PRODUCTINFORMATIEBLAD
LFP2000 -G3-827-04

LINEARlight FLEX® Protect POWER 2000 | LED modules voor professionele en industriële toepassingen



Toepassingsgebieden

- Facade accent lighting
- Ceiling integration
- Wall integration
- Cove lighting
- Machine lighting
- Path lighting
- Suitable for outdoor use

Productvoordelen

- Color uniformity better than 2 SDCM on the entire LED strip and between strips
- High luminous flux
- Great design freedom thanks to flexibility and cuttability of module
- High-performance silicone for extremely long life and flexibility
- Simple connection thanks to premounted connectors
- Extraordinary design and high quality materials
- Toolless connection only if using the optional CONNECTsystem
- Easy mounting on many smooth surfaces thanks to self-adhesive tape at the back
- Outdoor use possible: UV and salt mist resistant (UV acc. to ISO 4892-2 - Method A, salt mist acc. to IEC 60068-2-52 severity 1)

Productkenmerken

- Flexible and cuttable LED strip



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- Luminous flux: up to 2,000 lm/m
- Type of protection: IP67
- Dimmable with PWM technology

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TECHNISCHE GEGEVENS

ELEKTRISCHE GEGEVENS

Nominale vermogen	80,55 W
Nominaal vermogen	80.55 W
Nominaal wattage per meter	17,9 W
Nominale spanning	24 V
Ingangsspanning	23...24 V
Omgekeerde spanning	25 V
Type stroom	DC
Nominale stroom	3,36 A

Fotometrische gegevens

Totale nuttige lichtstroom [PICOS]	8550 lm
Lichtstroom efficiëntie	106 lm/W
Lichtstroom	8550 lm
Lichtstroom per meter	1900 lm
Kleurtemperatuur	2700 K
Kleurweergave-index Ra	> 80
Lichtkleur LED	Wit
Lichtkleur	2700 K
Standaardafwijking van kleurproeven	≤4 sdcm
Lichtstroom einde nominale leven	0.70

Lichttechnische gegevens

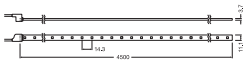
Stralingshoek	120 °
Nominale uitstr hoek (halfwaarde	120.00 °
Opstarttijd	< 0.5 s
Opwarmtijd (60 %) [AGGR]	0,00 s

Informatie over LED-modules

Aantal LED's per meter	70
Aantal LEDs per module	315
Aantal LEDs per kleinste eenheid	7

AFMETINGEN & GEWICHT

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Lengte	4500 mm
Lengte – kleinste eenheid	100 mm
Kabellengte	500,00 mm
Breedte	11,00 mm
Breedte (incl. ronde armaturen)	11.00 mm
Hoogte	4,50 mm
Hoogte (incl. cylin. armaturen)	4.50 mm
Draaddiameter aan ingang	0,34 mm²
Dwarsdoorsnede conductor	0.34 mm²
LED pitch	14,3 mm
Product gewicht	282,00 g

KLEUREN & MATERIALEN

Materiaal afdekking	Siliconen

TEMPERATUREN & BEDRIJFSOMSTANDIGHEDEN

Omgevingstemperatuur bereik	-20…+50 °C [1)]
Maximumtemperatuur op Tc-testpunt	70 °C
Temperatuursbereik op punt Tc	-20…70 °C [2)]
Prestatie temp.volgens IEC 62717	55 °C [3)]

1) Nominale omgevingstemperatuur 25 °C / Als die temperatuur op het Tc-punt ligt, is deze tijdens bedrijf onder de maximale waarde / Temperatuurstijging voor milieutest conform. tot IEC 62717, 1K / min

2) Overschrijding van de maximum waarden zal de verwachte levensduur verkorten of de LED strip vernietigen

3) Tp gewaardeerd. Tp punt valt samen met Tc punt - gemarkeerd op apparaat

Levensduur

Nominale levensduur lamp	60000 h
Aantal schakelcycli	›15000

AANVULLENDE PRODUCTGEGEVENS

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Product opmerking	Modules perfect afgestemd op OSRAM OPTOTRONIC® LED drivers (zie relevante tabel) / Voor actuele fotometrische gegevens en belangrijke veiligheids-, installatie- en toepassingsinformatie, zie <Hyperlink target="http://www.osram.com/led-systems">www.osram.com/led-systems. / Alle technische parameters die gelden voor de gehele module. Wegens het complexe productieproces van lichtdioden zijn de typische waarden die voor de technische LED parameters worden vermeld, zuiver statistische waarden die niet noodzakelijkerwijs overeenstemmen met de feitelijke technische parameters van een afzonderlijk product; afzonderlijke producten kunnen afwijken van de typische waarden

MOGELIJKHEDEN

Dimbaar	Ja
Dimmer interface	PWM
Type montage	Oppervlakte montage
Laagste buigradius	50 mm
Zelfklevend	Ja

CERTIFICATEN & NORMEN

Normen	CE; ENEC 10 VDE / EAC / UL-erkend component volgens UL 8750
Type bescherming	IP67
Energieverbruik	89.00 kWh/1000h
Energieklasse van ingesloten lichtbron	F

LOGISTIEKE GEGEVENS

Opslagtemperatuur	-40...+85 °C

Technische uitrusting

- Simplified connection with optional matching CONNECTsystem
- Quick installation with optional SLIM TRACK System
- Perfectly matched to OPTOTRONIC 24 V electronic control gears

AANVULLENDE PRODUCTINFORMATIE

- Some LED modules are equipped with a self-adhesive tape for attaching the LED module to suitable materials, such as aluminum profiles, which must be clean and free of oil or silicone coatings, as well as other dirt/dust particles. The adhesive tape is intended for single use and if removed may damage the material to which it is stuck and the LED module itself, which must then be scrapped. Use the adhesive tape when the installation material temperature is in the 18 °C...35 °C range. Complete adhesion takes up to 72 h.
- LED modules are designed for static installations in accordance with IPC 6013C – Use A. Take material vibrations, repetitive torsion, and elongation/compression into account.
- If the operating environment covers a broad temperature range (e.g. outdoor applications) and the operating length is longer than 2 m, the use of adequate mounting surfaces is required. The use of an additional thicker adhesive tape between LED module and mounting surface is also recommended in order to absorb the stress of any mismatch in expansion. Assure enough space for module expansion with increasing temperature.

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- The manufacturer is not responsible for damage due to chemical corrosion. The user must provide suitable protection against corrosive agents such as moisture and condensation and any other harmful elements/compounds. Make certain to avoid corrosive atmospheres. According to the current state of LED technology, hydrogen sulfide (H2S) causes accelerated corrosion which leads to shortened lifetime or premature failure. Sources of H2S may be rubber, foam rubber, soft-foam tapes, rubber-based sealing, natural sources (e.g. sulfur springs), etc. To avoid H2S from sulfur-vulcanized rubber use silicon-based materials or peroxide-crosslinked rubber instead. Follow the recommendations in the material datasheet of the rubber supplier.
- IP00 LED modules, as manufactured, have no conformal coating and therefore offer no inherent protection against corrosion. Conformal coating treatment is possible, however materials must be selected properly in order to avoid product damage or impaired performance; the user must also completely seal the cut parts (ends/edges).
- For applications involving exposure to humidity and dust the module must be protected by a fixture or housing with a suitable IP protection class.
- Consult OSRAM Technical Service for further advice.
- Only a qualified electrician may install the module.
- Handle with care and ensure that there is no mechanical product damage, including damage to invisible internal electronics parts.
- Exceeding maximum operating and storage temperature ratings can reduces the expected lifetime or even destroy the LED module. The temperature of the LED module must be measured at the Tc-point in accordance with EN 60598-1 under steady-state conditions, considering the worst case; drive all channels at 100 % power. Refer to the product drawing for the exact location of the Tc-point.
- Exceeding the maximum ratings for the operating voltage causes hazardous overload and will likely destroy the LED module.
- Installation of LED modules and connection to the power supply must comply with all applicable electrical and safety standards.
- Observe correct polarity and wiring diagrams! Incorrect polarity or wrong wiring can cause unpredictable permanent damage or even failure of the product.
- Never exceed the maximum operable length, including daisy-chaining connections.
- Always ensure electrical isolation between the LED module and the mounting surface, especially in the vicinity of connections or cut ends.
- IP00 LED modules are ESD-sensitive; take adequate precautions during installation and operation of the products.
- Use only SELV LED drivers in accordance with applicable lighting standards and LED module ratings. In order to safely operate OSRAM LED modules it is necessary to supply them with an electronically stabilized power supply providing protection against short circuits, overload and overheating. To simplify the approval process of the luminaire/installation, the electronic power supplies control gear for LED modules must bear the CE and ENEC marking. In Europe the Declarations of Conformity must include at least the following standards: EN 61347-2-13, EN 55015, EN 61547 and EN 61000-3-2. ENEC certification will be based on EN 61347-2-13 and EN 62384. OSRAM OPTOTRONIC LED drivers comply with all relevant standards and guarantee safe operation; see the relevant brochure for more detailed information about OSRAM OPTOTRONIC.
- Avoid installations in rural and urban areas with high industrial activity and heavy traffic (higher than class than 4C1 according IEC 60721-3) and as well as installation in spa, areas with chlorine atmosphere, direct exposure to blown sand.

DOWNLOADS

	Documenten en certificaten
PDF	User instruction
PDF	Declarations Of Conformity CE
PDF	Certificates

	Fotometrische- en lichtontwerpbestanden
	IES file (IES)
	LDT file (Eulumdat)

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LOGISTIEKE GEGEVENS

Productcode	Verpakkingseenheid (stuks per verpakking)	Afmetingen (lengte x breedte x hoogte)	Brutogewicht	Volume
4052899481152	Vouwdoos 1	353 mm x 349 mm x 32 mm	434.00 g	3.94 dm^3
4052899481169	Verzenddoos 8	365 mm x 286 mm x 366 mm	6474.00 g	38.21 dm^3

De genoemde productcodes beschrijven de kleinste hoeveelheid die besteld kan worden. Eén verzendeenheid kan bestaan uit één of meer afzonderlijke producten. Bij het plaatsen van een order enkele of veelvouden van de verpakkingseenheid invoeren.

DISCLAIMER

Onder voorbehoud van verandering zonder kennisgeving. Fouten en drukfouten voorbehouden. Zorg ervoor dat u de meest recente versie gebruikt.

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