

# LINEARlight FLEX Colormix Protect

Linear LED modules for flexible and individualized lighting solutions



#### Product family features

- Flexible and cuttable LED strip with inline multichip RGB LEDs
- RGB: binning on white point (RGB mix)
- Type of protection: IP67
- Dimmable with PWM technology
- Salt mist proof

### Product family benefits

- Uniform color changing
- Great design freedom thanks to flexibility and cuttability of module
- High-performance silicone for extremely long life and flexibility
- Easy mounting on many smooth surfaces thanks to self-adhesive tape at the back
- Extraordinary design and high quality materials
- Toolless connection with the optional CONNECTsystem

#### Areas of application

- Facade accent lighting
- Effect lighting in architecture
- Edge coupling
- Path lighting
- Suitable for outdoor use



#### Technical data

#### Electrical data

Product description	Nominal voltage	Type of current	Rated wattage	Input voltage range	Accidental reverse input voltage protection up to
LFP600RGB -G5-06 L1	24.0 V	DC	93.60 W	2325 V	25 V
LFP300RGB -G5-06 C	24.0 V	DC	47.40 W	2325 V	25 V

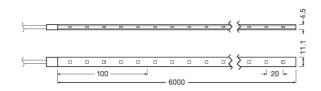
#### Photometrical data

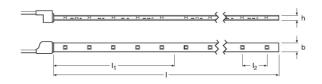
Product description	Lumi- nous flux per meter	Light color LED	Luminous efficacy	Color render- ing index Ra
LFP600RGB -G5-06 L1	570 lm	Red / Green / Blue	37 lm/W	
LFP300RGB -G5-06 C	300 lm	Red / Green / Blue	38 lm/W	80

#### **Dimensions & weight**

Product description	Length	Length – smallest unit	Width	Height	Cable length	Product weight
LFP600RGB -G5-06 L1	6000 mm	100.0 mm	11.1 mm	4.50 mm	500.0	400.00 g
LFP300RGB -G5-06 C	335.0 mm	150.0 mm	335.0 mm	14.6 mm	500.0	380.00 g

#### Product line drawing





LFP600RGB -G5-06 L1

LFP300RGB -G5-06 C

#### **Colors & materials**

Product description	Cover material	Body material
LFP600RGB -G5-06 L1	Silicone	Silicone
LFP300RGB -G5-06 C	Silicone	Silicone

#### Temperatures & operating conditions

Product description	Temperature range in operation at Tc point	Temperature range at storage
LFP600RGB -G5-06 L1	-3075 °C <sup>1)</sup>	-40+85 °C
LFP300RGB -G5-06 C	-2070 °C <sup>1)</sup>	-40+85 °C

 $^{1)}$  Exceeding the maximum ratings will reduce expected life time or destroy the LED strip.

#### Additional product data

Product description	ID of contained light	
	source	
LFP600RGB -G5-06 L1	LS_TRV_286415	
LFP300RGB -G5-06 C	LS_TRV_286657	

#### **Certificates & standards**

Product description	Type of protection	Standards	Energy efficiency class of the contained light source
LFP600RGB -G5-06 L1	IP68	CE/EAC/UL/CSA Recognized	G
LFP300RGB -G5-06 C	IP67	CE/EAC/UL/CSA Recognized	G

### Logistical data

Product description	Commodity code	
LFP600RGB -G5-06 L1	85395100000	
LFP300RGB -G5-06 C	85395100000	

# Environmental information Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)

Product description	Date of Declaration	Primary Article Identifier	Candidate List Substance 1
LFP600RGB -G5-06 L1	16-06-2023	4062172283526	Lead
LFP300RGB -G5-06 C	16-06-2023	4062172283540	Decamethylcyclopentasilo xane [D5]
Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
LFP600RGB -G5-06 L1	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	f833d563-81ea-423d- bb38-931e8a9968e6
LFP300RGB -G5-06 C	541-02-6	The identification of the Candidate List substance is sufficient to allow safe use of the article.	2f139140-33a3-43cb- a86f-68d2ab93df8e
Product description	Candidate List Substance 2	CAS No. of substance 2	Candidate List Substance 3
LFP600RGB -G5-06 L1			
LFP300RGB -G5-06 C	Octamethylcyclotetrasilox ane [D4]	556-67-2	Lead
Product description	CAS No. of substance 3		
LFP600RGB -G5-06 L1			
LFP300RGB -G5-06 C	7439-92-1		

#### 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 (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.

Sales and Technical Support

Sales and Technical Support www.osram.com

#### Download Data

	File
Z	User instruction LINEARlight FLEX Protect Colormix LFP600RGB-G5
7	Product Datasheet LINEARlight FLEX Colormix LFP600RGB L1 Specification Sheet (EN)
2	Brochures Light is freedom of design (EN)
Z	Certificates VDE ENEC CERTIFICATE 40052516 160823
	Certificates LINEARlight Flex DP UL 4413809 200622
Q	Eulumdat LFP600RGB G5 06 L1 LDT 010622
Q	IES data LFP600RGB G5 06 L1 IES 010622
Z	User instruction LINEARlight FLEX Protect Colormix LFP300RGB G5
	Product Datasheet LINEARlight FLEX Colormix LFP300RGB Specification Sheet (EN)
1	Eulumdat LFP300RGB-G5-06 C 1 LDT 060622
1	IES data LFP300RGB-G5-06 C 1 IES 060622

#### Ecodesign regulation information:

- This product is considered to be a "containing product" in the sense of Regulations (EU) 2019/2020 and (EU) 2019/2015. The contained light source is intended for use in applications requiring high-quality coloured light.
- Tolerances of the reported values, are according to LED Modules Performance standard IEC/EN 62717.
- In general, the replacement of the contained light sources without permanent damage to the product with the use of common available tools is possible in the final application when they can be dismantled from the installation environment and substituted for the necessary number of light sources restoring its full electrical/mechanical/thermal/optical functionality by means of a professional installer. In the contrary, and limited to the LINEARlight Flex Diffuse, LINEARlight Rigid Finesse, GINO LED Flex Diffuse and LUMINENT Milky product families, the contained light source is an integrated part of the containing product and its removal can only be done by causing a permanent damage to the containing product due to its tight mechanical, electrical, optical, thermal interaction and/or environmental protection with or from the containing product. Therefore, a replacement of the light source with the use of common available tools is not justified.
- Dismantling of light sources from containing products at end of life: Containing products with light sources which are scalable in length can be cut to the length of the contained light source and if applicable mechanically detached from protective and/or optical covers. Containing products shall be separated from building material and/or from other additional mounting accessories by means of a professional installer.Separate control gear and light sources must be disposed of at certified disposal companies in accordance with Directive 2012/19/EU (WEEE) in the EU and with Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 in the UK. For this purpose, collection points for recycling centres and take-back systems (CRSO) are available from retailers or private disposal companies, which accept separate control gear and light sources free of charge. In this way, raw materials are conserved and materials are recycled.

#### Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172283526	LFP600RGB -G5-06 L1	Shipping carton box 8	365 mm x 286 mm x 366 mm	38.21 dm³	7418.00 g
4062172283540	LFP300RGB -G5-06 C	Shipping carton box 8	365 mm x 286 mm x 366 mm	38.21 dm³	7258.00 g

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.

#### Accessories Optional

Product description	Accessory name	Accessory code
LFP600RGB -G5-06 L1	LF -4PIN Protect - Installation Kit	4062172016490
LFP600RGB -G5-06 L1	LF -4CONN Protect	4062172016452
LFP600RGB -G5-06 L1	LF -ENDCAP Protect	4062172016438
LFP600RGB -G5-06 L1	LTS-SLIMTRACK -2000 KIT 5 PCS	4062172207300
LFP300RGB -G5-06 C	LF -4PIN Protect - Installation Kit	4062172016490
LFP300RGB -G5-06 C	LF -4CONN Protect	4062172016452
LFP300RGB -G5-06 C	LF -ENDCAP Protect	4062172016438
LFP300RGB -G5-06 C	LTS-SLIMTRACK -2000 KIT 5 PCS	4062172207300

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#### Disclaimer

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