INSTRUCTION LEAFLET

This product should be installed by a qualified electrician in accordance with all current, local legislation. For the UK, the current edition of the IEE Wiring Regulations and European Standard IEC 60364.

LD154, LD154T & LD154DR



In-Ground LED Uplighter Install sheet - Page 1

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 c**onstant current driver.

Suitable for mounting on normally flammable surfaces.

Lamp: E3, N1 or P1 LED Engine.

This fitting is IP67.

Lumen Maintenance: L90B5 at 90,000hrs.

LD154, LD154T &	LD154DR - E3		
Product & LED Output Code	Power Output	Max Ambient	Energy Class
LD154, LD154T & LD154DR-E3-350	350mA 5W	-20°C to 50°C	D
LD154, LD154T & LD154DR-E3-500	500mA 7W	-2016 10 5016	Е
LD154, LD154T & LD154DR-E3-700	700mA 10W	-20°C to 50°C	Е

*700mA Power Output only to be used with Concrete Can installed in concrete

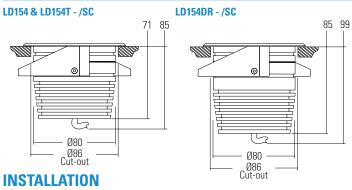
LD154, LD154T &	LD154DR - N1		
Product & LED Output Code	Power Output	Max Ambient	Energy Class
LD154, LD154T & LD154DR-N1-350	350mA 7W	-20°C to 50°C G	
LD154, LD154T & LD154DR-N1-500	500mA 10W		G
LD154, LD154T & LD154DR-N1-700	700mA 14W		

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

70011A TOWER Output Only to be used with concrete can installed in concrete.					
LD154, LD154T & LD154DR - P1					
Product & LED Output Code	Power Output	Max Ambient	Energy Class		
LD154, LD154T & LD154DR-P1-350	350mA 14W	-20°C to 25°C	G		
LD154, LD154T & LD154DR-P1-500	500mA 20W				

* 500mA Power Output only to be used with Concrete Can installed in concrete.

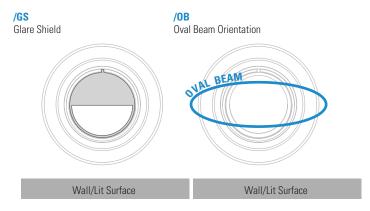
DIAGRAM



/SC

Spring Clips

- 1. Prepare cut out: Ø86mm
- 2. Feed cable through to the driver's location. Connect luminaire to the specified driver, ensuring it is disconnected from the mains side. NOTE: 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. Rotate fitting anti-clockwise to allow the springs to bite into the mounting surface. This will help it stay securely in place.
- 5. Rotate the fitting so that the notch is at the furthest distance from the intended lit surface and perpendicular to the wall.
- Confirm installation was successful by powering up the fitting. If there is no light output, switch off power immediately and verify wiring.



DIAGRAM

LD154 & LD154T - /485S

71 85

71 85

85 99

71 85

080

080

080

Cut-out

INSTALLATION

/485

Fixing Sleeve

1. Prepare cut out for fixing sleeve: Ø86mm (+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: 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 LD154 into sleeve. Failure to do so could hamper removal and cause damage to the fixing sleeve. Do not fully insert fitting into sleeve!
- 4. Rotate the fitting so that the notch is at the furthest distance from the intended lit surface and perpendicular to the wall. 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.

INSTRUCTION LEAFLET

This product should be installed by a qualified electrician in accordance with all current, local legislation. For the UK, the current edition of the IEE Wiring Regulations and European Standard IEC 60364

LD154, LD154T & LD154DR

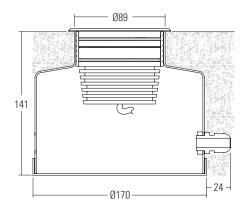


In-Ground LED Uplighter

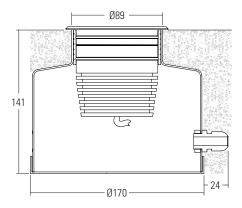
Install sheet - Page 2

DIAGRAM

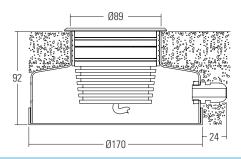
LD154 & LD154T - /486N (-2)



LD154DR - /486N (-2)



LD154 & LD154T - /485N (-2)



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	+	-

INSTALLATION

/485N (-2), /486N (-2) & /485GT

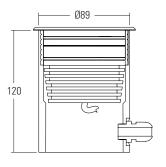
Concrete Can & Ground Tube

- 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
- 4. Fill cavity with concrete. When pouring ensure as little material falls into the can as possible.
- 5. Wire the luminaire to a specified driver.

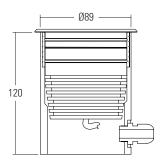
NOTE: Connections in wet environments. Make IP68 connection to stop water travelling up the cables into the fittings! Refer to IP connection sheet for further

- 6. Make sure the inside of the fixing sleeve and the outside of the luminaire is free from arit and dirt.
- 7. Grease O-rings with a heavy duty, silicone-free grease and place LD154 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 so that the notch is at the furthest distance from the intended lit surface and perpendicular to the wall. 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.

LD154 & LD154T - /485GT



LD154DR - /485GT



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 recyling scheme



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 Clean with soft damp cloth 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 LED: Please contact LightGraphix 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 0-ring replacement part numbers: Outer 0-ring 17.0010. 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 CONNECTION 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 -No. of Positions: 1Way must be performed by a qualified person. For connections made in dry environments 2 x Wago 221-2411 or connections with similar specifications are -Rated Voltage: 450V recommended. For damp or wet environments a connector of the same electrical specification but with a suitable IP rating should be used. The fitting -Rated Current: 32A guarantees a minimum static load resistance of 5kN. The rated maximum surface temperature is less than 100°C.

MAINTENANCE

-Wire Connection Method: Clamp -Wire Size (stranded): 18 - 14AWG