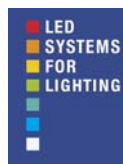


Corona - Effect



Application document for LINEARlight LM11A

1. Description



Illuminated text with Corona Effect

For the indirect illumination of extremely flat illuminated texts for interior and exterior applications.

The OSRAM LINEARlight Flex LM11A-W1-854 mounted in a text illuminates the rear panel and creates a sun-like "corona effect" around the text. The power supply units are in the building.

2. Construction



Data sheets on:
<http://www.osram.com/products/led-systems>

Note: Read the LM11A LINEARlight Flex product data sheet through carefully. It contains detailed descriptions of the main safety and installation instructions.

Please note in particular the minimum bending radius of the product of 10 mm, which is important for the construction.

You should also read the OPTOTRONIC® "Technical Guide" for the installation of the equipment and data sheets OT50/220-240/10 (IP20) and OT50/120-277/10 E (IP64). DataSheets can be downloaded at www.osram.com



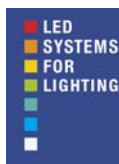
Overall construction of the illuminated text

The overall construction consists of the following:

- The illuminated logo
- An optional coated metallic reflector with a slightly larger contour than the illuminated logo, which considerably increases the reflective effect on a rendered or painted facade.

Note: This reflector is not essential.

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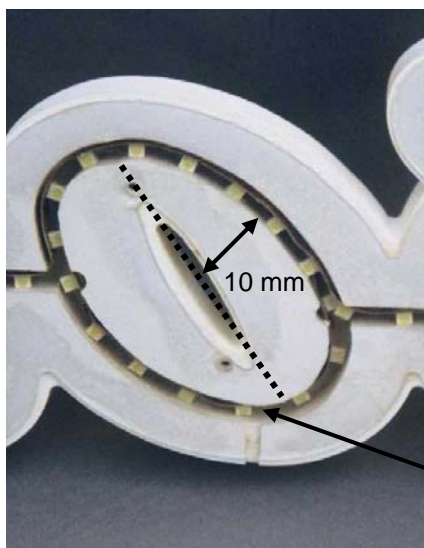
Constructive design with LINEARlight Flex

The base material for the text or the letter may be either weather-resistant rigid PVC foam, for example Kömacel, or metal. Acrylic that only allows light to escape from the rear is also conceivable.

A groove is cut into the letter, into which the LINEARlight Flex is later inserted.

Note: When defining the cutting contour, avoid sharp corners and edges. The minimum bending radius of the LED module is 10 mm.

Bending at right-angles, even where there are no components is at your own risk. This always involves the possibility of the LED being damaged. Consequential damage can therefore not be accepted as a fault.



Minimum bending radius LINEARlight Flex

Step 1

Define the cutting contour to suit the logo text.

Step 2

Cut a continuous groove through the centre of the letters.

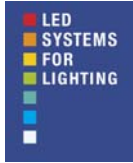
Width: approx. 6 - 7 mm
Depth: approx. 12 - 13 mm

Step 3

Drill holes to allow condensation to drain.

Note: The perfect diameter of the drain holes is between 4 - 5 mm.

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3. Finishing



LINEARlight Flex LM11A -W1-854

Step 4

Cut the LINEARlight Flex off the roll to match the length of the contour.

Note: Make the cut only at the places marked with a “✂” symbol“.

Step 5

Two cables to supply voltage must be soldered to the ends or in the centre to the solder contacts marked plus and minus (+/-) to connect the LINEARlight Flex to the power supply.

Note: The exact electrical data and circuit instructions are set out in the data sheet.

Soldering conditions:

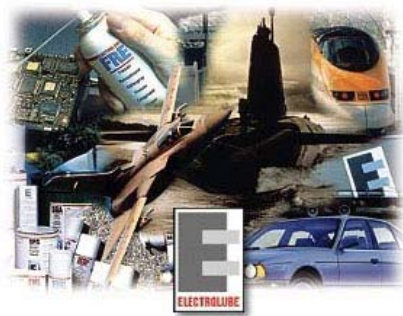
| | |
|-----------------------|----------|
| Soldering temperature | < 260 °C |
| Soldering time | < 10 sec |

Step 6 (For exterior applications only)

To protect the LINEARlight Flex in the groove from possible corrosion by condensation, a protective coating must be added once the product has been inserted into the groove.

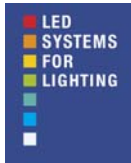
Note: Follow the finishing steps in precisely the order set out here.

Prepare – Solder on the cables - Coat



Subsequent coating

Corona - Effect



Application document for LINEARlight LM11A



Spray gun

Recommended protective coating

Acrylic protective coating - www.electrolube.com

- APL15ML 15 ml bottle / No. in pack: 12
- APL400H 400 ml spray can / No. in pack: 12
- APL500ML 500 ml large container / No. in pack: 1
- APL05L 5 l large container / No. in pack: 1

The coating must be applied with an even thickness of approx. $\frac{1}{10}$ mm using either a spray can or a pneumatic spray gun.

Note: Refer to the manufacturer's instructions.

www.walther-pilot.de

Products / Spray guns → PILOT Mini

4. Installation



Letter contour with inserted Flex

Step 7

Insert the coating and cabled LINEARlight Flex into the letter groove. Either the backing foil on the rear can be removed and the module glued straight into the groove or the backing foil is not removed and the LINEARlight Flex is simply inserted into the groove.

Note: Do *not* fill the groove containing the LED module with casting resins or similar substances, since this produces a risk of yellowing and destruction.

Step 8

Cover the open groove (with the LED module) using:

- a) Transparent foil
- b) Transparent Plexiglas in the shape of the text contour

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Letter contour with transparent protection

Affix the foil or Plexiglas to the letter contour.

Note: Do *not* apply silicon, etc. to the full area of the letter contour and transparent cover. You do not have to make the illuminated text 100% watertight. Ventilation through an air gap is desirable.

Step 9

Thread the cable through the foil or Plexiglas. Then seal the hole with silicon.

Step 10

The letter can be mounted:

- Using long screws direct to the wall of the building
- On a white metal plate with the same contour, but a little larger than the actual letter.

The distance between the contour and the metal plate is approx. 20-30 mm. The reflective properties of the metal plate are much better than a facade with a rough surface that has been painted white.

5. Final assembly



Final assembly of illuminated text / reflector

Step 11

Connect to a 10 VDC OSRAM OPTOTRONIC® control unit. The following may be used:

OT12/230-240/10 (IP20), OT50/220-240/10 (IP20) or OT50/120-277/10 E (IP64).