

## PRODUKTDATENBLATT LF4000 -G3-830-03 discontinued

LINEARlight FLEX® POWER 4000 | LED-Module für professionelle und industrielle Anwendungen



### Anwendungsgebiete

- Cove lighting
- Ceiling integration

### Produktvorteile

- Color uniformity better than 2 SDCM on the entire LED strip and between strips
- Large selection of light colors
- Large selection of white tones
- High luminous flux suitable for general lighting
- "Shop White" versions available for great color rendering without yellowing effect
- Great design freedom thanks to flexibility and cuttability of module
- Extraordinary design and high quality materials
- Simple mounting and connection
- Toolless connection with the optional CONNECTsystem
- Easy mounting on many smooth surfaces thanks to self-adhesive tape at the back

### Produkteigenschaften



- Flexible and cuttable LED strip
- Luminous flux: up to 3,800 lm/m
- Module efficacy: up to 133 lm/W
- Dimmable with PWM technology
- High CRI versions: typical average value 95

## TECHNISCHE DATEN

### Elektrische Daten

Nennleistung	86,70 W
Bemessungsleistung	86.70 W
Nennleistung pro Meter	28,9 W
Nennspannung	24 V
Eingangsspannungsbereich	23...25 V
Sperrspannung	25 V
Stromart	Gleichspannung (DC)
Nennstrom	3600 mA

### Photometrische Daten

Nutzbarer Gesamtlichtstrom	11250 lm
Lichtausbeute	130 lm/W
Lichtstrom	11550 lm
Lichtstrom pro Meter	3750 lm
Farbtemperatur	3000 K
Farbwiedergabeindex Ra	80
Lichtfarbe LED	Weiß
Lichtfarbe (Bezeichnung)	3000 K
Standardabweichung des Farbgleichs	≤3 sdc
Lichtstromerhalt am Ende der Nennlebensdauer	0.70

### Lichttechnische Daten

Ausstrahlungswinkel	120 °
Bemessungshalbwertswinkel	120.00 °
Startzeit	< 0.5 s
Aufwärmzeit (60 %)	0.00 s

### LED MODULE INFORMATION

Anzahl LEDs pro Meter	70
Anzahl LED je Modul	210
Anzahl LED je kleinste Einheit	7

### Maße & Gewicht



Länge	3000 mm
Länge - kleinste Einheit	100.0 mm
Breite	8.00 mm
Breite (einschließlich runde Leuchten)	8.00 mm
Höhe	1.40 mm
Länge (einschließlich runde Leuchten)	1.40 mm
LED-Abstand	14,3 mm
Produktgewicht	39,00 g

### Temperaturen & Betriebsbedingungen

Umgebungstemperaturbereich	-20...+50 °C
Maximale Temperatur am Messpunkt tc	75 °C
Betriebstemperaturbereich	-20...90 °C <sup>1)</sup>
Betriebstemperatur nach IEC 62717	60 °C <sup>2)</sup>

<sup>1)</sup> Das Überschreiten der Maximalwerte verringert die erwartete Lebensdauer oder zerstört das LED-Band.

<sup>2)</sup> Tp rated. Tp point coincides with Tc point - marked on device

### Lebensdauer

Anzahl der Schaltzyklen	≥ 15000
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### Zusätzliche Produktdaten

Anmerkung zum Produkt	Perfekt auf OSRAM OPTOTRONIC® LED-Treiber abgestimmte Module (siehe entsprechende Tabelle) / Aktuelle lichttechnische Daten und wichtige Sicherheits-, Installations- und Anwendungsinformationen finden Sie unter <a href="http://www.osram.com/led-systems">http://www.osram.com/led-systems</a> . / Alle technischen Parameter gelten für das ganze Modul. Aufgrund des komplexen Herstellungsprozesses von Leuchtdioden stellen die angegebenen typischen Werte der technischen LED-Parameter nur rein statistische Größen dar, die nicht notwendigerweise den tatsächlichen technischen Parametern jedes einzelnen Produkts, das vom typischen Wert abweichen kann, entsprechen.
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### Einsatzmöglichkeiten

Dimmbar	Ja
DIM-Schnittstelle	PWM
Montageart	Anbau

Kleinster Biegeradius	20 mm
Selbstklebend	Ja

### Zertifikate & Standards

Normen	CE; ENEC 10 VDE / EAC / UL anerkannte Komponente gem. UL 8750
Schutzart	IP00
Energieverbrauch	95.00 kWh/1000h
Energieeffizienzklasse	A+

### LOGISTISCHE DATEN

Lagertemperaturbereich	-40...80 °C
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### Daten gemäß der Verordnung zur Energieverbrauchskennzeichnung EU 2019/2015

Ähnliche Farbtemperatur	SINGLE_VALUE
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### TECHNISCHE AUSSTATTUNG












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

### ZUSÄTZLICHE PRODUKTINFORMATIONEN

- 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.
- 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 (H<sub>2</sub>S) causes accelerated corrosion which leads to shortened lifetime or premature failure. Sources of H<sub>2</sub>S may be rubber, foam rubber, soft-foam tapes, rubber-based sealing, natural sources (e.g. sulfur springs), etc. To avoid H<sub>2</sub>S 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 reduce the expected lifetime or even destroy the LED module. The temperature of the LED module must be measured at the T<sub>c</sub>-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

DOWNLOADS	
	User instruction LINEARlight FLEX POWER
	PRODUKTDATENBLATT LINEARlight FLEX POWER Specification Sheet (EN)
	Certificates EAC Certificate
	Certificates VDE_ENEC+ Certificate
	Certificates CB TEST CERTIFICATE DE1-57844
	Certificates UL Certificate
	Certificates ENEC10_VDE Certificate
	Declarations of conformity Manufacturer declaration
	Declarations of conformity Declaration of conformity LINEARlight FLEX
	Declarations of conformity EU Declaration of conformity
	Declarations of conformity LF HP G3 CE 4160937 00 071119

## DOWNLOADS



Declarations of conformity  
LF HP G3 CE 3420012 03 071119



IES file (IES)  
727218\_LF4000-G3-830-03\_IES



LDT file (Eulumdat)  
727219\_LF4000-G3-830-03\_LDT



Advertisements  
Light is freedom of design (EN)



Advertisements  
Light is freedom of design (DE)

## VERPACKUNGSMFORMATIONEN

EAN	Verpackungseinheit (Stück pro Einheit)	Abmessungen (Länge x Breite x Höhe)	Bruttogewicht	Volumen
4052899952874	Faltschachtel 1	29 mm x 190 mm x 186 mm	131.00 g	1.02 dm <sup>3</sup>
4052899954069	Versandschachtel 8	241 mm x 195 mm x 205 mm	1245.00 g	9.63 dm <sup>3</sup>

Die genannten Produktnummern beschreiben die kleinste bestellbare Mengeneinheit. Eine Versandeinheit kann mehrere Einzelprodukte beinhalten. Als Bestellmenge verwenden Sie bitte das Ein- oder Mehrfache einer Versandeinheit.

## Haftungsausschluss

Änderungen und Irrtümer vorbehalten. Vergewissern Sie sich, dass Sie immer den neuesten Stand verwenden.