

LD1220



Exterior Low Glare Adjustable LED Downlight

Data sheet - Page 1

LD1220 is a very powerful, low glare, exterior rated, adjustable downlighter. This is a specialist product primarily designed for use externally on yachts, so special attention needs to be paid to the mounting of this product. It is machined from high grade materials, to ensure it can withstand sea environments.

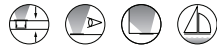
Key Features

- LED and lens assembly recessed within a black anodised body for reduced glare
- Lockable tilt of up to 30° and 360° rotation
- Innovative flexible 'boot' which allows adjustment whilst maintaining IP rating
- Fixing ring accessory allows flush mounting into ceiling
- High output 6 LED cluster using 93 CRI LEDs
- Interchangeable optics
- Low depth, ideal for restricted spaces
- High quality machined components
- Stainless steel 316 and hard anodized aluminium for harsh exterior environments
- Available with Switch, 0-10V, DMX, Dali or Mains dimmable drivers



Specification

Applications



Beam Angles

15°, 25°, 40°

LED type

6 x Cree XPG

Colour temperature

2700K / 3000K

5000K

Current	2700K / 3000K			5000K		
	350mA	500mA	700mA	350mA	500mA	700mA
LED power (Max)	7W (6.6W)*	10W (9.6W)*	14W (13.5W)*	7W (6.6W)*	10W (9.6W)*	14W (13.5W)*
CRI	93	93	93	80	80	80
Forward voltage (V) ₁₀₀	20V	20.7V	22V	20V	20.7V	22V
Delivered lumens (L ₁₀₀)	413	537	639	640	832	990
Lumens per circuit watt**	64	56	46	98	87	72

LED lifetime (to 70% lumen maintenance)

50,000hrs at an average ambient temperature of 35°C

Materials

Stainless steel 316, Hard anodised aluminium, PVC 'Boot'

Wiring

Pre-wired with 350mm twin core sheathed cable

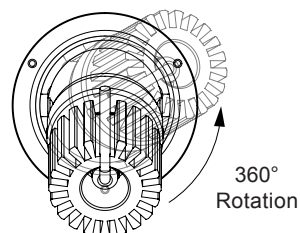
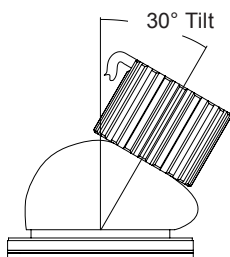
IP rating

IP67 the front & IP54 from behind

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

**data shown allows for an 85% efficient driver at an ambient temperature of 35°C

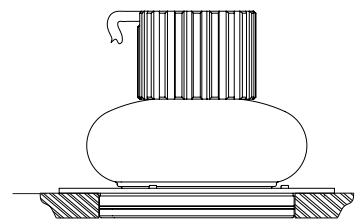
Lockable Adjustment



IP Rating

IP54 from behind

IP67 from the front



LD1220

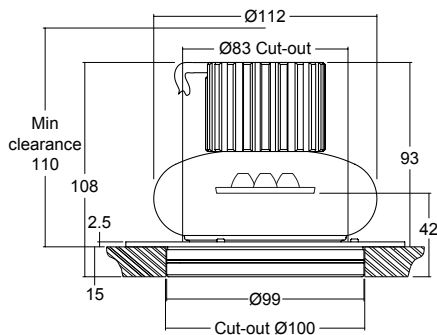
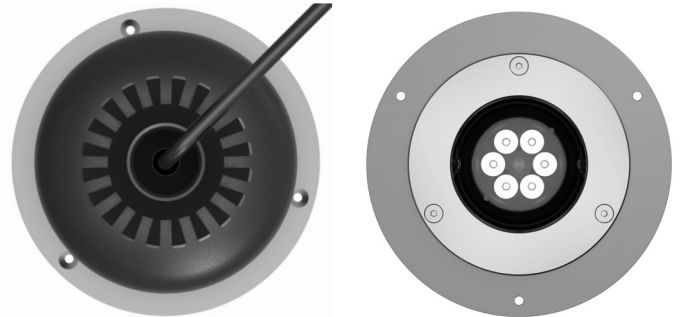
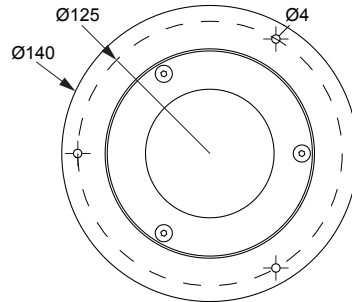


Exterior Low Glare Adjustable LED Downlight

Data sheet - Page 2

Fixing Method

/CMR140 - Metal Ceiling Mount Ring



This is the recommended method of fixing. It can only be used if there is access to behind the mounting surface!

Why use the ceiling mount ring?

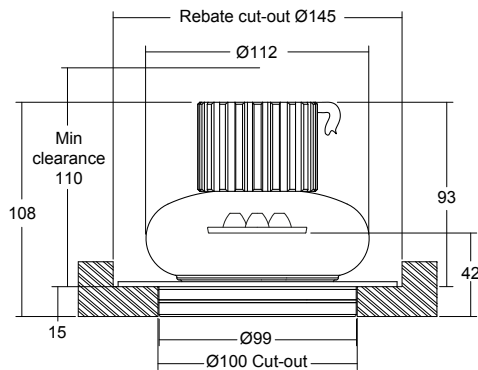
- The fixing holes for the LD1220 are very close to the cut-out diameter, so if the ceiling ring was not used there would be a risk of the fixing screws breaking out
- Maximum thickness behind the bezel is 5mm to allow for the fixture to tilt. So if fixing into wood, this would not be thick enough for a secure fixing
- CMR140 ceiling mount ring is manufactured from metal and has the threaded fixing holes pre-drilled
- It provides a surface for the LD1220 to be fixed flush into the mounting surface

What is the thickness of the mounting surface?

The LD1220 is designed to be installed flush, so the thickness of the mounting surface is important to how the ceiling ring is installed:

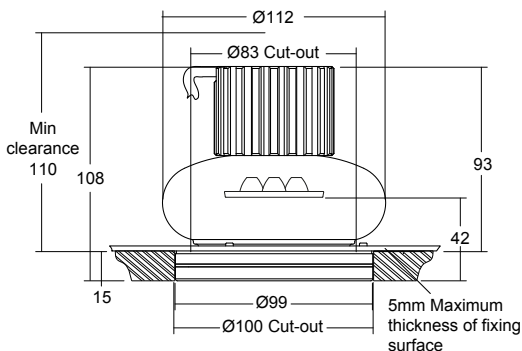
- If this surface is 15mm in thickness then the ceiling ring can be fixed directly to the back of it
- If the surface is thicker than 15mm then a rebate will need to be created to guarantee the LD1220 sits flush with the front surface

Please see page 4 for full instructions on how to install the LD1220.



- Fixing directly into mounting surface

Only recommended if this is being mounted into metal work with pre-drilled mounting holes!



- Because the fixing holes are so close to the edge of the cut-out this method will only work when mounting into a metal surface
- This surface should have a maximum thickness of 5mm to allow the adjustment of the LD1220
- The fixing holes in the ceiling mount ring need to be replicated in the fixing surface, and should only be attempted by a boat yard
- This method is not suitable for mounting into wood or plaster board.

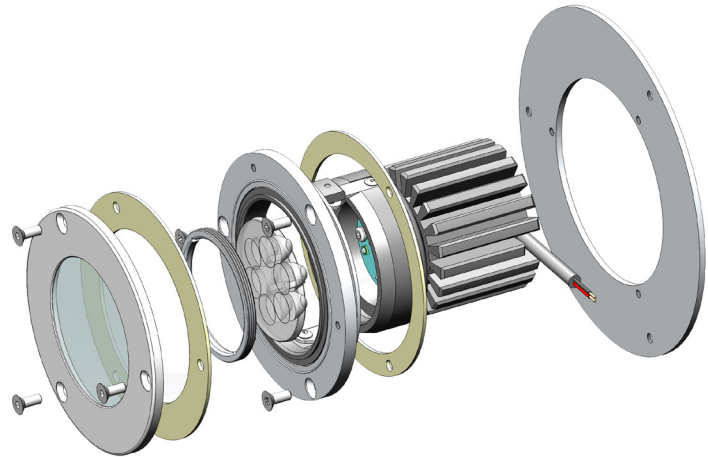
LD1220

Exterior Low Glare Adjustable LED Downlight



Data sheet - Page 3

Design



Order Codes and Options

Product code	LED colour	Beam angle	Accessories	Finish
LD1220-350 - 500 - 700	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Example: LD1220-350 / LW30 / MB / CMR1220 / Polished Stainless Steel

Product codes with output options

7W 350mA	LD1220-350
10W 500mA	LD1220-500
14W 700mA	LD1220-700

LED colour options

LED colour options	Suffix
Extra Warm White (2700K)	/LW27
Warm white (3000K)	/LW30
Cool white (5000K)	/LW50

Beam / lens angle options

15° narrow spot	/NB
25° medium	/MB
40° wide	/WB

Accessories

Ceiling mount ring (black anodised)	/CMR140
Honeycombe louvre (black)	/HL50

Bezel finish options

Paint finish black / white (RAL 9016) / RAL
 Polished and passivated stainless steel (marine grade polishing)

Use with 350mA, 500mA, or 700mA constant current LED drivers

For our complete range of LED drivers please download the data sheet from the downloads section at www.lightgraphix.co.uk or please contact us for more information

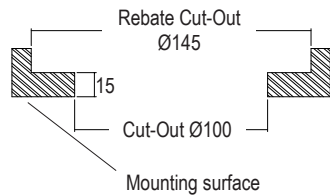
LD1220



Installation Instructions

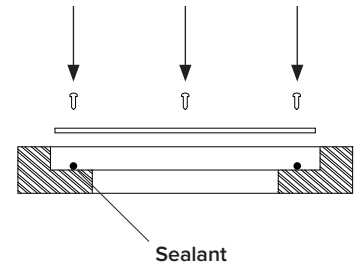
Data sheet - Page 4

- 1** Bore cut-out of $\text{Ø}100\text{mm}$ for the bezel. For mounting in surfaces greater than 15mm in thickness, create a $\text{Ø}145\text{mm}$ rebate in the back of the mounting surface.

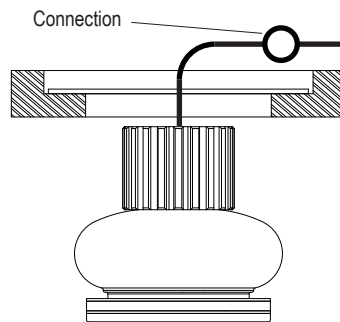


- 2** Fix the mounting ring in the rebate or on the mounting surface.

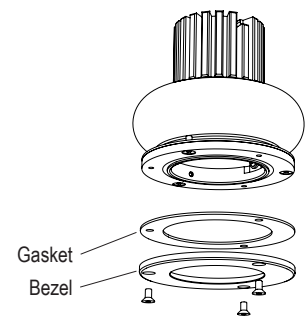
Sealant can be used to create an IP rated seal.



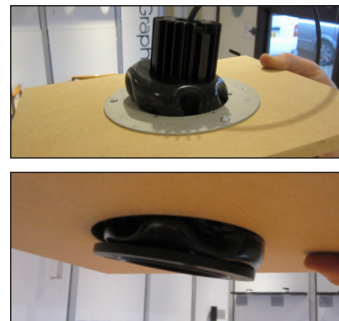
- 3** Wire the luminaire to a specified driver. NOTE: Connections in wet environments. Make IP68 connection to stop water travelling up the cables into the fittings! Refer to IP connection data sheet for further details.



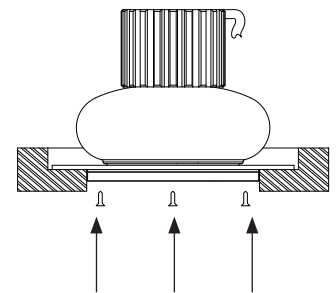
- 4** Remove bezel and gasket by using the supplied allen key to unscrew the 3 CSK screws.



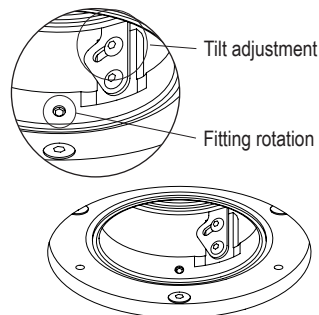
- 5** Pass fitting through mounting ring. It is advised that the "Boot" is gently compressed in order for the fitting to pass through with ease. NOTE: Handle with care to maintain the fitting's IP protection.



- 6** Secure the fitting into the mounting ring by using the 3 M4x10 screws provided.



- 7** Make any adjustments needed using the 2mm Allen key. Tilt adjustment: Loosen both tilt assembly screws (leaving some friction). Use fingers to tilt the fitting, avoid touching the optic. Tighten to lock off position. Fitting rotation: Loosen the 3 grub screws in the rotation ring. Adjust to desired position. Tighten to lock off position.



- 8** Once adjusted to the desired position, replace the gasket and bezel.

