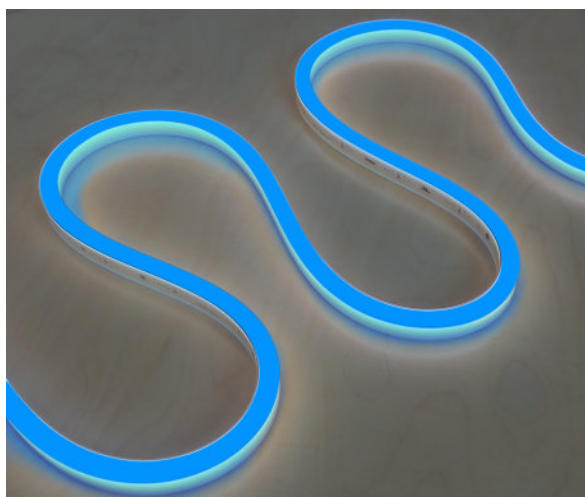


LINEARlight FLEX DIFFUSE Side Monochrome

LED modules for professional and industrial applications Notice: New Generation or successor products available!



Product family features

- Diffused light lines without visible spots
- Flexible and cuttable module to support design freedom
- Long operational length per single power feed possible (up to 6m)
- Ideal for luminaire designs
- Extra strong self-adhesive backside for easy mounting
- 24 V technology for easy dimensioning
- Recommended in system use with OPTOTRONIC
- Increased reliability due to single piece reel-to-reel technology
- Dimmable with PWM technology

Product family benefits

- IP67 protection with high performance silicone
- Reliable connection over long periods of time: IP67 connector with built-in protection against liquids penetrating through the wires into the LED strip
- 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)

Areas of application

- Individual and customized luminaires
- Organic shaped luminaires
- Architectural Integration – e.g. coves, walls
- Object integration – e.g. handrails
- Signage and illuminated advertising



Product family datasheet

Technical data

Product description	Electrical data						
	Nominal wattage per meter	Nominal current	Input voltage range	Nominal voltage	Accidental reverse input voltage protection up to	Nominal wattage	Type of current
LFD400MS -G1-BL-06 ¹⁾	12.0 W	3 A	23...25 V	24.0 V	25 V	72.00 W	DC
LFD400MS -G1-GR-06 ¹⁾	12.0 W	3 A	23...25 V	24.0 V	25 V	72.00 W	DC
LFD400MS -G1-RE-06 ¹⁾	12.0 W	3 A	23...25 V	24.0 V	25 V	72.00 W	DC
LFD400MS -G1-YE-06 ¹⁾	12.0 W	3 A	23...25 V	24.0 V	25 V	72.00 W	DC
LFD400MS -G1-OR-06 ¹⁾	12.0 W	3 A	23...25 V	24.0 V	25 V	72.00 W	DC
LFD400MS -G1-GR-03 ¹⁾	12.0 W	1.5 A	23...25 V	24.0 V	25 V	36.00 W	DC

Product description	Photometrical data	Light technical data	LED module information	Dimensions & weight		
	Nominal dominant wavelength	Beam angle	Number of LEDs per module	Length	Width	Height
LFD400MS -G1-BL-06 ¹⁾	457...467 nm	120 °	900	6000 mm	10.0 mm	14.1 mm
LFD400MS -G1-GR-06 ¹⁾	525...539 nm	120 °	900	6000 mm	10.0 mm	14.1 mm
LFD400MS -G1-RE-06 ¹⁾	612...626 nm	120 °	900	6000 mm	10.0 mm	14.1 mm
LFD400MS -G1-YE-06 ¹⁾	586...594 nm	120 °	900	6000 mm	10.0 mm	14.1 mm
LFD400MS -G1-OR-06 ¹⁾	603...611 nm	120 °	900	6000 mm	10.0 mm	14.1 mm
LFD400MS -G1-GR-03 ¹⁾	525...539 nm	120 °	900	3000 mm	10.0 mm	14.1 mm

Product description	Product weight	Temperatures & operating conditions		Lifespan	Capabilities
		Temperature range at storage	Temperature range in operation at Tc point	Lifespan	Dimmable
LFD400MS -G1-BL-06 ¹⁾	1040.00 g	-20...85 °C	-20...65 °C ²⁾	50000 h ₃₎	Yes
LFD400MS -G1-GR-06 ¹⁾	1040.00 g	-20...85 °C	-20...65 °C ²⁾	50000 h ₃₎	
LFD400MS -G1-RE-06 ¹⁾	1040.00 g	-20...85 °C	-20...65 °C ²⁾	26000 h ₃₎	
LFD400MS -G1-YE-06 ¹⁾	1040.00 g	-20...85 °C	-20...65 °C ²⁾	26000 h ₃₎	
LFD400MS -G1-OR-06 ¹⁾	1040.00 g	-20...85 °C	-20...65 °C ²⁾	26000 h ₃₎	
LFD400MS -G1-GR-03 ¹⁾	531.00 g	-20...85 °C	-20...65 °C ²⁾	50000 h ₃₎	

Product family datasheet

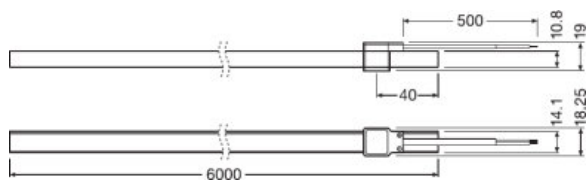
Product description	Certificates & standards	Logistical data
	Standards	Commodity code
LFD400MS -G1-BL-06 ¹⁾	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	940540399000
LFD400MS -G1-GR-06 ¹⁾	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	940540399000
LFD400MS -G1-RE-06 ¹⁾	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	940540399000
LFD400MS -G1-YE-06 ¹⁾	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	940540399000
LFD400MS -G1-OR-06 ¹⁾	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	940540399000
LFD400MS -G1-GR-03 ¹⁾	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	940540399000

¹⁾ Modules perfectly matched to OSRAM OPTOTRONIC LED drivers (see relevant table)/For current photometric data and important safety, installation and application information (see www.osram.com/led-systems),/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

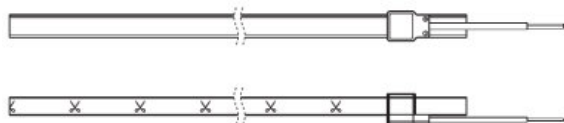
²⁾ Exceeding the maximum ratings will reduce expected life time or destroy the LED strip.

³⁾ L70/B50

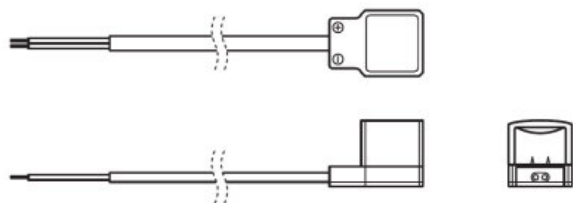
Product family datasheet



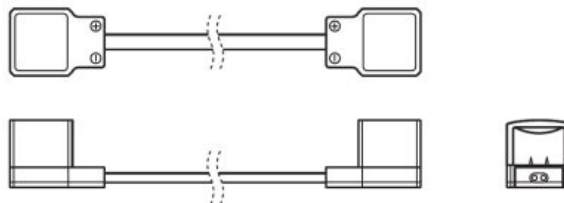
LINEARlight Flex Diffuse 400 Monochrome Side



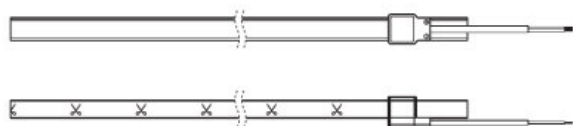
728586_LFD Side Blue



729201_LINEARLIGHT FLEX DIFFUSE POWER FEEDER



729202_LINEARLIGHT FLEX DIFFUSE Module to module middle jumper

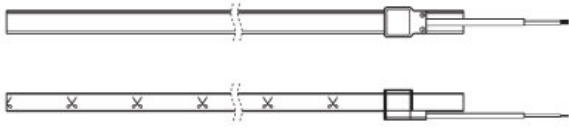


728587_LFD Side Green

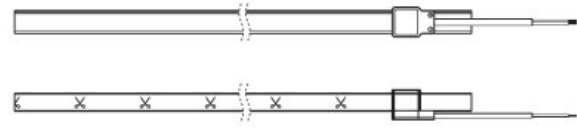


727967_LINEARlight Flex Diffuse MS

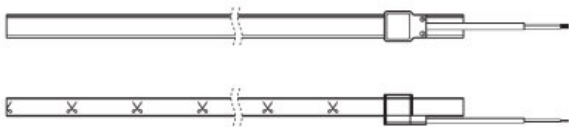
Product family datasheet



728588_LFD Side Yellow



728589_LFD Side Orange



727968_LINEARlight Flex Diffuse MS (3m)

Application advice

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

Product family 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 reduce the expected lifetime or even destroy the LED module. The temperature of the LED module must be measured at the T_c-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_c-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

Product family datasheet

Sales and Technical Support www.osram.com

Download Data

File	
	User instruction LINEARLIGHT Flex Diffuse Installation Guide - Naed Version (EN)
	Product Datasheet LINEARlight FLEX DIFFUSE Side (EN)
	Brochures Light is freedom of design (EN)
	Certificates VDE-ENEC Certificate
	Certificates UL Certificate
	Certificates CB TEST CERTIFICATE DE-57743
	Declarations of conformity Declaration of Conformity_LINEARlight Flex Diffuse
	Declarations of conformity 726048_Manufacturer Declaration_LINEARlight Flex Diffuse
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Product family datasheet

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	IES data IES LFD400MS-G1-GR-03

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899953659	LFD400MS -G1-BL-06	Shipping carton box 6	519 mm x 246 mm x 525 mm	67.03 dm ³	13358.00 g
4052899953666	LFD400MS -G1-GR-06	Shipping carton box 6	519 mm x 246 mm x 525 mm	67.03 dm ³	13358.00 g
4052899953673	LFD400MS -G1-RE-06	Shipping carton box 6	519 mm x 246 mm x 525 mm	67.03 dm ³	13358.00 g
4052899953680	LFD400MS -G1-YE-06	Shipping carton box 6	519 mm x 246 mm x 525 mm	67.03 dm ³	13358.00 g
4052899953697	LFD400MS -G1-OR-06	Shipping carton box 6	519 mm x 246 mm x 525 mm	67.03 dm ³	13358.00 g
4052899450882	LFD400MS -G1-GR-03	Shipping carton box 6	519 mm x 246 mm x 525 mm	67.03 dm ³	10304.00 g

Product family datasheet

Logistical Data

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 Mandatory

Product description	Accessory name	Accessory code
LFD400MS -G1-BL-06	FX-DCS -G1-CM2PF-IP67-500-X5	▶ 4052899451971
LFD400MS -G1-GR-06	FX-DCS -G1-CM2PF-IP67-500-X5	▶ 4052899451971
LFD400MS -G1-RE-06	FX-DCS -G1-CM2PF-IP67-500-X5	▶ 4052899451971
LFD400MS -G1-YE-06	FX-DCS -G1-CM2PF-IP67-500-X5	▶ 4052899451971
LFD400MS -G1-OR-06	FX-DCS -G1-CM2PF-IP67-500-X5	▶ 4052899451971
LFD400MS -G1-GR-03	FX-DCS -G1-CM2PF-IP67-500-X5	▶ 4052899451971

Accessories Optional

Product description	Accessory name	Accessory code
LFD400MS -G1-BL-06	FX-LFDM -G1-BS-12H13	▶ 4052899452541
LFD400MS -G1-BL-06	FX-LFDM -G1-BSL-12H13E9	▶ 4052899452572
LFD400MS -G1-BL-06	FX-DCS -G1-CM2PF-IP67-SIDEKIT5	▶ 4052899452015
LFD400MS -G1-BL-06	FX-DCS -G1-CM2PJ-IP67-0190-X5	▶ 4052899452039
LFD400MS -G1-BL-06	FX-DCS -G1-CM2PJ-IP67-SIDEKIT5	▶ 4052899452077
LFD400MS -G1-BL-06	FX-DCS -G1-ECS-KIT20	▶ 4052899452121
LFD400MS -G1-BL-06	FX-DCS -G1-EHS-KIT20	▶ 4052899452206
LFD400MS -G1-BL-06	FX-DCS -G1-GL-25	▶ 4052899452244
LFD400MS -G1-GR-06	FX-LFDM -G1-BS-12H13	▶ 4052899452541
LFD400MS -G1-GR-06	FX-LFDM -G1-BSL-12H13E9	▶ 4052899452572
LFD400MS -G1-GR-06	FX-DCS -G1-CM2PF-IP67-SIDEKIT5	▶ 4052899452015
LFD400MS -G1-GR-06	FX-DCS -G1-CM2PJ-IP67-0190-X5	▶ 4052899452039
LFD400MS -G1-GR-06	FX-DCS -G1-CM2PJ-IP67-SIDEKIT5	▶ 4052899452077
LFD400MS -G1-GR-06	FX-DCS -G1-ECS-KIT20	▶ 4052899452121
LFD400MS -G1-GR-06	FX-DCS -G1-EHS-KIT20	▶ 4052899452206
LFD400MS -G1-GR-06	FX-DCS -G1-GL-25	▶ 4052899452244
LFD400MS -G1-RE-06	FX-LFDM -G1-BS-12H13	▶ 4052899452541
LFD400MS -G1-RE-06	FX-LFDM -G1-BSL-12H13E9	▶ 4052899452572
LFD400MS -G1-RE-06	FX-DCS -G1-CM2PF-IP67-SIDEKIT5	▶ 4052899452015

Product family datasheet

LFD400MS -G1-RE-06	FX-DCS -G1-CM2PJ-IP67-0190-X5	▶ 4052899452039
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Disclaimer

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