LD242A RGB

Underwater RGB LED Pool Light



The LD242A RGB has been designed specifically for permanent submersion applications. It is manufactured from high grade 316 stainless steel and anodised aluminium. The LED module is potted to prevent moisture ingress via the cable and the fitting is mechanically sealed. The bezel is polished and passivated for extra protection against chlorine or salt water.

Key Features

- Integral anti-wicking barrier increases protection against moisture ingress due to incorrect IP rated cable connections
- LD242A RGB is mechanically sealed, allowing it to be a serviceable product by LightGraphix
- Single LED optic allows colours to mix at the source, with smoother RGB changing and no multiple shadows
- First fix sleeve and O-rings to seal fitting into mounting surface
- Optional concrete-in first fix housing
- Bezel is polished and passivated for pool and sea environments
- LD242A (single colour) also available
- Please specify with long cables to enable connections to be made in a dry location
- Available with 0-10V, DMX or DALI drivers
- This can only be used underwater due to thermal management. Please see our LD56 RGB for other applications

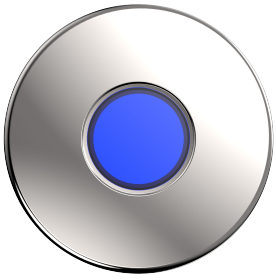
Design tip: The 30° medium beam optic is the best for colour mixing. The narrow 12° can be used if the lighting scheme does not involve mixing of the RGB to create a colour, or if the surface being washed is a reasonable distance away allowing the colour to mix.

Specification

Applications	
Beam Angles	12° Narrow and 30° Medium
LED type	1 x Cree XML RGB
Current	350mA
LED power (Max)*	3.6W
Forward voltage $(V)_{100}$	9.0V
LED lifetime (to 70% lumen maintenance)	50,000hrs at a max ambient temperature of 35°C
Glass	5mm thick low iron glass
Materials	Hard black anodised aluminium body, machine finish 316 stainless steel bezel
Wiring	Comes pre-wired with 2 core 5m lead, can be specified with up to 10m at extra cost
IP rating	IP68 up to 2m. Not suitable for saltwater pools.

*LED wattage includes losses associated with using an 85% efficient driver

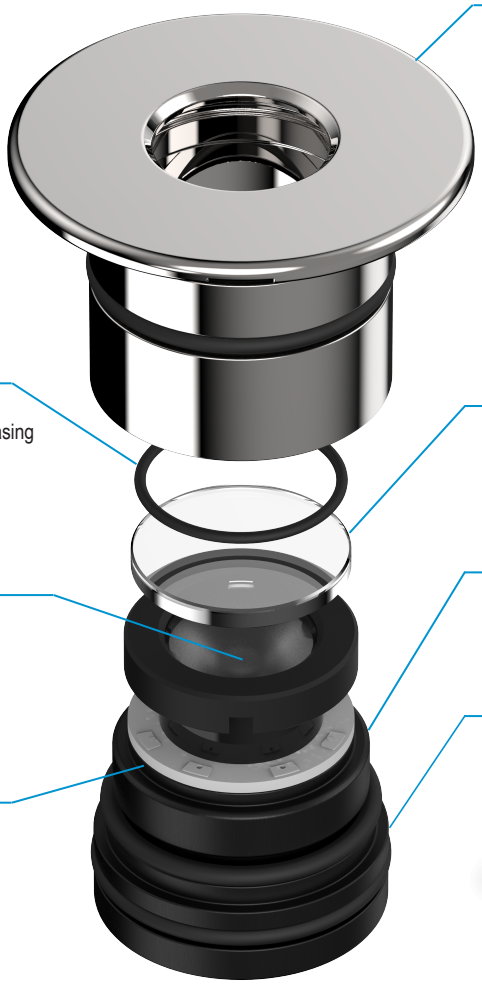




LD242A RGB

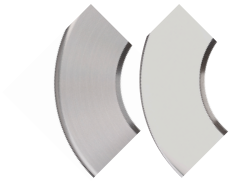
Underwater RGB LED Pool Light

Product Features



BEZEL

High quality machined, marine-grade 316 stainless steel, which is polished and High quality machined, marine-grade 316 stainless steel, which is polished and passivated to provide extra protection in underwater environments. Polishing the bezel brings the chromium to the surface and gives excellent protection from oxidation, whilst passivation removes ferrous material from details like threads and prevents brown stains caused by oxidation.



WATERTIGHTNESS

LD242A is mechanically sealed with O-rings, increasing both the reliability and serviceability of the fitting.

GLASS

5mm thick low iron glass, for high efficiency light output.

OPTIC

High efficiency optics with a range of beam angles to create the perfect effect.

BODY

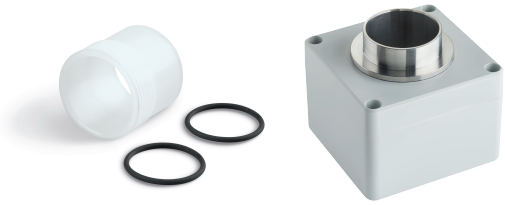
Machined and anodised body. 6000 series aluminium chosen for its thermal characteristics and resistance to corrosion.

LED

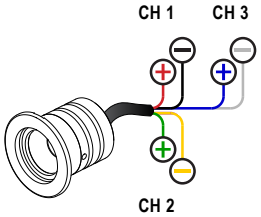
Cree XML RGB LED.

ACCESSORY

Choose between our fixing sleeve or concrete-in housing



LED Technology

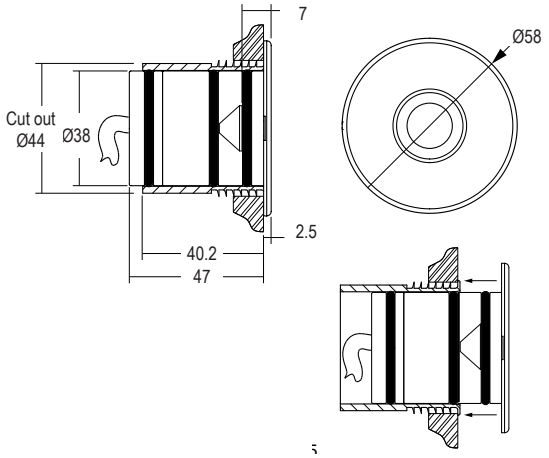
LED Board		Industry leading thermal management of the LED, with a high quality, embedded copper PCB and direct contact cooling for the LEDs, guaranteeing long life and minimal colour shift.
LED type	Cree XML	
Key features	- RGB LEDs mounted under a single 12deg or 30deg optic for colour mixing - All copper LED board - 3 LED circuits required	
Cables		

LD242A RGB

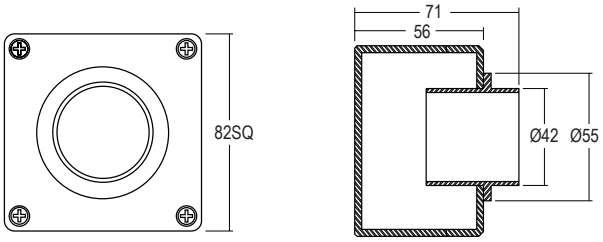
Underwater RGB LED Pool Light

Dimensions and Fixing Options

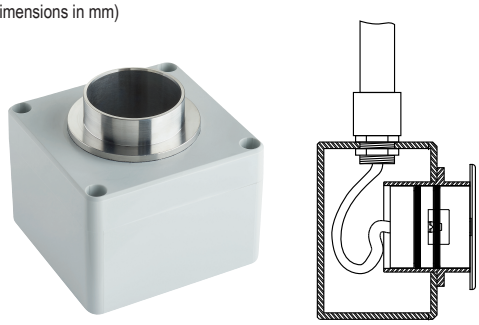
/476 - Fixing sleeve and O-rings



/242N - Concrete housing



(Dimensions in mm)



IP rated conduit bonded to housing. It is recommended to specify LD242A with a long cable to enable connections to be made in a dry location. No connection should be made within the concrete housing.

Order Codes and Options

Product code	Beam angle	Finish	Fixing
LD242A-RGB-350			

Example: LD242A-RGB-350 / MB / Stainless Steel / 476

Product codes with output options

3.6W (3 x 1.2W LEDs) at 350mA	**LD242A-RGB-350**

Beam / lens angle options

12° narrow spot	/NB
30° medium	/MB

Bezel finish options

Polished and passivated stainless steel (for marine environments)

Fixing accessories

First fix sleeve with O-rings	/476
Concrete housing	/242N

Use with 350mA constant current LED drivers

We can offer both DMX & DALI dimmable driver options.
Please see the downloads section on our website:
To run 2-13 LD242A-350 in series use a TXDEL4A350DMX (DMX dimmable)