x M20 Optional: 1 x M20/M25, 3 x M20/M25 entries UL version: Standard pipe: ¼" NPT Standard direct: 2 x ¾" NPT Optional direct: 1 x ½"/¾" NPT or 3 x ½"/¾" NPT Dual UL/ATEX, UL/IECEX: Standard direct: 2 x ¾" NPT
<b>Terminals</b>	Direct mount: 12 x 2.5mm <sup>2</sup> /14AWG Pipe mount: 8 x 14AWG
<b>Labels</b>	Tag/duty optional

## General arrangement drawing (all dimensions in mm)



### Electrical:

Nominal voltage	d.c			a.c				
	12V	24V	48V	110V	120V	230V	240V	254V
Average current steady (mA)	430	220	120	70	70	40	40	40
Average current 60fpm (mA)	880	420	220	90	90	50	50	50
Average current 80fpm (mA)	880	420	220	90	90	50	50	50
Average current 120fpm (mA)	880	420	220	90	90	50	50	50
Average current double (mA)	710	340	180	40	40	30	30	30

### Typical light output (effective Cd) (no guard)

Colour	Red	Blue	Green	Amber	Clear	Yellow
<b>60 fpm</b>	61	24	86	55	128	122
<b>80 fpm</b>	55	22	78	49	117	112
<b>120 fpm</b>	47	19	66	42	100	95
<b>Steady*</b>	41	17	59	39	86	82

\*Not available ULC

## Ordering requirements

The following code is designed to help in selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box

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