

# LD15 range high intensity LED beacon

Ex d, weatherproof



## Overview

These certified LED beacons 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

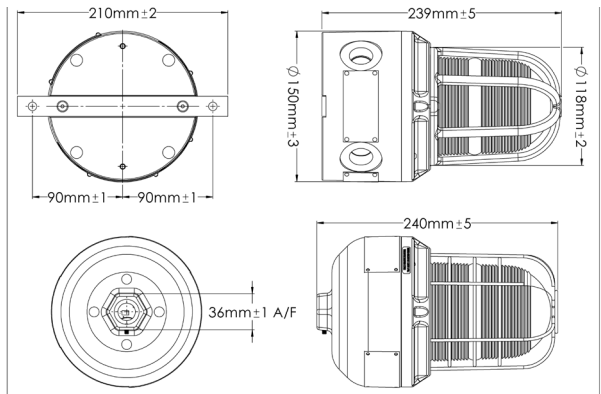
- Zone 1, 2, 21 & 22
- Ex d IIC T6/T5
- ATEX Certified Ex II 2GD
- IECEx Certified Gb, Db
- UL certified for USA and Canada
  - Hazardous locations:
    - Class I, Div. 2, Groups A, B, C & D
    - Class II, Div. 2 Groups F & G
    - Class I, Zone 1, AExd, IIC T6/T5
  - Ordinary locations: visual-signal device
- CCC Ex certified
- INMETRO certified
- IP66 & 67
- SIL2 certified
- Certified temperature -55°C to +70°C
- Corrosion-free GRP
- Optional stainless steel backstrap
- Various lens colours
- Optional cast aluminium or stainless steel wire 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



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 T5/T6 Gb. Ex tb op is IIIC T85°C/T100°C Db
<b>INMETRO Ex d</b>	Ex d IIC T5/T6 Gb, Ex tb IIIC T85°C/T100°C Db
<b>CCC Ex</b>	Ex db IIC T5/T6 Gb, Ex tb IIIC T85°C/T100°C Db
<b>GB (GuoBiao)</b>	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. E187894
<b>UL certified</b>	Class I, Div. 2, Groups A, B, C & D Class II, Div. 2, Groups F & G Class I, Zone 1, AEx d IIC T5/T6
<b>SIL</b>	SIL2 certified to IEC61508. Cert number FSP 13005

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
<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: ¾" NPT Standard direct: 2 x ¾" NPT Optional direct: 1 x ½"/¾" NPT or 3 x ½"/¾" 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. (50Hz*)				
	12	24	48	110	120	230	240	254
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

\*For 60Hz please refer to the US datasheet

**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

NPT

**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

Model	Certification	Voltage	Lens colour	Lens guard	Fixings	Options	Finish
LD15							

Certification	Code
ATEX	B
IECEX	J
Dual ATEX/UL	AU
Dual IECEX/UL	JU
UL	UL
UL (ordinary location)	UW
ULC	UC
INMETRO	DM
CCC Ex/GB	Q
Weatherproof	W

Lens colour	Code
Red	R
Blue	B
Green	G
Amber	A
Clear	C
Yellow	Y

Fixings	Code
Pipe mount	P*
Direct mount without backstrap	D†
Direct mount with backstrap	B†

\*Only available on UL listings  
†Contact MEDC if ½"NPT is required

Finish	Code
Natural black	N
Red	R
Blue	B
Yellow	Y
Green	G
White	W
Special	S*

\*Please specify

Voltage	Code
12-48Vdc	DC
110-254Vac	AC

Guard	Code
None	N
Cast	C
Wire	W

Option	Code
None	N
Tag label	T*
Duty label	D*
Relay initiate	R†**
Telephone initiate	I‡**
Blanking plug	P

\*Please specify. For UL one label only. For AU/JU no labels.  
†Suitable for 24Vdc initiate supplies only  
‡Not available on UL/UW/ULC  
\*\*Not available on SIL