

## LD141X & LD141DR

Compact In-Ground Recessed LED Uplighter



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### SPECIFICATION

LED surfaced mounted luminaires are class III for Safety Extra Low Voltage **DC** supply. The product should only be used with a supplied or LightGraphix approved **350mA, 500mA or 700mA** constant current driver.

**Suitable for mounting on normally flammable surfaces.**

Lamp: **E3 or F1 LED Engine.**

This fitting is **IP67.**

Lumen Maintenance: L90B5 at 90,000hrs.

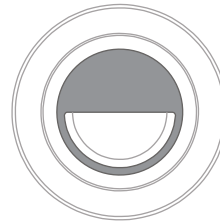
LD141X & LD141DR - E3			
Product & LED Output Code	Power Output	Max Ambient	Energy Class
LD141X & LD141DR-E3-350	350mA 5W	-20°C to 50°C	D
LD141X & LD141DR-E3-500	500mA 7W		E
LD141X & LD141DR-E3-700	700mA 10W	-20°C to 35°C	E

\* 700mA Power Output only to be used with Concrete Can 441-N installed in concrete.

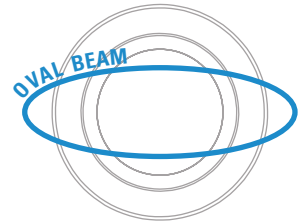
LD141X & LD141DR - F1			
Product & LED Output Code	Power Output	Max Ambient	Energy Class
LD141X & LD141DR-F1-350	350mA 3.5W	-20°C to 50°C	G
LD141X & LD141DR-F1-500	500mA 5W		
LD141X & LD141DR-F1-700	700mA 7W	-20°C to 35°C	

\* 700mA Power Output only to be used with Concrete Can 441-N installed in concrete.

**/GS**  
Glare Shield



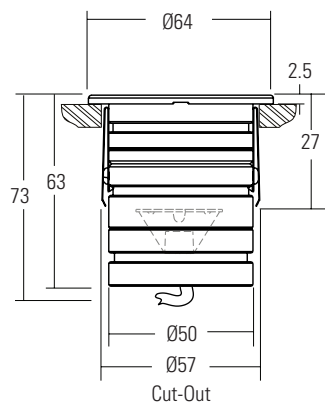
**/OB**  
Oval Beam Orientation (LD141X only)



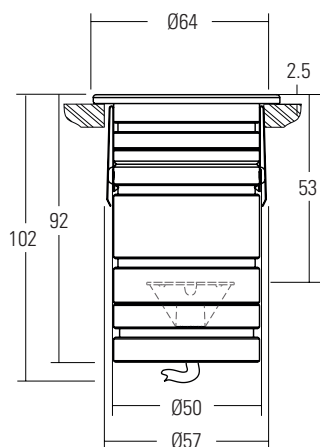
Wall/Lit Surface

### DIAGRAM

**LD141X - /SC**



**LD141DR - /SC**



### INSTALLATION

**/SC**  
Spring Clips

1. Prepare cut out: Ø57mm
2. Feed cable through to the driver's location. Connect luminaire to the specified driver, ensuring it is disconnected from the mains side. **NOTE: For connections in wet environments. Make IP68 connection to stop water travelling up the cables into the fitting!**
3. Compress springs against the side of the fitting.
4. Before fully placing fitting into cutout, rotate the fitting to achieve correct alignment if using glare shields or tilt tenses.
5. Confirm installation was successful by powering up the fitting. If there is no light output, switch off power immediately and verify wiring.

## LD141X & LD141DR

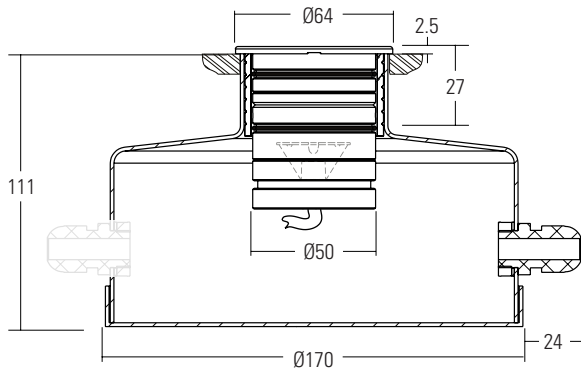


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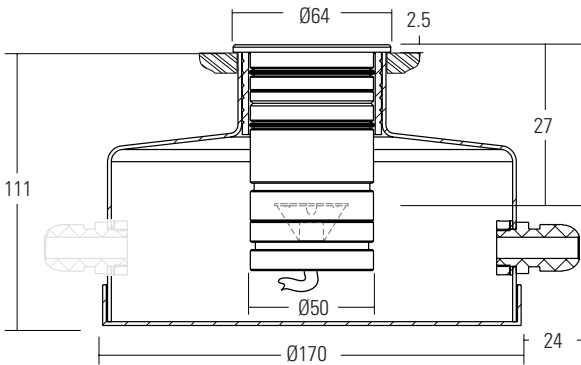
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### DIAGRAM

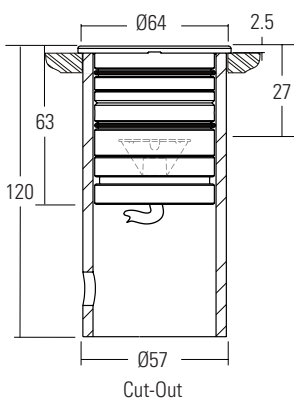
#### LD141X - /441N (-2)



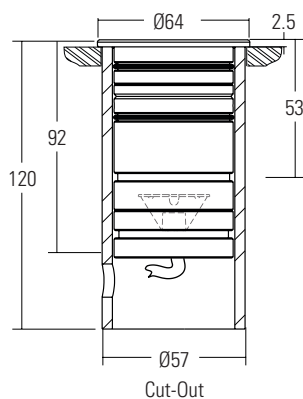
#### LD141DR - /441N (-2)



#### LD141X - /441GT



#### LD141DR - /441GT



### INSTALLATION

#### /441N (-2) & /441GT

Concrete Can & Ground Tube

1. Remove luminaire from concrete housing/ground tube.
2. Place the concrete can/ground tube into the prepared area/cavity, this must be level. If the housing/tube requires bolster, ensure it is supported. Feed power cable through the gland and tighten. Allow enough excess cable for the connection required to the fitting, and to allow for the fitting to be removed from its housing.
3. These accessories are designed to be used primarily within concrete. They can be used in areas with loose / soft substrate but they must only be used within concrete for load bearing applications. Failure to do so, will cause structural and IP failure. If a secondary surface is going to be used ensure the concrete is offset by the specified material thickness.
4. Fill desired area with concrete. When pouring ensure as little material falls into the can as possible.
5. Wire the luminaire to a specified driver.  
**NOTE: For connections in wet environments. Make IP68 connection to stop water travelling up the cables into the fittings! Refer to IP connection sheet for further details.**
6. Make sure the inside of the fixing sleeve and the outside of the luminaire is free from grit and dirt.
7. Grease O-rings with a heavy duty, silicone-free grease and place LD141 into sleeve. Failure to do so could hamper removal and cause damage to concrete can. Do not fully insert fitting into sleeve!
8. Rotate the fitting to achieve correct alignment if using glare shields or tilt tenses. Once in a satisfactory orientation, push fittings fully into their sleeves.
9. Confirm installation was successful by powering up the fitting. If there is no light output, switch off power immediately and verify wiring.

## LD141X & LD141DR

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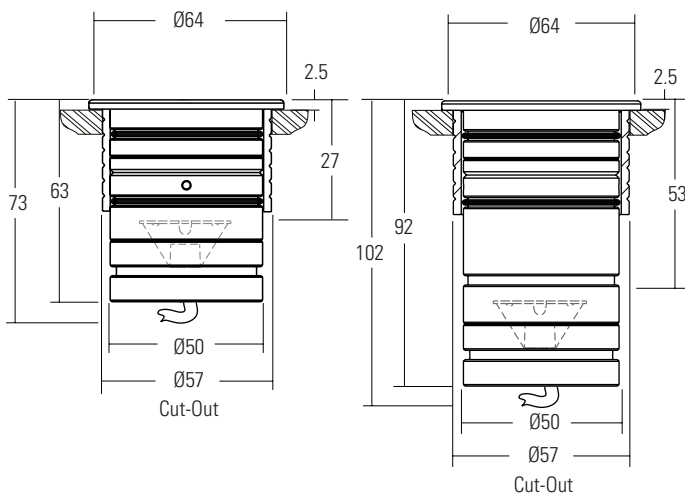


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### DIAGRAM

LD141X - /441S

LD141DR - /441S



### INSTALLATION

#### /441S

Sleeve

1. Prepare cut out for fixing sleeve:  $\varnothing 57\text{mm}$  (+1mm or +2mm)  
Bond in sleeve for a secure fit. **NOTE: Rotabond 2000, 3M 4200 Marine, Simson MSR, Sikaflex 221 adhesives recommended.**
2. Feed cable through to the driver's location. Connect luminaire to the specified driver, ensuring it is disconnected from the mains side. **NOTE: For connections in wet environments. Make IP68 connection to stop water travelling up the cables into the fitting!**
3. Grease O-rings with a heavy duty, silicone-free grease and place LD141 into sleeve. Failure to do so could hamper removal and cause damage to mounting surface. Do not fully insert fitting into sleeve!
4. Rotate the fitting to achieve correct alignment if using glare shields or tilt tenses. Once in a satisfactory orientation, push fittings fully into their sleeves.
5. Confirm installation was successful by powering up the fitting. If there is no light output, switch off power immediately and verify wiring.

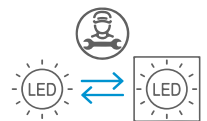
### SEE CONSTANT CURRENT WIRING SHEET FOR IN SERIES WIRING DIAGRAM

Do not power up until fitting is wired correctly! Constant current LEDs must be wired in series, polarity is critical. Please refer to specified driver sheet for details on the minimum and maximum number of LEDs per circuit.

CORE COLOUR & POLARITY		
Colour of Cable	Red	Black
Polarity	+	-

### END OF LIFE

This fitting contains a replaceable (LED only) light source, that must be replaced by a professional. If the product has come to the end of its life or is in need of repair please contact LightGraphix or your preferred recycling scheme.



### IMPORTANT

Make sure that all cables and connections are securely connected before switching on the power. Failing to do this can lead to failure of the LEDs and/or the driver. If the LEDs do not work upon power up, turn off the power source immediately and check the polarity of the wiring. Any attempt made to open up and/or modify the luminaire will invalidate the manufacturers warranty. The external cable of this luminaire cannot be replaced; if the cable is damaged the luminaire shall be destroyed. This is inclusive of but not limited to removal of the LightGraphix product label or removal of any parts from the main body of the product including bezels, electrical components and factory fitted fixing methods (unless otherwise stated in these instructions). Luminaire should be wired no further than 30 meters away from a SELV constant current LED driver (based on a 1mm squared cross sectional cable). Forward voltage of luminaire is 18VDC, if wired in series UOUT of LED driver and luminaire circuit should not exceed 60VDC. Terminal block not included. Installation must be performed by a qualified person. For connections made in dry environments 2 x Wago 221-2411 or connections with similar specifications are recommended. For damp or wet environments a connector of the same electrical specification but with a suitable IP rating should be used. The fitting guarantees a minimum static load resistance of 5kN. The rated maximum surface temperature is less than 100°C.

### MAINTENANCE

Clean with soft damp cloth  
LED: Please contact LightGraphix  
O-ring replacement part numbers: Outer O-ring 17.0010.

### CONNECTION

- Wire Connection Method: Clamp
- No. of Positions: 1Way
- Rated Voltage: 450V
- Rated Current: 32A
- Wire Size (stranded): 18 - 14AWG