

# PRODUCT FAMILY DATASHEET

## LINEARlight FLEX® Protect ECO

LED modules for professional and industrial applications



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### Areas of application

- Decorative applications
- Wall integration
- Backlighting of complex structures
- Path lighting
- Signage
- Suitable for outdoor use

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### Product benefits

- Large selection of light colors
- 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 with the optional CONNECTsystem
- Easy mounting on many smooth surfaces thanks to self-adhesive tape at the back

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### Product features

- Flexible and cuttable LED strip
- Luminous flux: up to 200 lm/m
- Type of protection: IP67
- Dimmable with PWM technology
- Fine White (3.5 SDCM)
- Salt mist proof



## TECHNICAL DATA

### Electrical data

Product description	Nominal wattage	Construction wattage	Nominal wattage per meter	Nominal voltage	Input voltage range
LFP200M -G3-YE-06	36.00 W	36.00 W	6 W	24 V	23...25 V
LFP200M -G3-RE-06	36.00 W	36.00 W	6 W	24 V	23...25 V
LFP200M -G3-BL-06	24.5 W	24.50 W	4.1 W	24 V	23...25 V

Product description	Reverse Voltage	Type of current	Nominal current
LFP200M -G3-YE-06	25 V	DC	1500 mA
LFP200M -G3-RE-06	25 V	DC	1500 mA
LFP200M -G3-BL-06	25 V	DC	1020 mA

### Photometrical data

Product description	Total useful luminous flux [PICOS]	Luminous efficacy	Luminous flux	Luminous flux per meter	Light color LED
LFP200M -G3-YE-06	840 lm	23 lm/W	840 lm	140 lm	Yellow
LFP200M -G3-RE-06	840 lm	23 lm/W	840 lm	140 lm	Red
LFP200M -G3-BL-06	290 lm	12 lm/W	290 lm	48 lm	Blue

Product description	Light color (designation)	Nominal dominant wavelength
LFP200M -G3-YE-06	Yellow	587 nm
LFP200M -G3-RE-06	Red	625 nm
LFP200M -G3-BL-06	Blue	467 nm

### Light technical data

Product description	Beam angle	Rated beam angle (half peak value)	Starting time	Warm-up time (60 %) [AGGR]
LFP200M -G3-YE-06	120 °	120.00 °	< 0.5 s	0.00 s
LFP200M -G3-RE-06	120 °	120.00 °	< 0.5 s	0.00 s
LFP200M -G3-BL-06	120 °	120.00 °	< 0.5 s	0.00 s

### LED MODULE INFORMATION

Product description	Number of LEDs per meter	Number of LEDs per module	Number of LEDs per smallest unit
LFP200M -G3-YE-06	33	200	5
LFP200M -G3-RE-06	33	200	5
LFP200M -G3-BL-06	33	200	5

### Dimensions & Weight

Product description	Length	Length – smallest unit	Cable length	Width	Width (incl. round luminaires)
LFP200M -G3-YE-06	6000 mm	150 mm	500.000	11.10 mm	11.10 mm
LFP200M -G3-RE-06	6000 mm	150 mm	500.000	11.10 mm	11.10 mm
LFP200M -G3-BL-06	6000 mm	150 mm	500.000	11.10 mm	11.10 mm

Product description	Height	Height (incl. round luminaires)	Cable cross-section, input side	Conductor cross section	LED pitch
LFP200M -G3-YE-06	4.80 mm	4.80 mm	0.34 mm <sup>2</sup>	0.34 mm <sup>2</sup>	30,0 mm
LFP200M -G3-RE-06	4.80 mm	4.80 mm	0.34 mm <sup>2</sup>	0.34 mm <sup>2</sup>	30,0 mm
LFP200M -G3-BL-06	4.80 mm	4.80 mm	0.34 mm <sup>2</sup>	0.34 mm <sup>2</sup>	30,0 mm

Product description	Product weight
LFP200M -G3-YE-06	390.00 g
LFP200M -G3-RE-06	390.00 g
LFP200M -G3-BL-06	390.00 g

**Colors & materials**

Product description	Cover material
LFP200M -G3-YE-06	Silicone
LFP200M -G3-RE-06	Silicone
LFP200M -G3-BL-06	Silicone

**Temperatures & operating conditions**

Product description	Ambient temperature range	Maximum temperature at tc test point	Temperature range in operation	Performance temp. acc. to IEC 62717
LFP200M -G3-YE-06	-20...+50 °C	70 °C	-20...70 °C <sup>1)</sup>	35 °C <sup>2)</sup>
LFP200M -G3-RE-06	-20...+50 °C	70 °C	-20...70 °C <sup>1)</sup>	35 °C <sup>2)</sup>
LFP200M -G3-BL-06	-20...+50 °C	70 °C	-20...70 °C <sup>1)</sup>	35 °C <sup>2)</sup>

1) At the T<sub>c</sub> point

2) T<sub>p</sub> rated. T<sub>p</sub> point coincides with T<sub>c</sub> point - marked on device

**Additional product data**

Product description	Product remark
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Product description	Product remark
LFP200M -G3-YE-06	Modules perfectly matched to OSRAM OPTOTRONIC® LED drivers (see relevant table) / For current photometric data and important safety, installation and application information, see <a href="http://www.osram.com/led-systems">www.osram.com/led-systems</a> . / All the technical parameters apply to the entire module. In view of the complex manufacturing process for light emitting diodes, the typical values given above for the technical LED parameters are merely statistical values that do not necessarily correspond to the actual technical parameters of an individual product; individual products may vary from the typical values
LFP200M -G3-RE-06	Modules perfectly matched to OSRAM OPTOTRONIC® LED drivers (see relevant table) / For current photometric data and important safety, installation and application information, see <a href="http://www.osram.com/led-systems">www.osram.com/led-systems</a> . / All the technical parameters apply to the entire module. In view of the complex manufacturing process for light emitting diodes, the typical values given above for the technical LED parameters are merely statistical values that do not necessarily correspond to the actual technical parameters of an individual product; individual products may vary from the typical values
LFP200M -G3-BL-06	Modules perfectly matched to OSRAM OPTOTRONIC® LED drivers (see relevant table) / For current photometric data and important safety, installation and application information, see <a href="http://www.osram.com/led-systems">www.osram.com/led-systems</a> . / All the technical parameters apply to the entire module. In view of the complex manufacturing process for light emitting diodes, the typical values given above for the technical LED parameters are merely statistical values that do not necessarily correspond to the actual technical parameters of an individual product; individual products may vary from the typical values

### Capabilities

Product description	Dimmable	Dimming interface	Type of installation	Lowest bending radius	Self-adhesive
LFP200M -G3-YE-06	Yes	PWM	Surface mounting	50 mm	Yes
LFP200M -G3-RE-06	Yes	PWM	Surface mounting	50 mm	Yes
LFP200M -G3-BL-06	Yes	PWM	Surface mounting	50 mm	Yes

### Certificates & Standards

Product description	Standards	Type of protection	Energy consumption
LFP200M -G3-YE-06	CE / EAC / UL Recognized component according UL 8750	IP67	39.60 kWh/1000h
LFP200M -G3-RE-06	CE / EAC / UL Recognized component according UL 8750	IP67	39.60 kWh/1000h
LFP200M -G3-BL-06	CE / EAC / UL Recognized component according UL 8750	IP67	27.00 kWh/1000h

### LOGISTICAL DATA

Product description	Temperature range at storage
LFP200M -G3-YE-06	-40...+85 °C
LFP200M -G3-RE-06	-40...+85 °C
LFP200M -G3-BL-06	-40...+85 °C



## Energy labelling regulation data acc EU 2019/2015

Product description	Correlated colour temperature type
LFP200M -G3-YE-06	SINGLE_VALUE
LFP200M -G3-RE-06	SINGLE_VALUE
LFP200M -G3-BL-06	SINGLE_VALUE

## EQUIPMENT / ACCESSORIES

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

## APPLICATION ADVICE

For more detailed application information and graphics please see product datasheet.

## ADDITIONAL PRODUCT INFORMATION

- 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 T<sub>c</sub>-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.









## SALES AND TECHNICAL SUPPORT














Sales and Technical Support [www.ledvance.com](http://www.ledvance.com)

## COUNTRY SPECIFIC INFORMATION

Product description	Product code	METEL-Code	SEG number	STK number	UK Org
LFP200M -G3-YE-06	4052899500587	-	-	-	-
LFP200M -G3-RE-06	4052899500549	-	-	-	-
LFP200M -G3-BL-06	4052899500525	-	-	-	-

## DOWNLOAD DATA

DOWNLOAD DATA	
	Certificates UL Certificate
	Declarations of conformity Manufacturers Decalration LFP200M G3
	Declarations of conformity Declaration of Conformity LFP200M G3
	IES file (IES) IES LFP200M-G3-YE-06
	LDT file (Eulumdat) Eulumdat LFP200M-G3-YE-06
	Advertisements Light is freedom of design (EN)
	Advertisements 729674_Light is freedom of design (EN)
	Certificates UL Certificate

DOWNLOAD DATA	
	Declarations of conformity Declaration of Conformity LFP200M G3
	Declarations of conformity Manufacturers Decalration LFP200M G3
	IES file (IES) IES LFP200M-G3-RE-06
	LDT file (Eulumdat) Eulumdat LFP200M-G3-RE-06
	Advertisements Light is freedom of design (EN)
	Advertisements 729674_Light is freedom of design (EN)
	Certificates UL Certificate
	Declarations of conformity Manufacturers Decalration LFP200M G3
	Declarations of conformity Declaration of Conformity LFP200M G3
	IES file (IES) IES LFP200M-G3-BL-06
	LDT file (Eulumdat) Eulumdat LFP200M-G3-BL-06
	Advertisements Light is freedom of design (EN)
	Advertisements 729674_Light is freedom of design (EN)

## LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4052899500587	Folding box 1	353 mm x 349 mm x 32 mm	869.00 g	3.94 dm <sup>3</sup>
4052899500549	Folding box 1	353 mm x 349 mm x 32 mm	869.00 g	3.94 dm <sup>3</sup>
4052899500525	Folding box 1	353 mm x 349 mm x 32 mm	869.00 g	3.94 dm <sup>3</sup>

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

## DISCLAIMER

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.

