

## LINEARlight Colormix Overall Module

Constant Voltage 24 V



### Areas of application

- Restaurants
- Architainment
- Shops
- Mood lighting and wallwashing (LR18CP)
- Effect lighting (LR28CA)
- Background lighting (LR18CE)

### Product benefits

- Very flat construction height: 13 mm
- Adequate heat removal thanks to aluminum housing
- Modules can be easily joined together to make seamless strip lighting
- The modules are compatible with each other
- Low maintenance costs thanks to a lifetime of up to 50,000 h (L70/B50)

### Product features

- Design-oriented complete module with integrated optics
- Multichip RGB LEDs (LR28CA, LR18CE)
- Individual RGB LEDs (LR18CP)
- Integrated SMD plug connector (male/female) on both sides of the PCB



# Product family datasheet

## Technical data

### Electrical data

Product description	Nominal voltage	Rated wattage	Reverse Voltage	Type of current	Voltage range
LR18CP 560-L2050	24.00 V	19.10 W	25 V	DC	23...25 V
LR18CE 560-L2050	24.00 V	3.60 W	25 V	DC	23...25 V
LR28CA 560-L2050	24.00 V	10.10 W	25 V	DC	23...25 V

### Photometrical data

Product description	Light color as per EN 12464-1	Light color LED	Nominal dominant wavelength	Luminous flux
LR18CP 560-L2050	Color Changing	RGB	616 / 531 / 468 nm	300/400/29/729 lm
LR18CE 560-L2050	Color Changing	RGB	649 / 530 / 620 nm	50/81/12/143 lm
LR28CA 560-L2050	Color-changing	RGB	640 / 530 / 620 nm	126/202/50/378 lm

### Light technical data

Product description	Beam angle
LR18CP 560-L2050	20 ° x 50 °
LR18CE 560-L2050	20 ° x 50 °
LR28CA 560-L2050	20 ° x 50 °

### LED module information

Product description	Number of LEDs per module
LR18CP 560-L2050	18
LR18CE 560-L2050	18
LR28CA 560-L2050	28

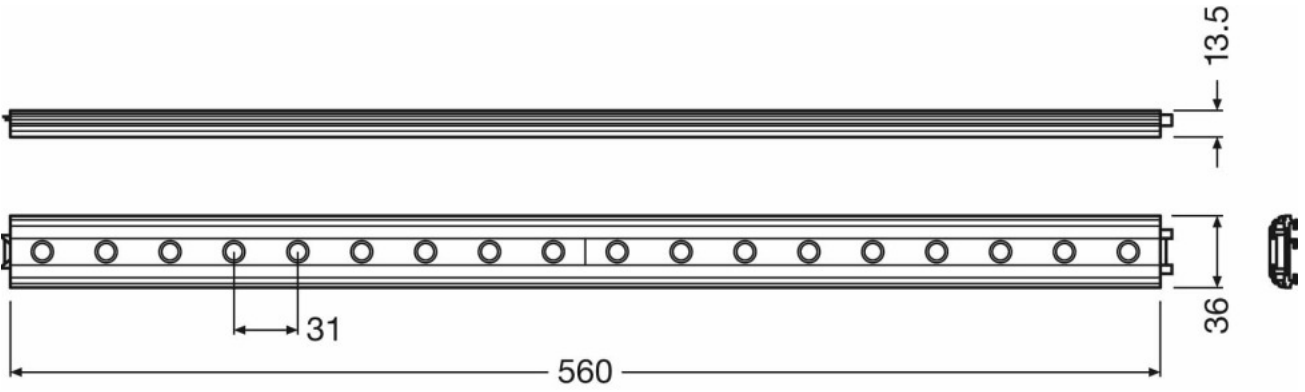
### Dimensions & weight

Product description	Product weight	Length	Width	Height
LR18CP 560-L2050	305.00 g	560.0 mm <sup>1)</sup>	36.0 mm	13.5 mm
LR18CE 560-L2050	305.00 g	560.0 mm <sup>1)</sup>	36.0 mm	13.5 mm
LR28CA 560-L2050	305.00 g	560.0 mm <sup>1)</sup>	36.0 mm	13.5 mm

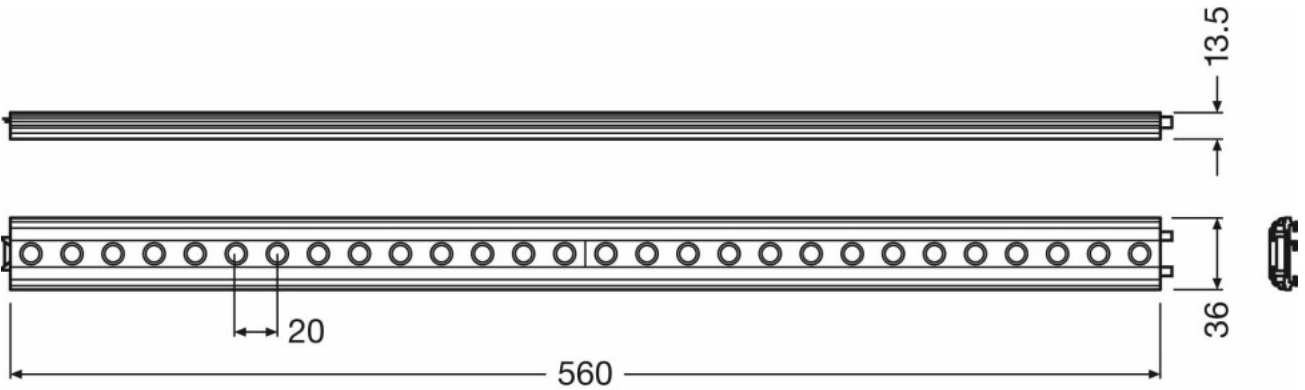
<sup>1)</sup> LED pitch 20 mm

Product family datasheet

Product line drawing



LR18CP 560-L2050, LR18CE 560-L2050



LR28CA 560-L2050

# Product family datasheet

## Colors & materials

Product description	Cover material	Body material
LR18CP 560-L2050	Plastic	Anodised aluminum
LR18CE 560-L2050	Plastic	Anodised aluminum
LR28CA 560-L2050	Plastic	Anodised aluminum

## Temperatures

Product description	Maximum temperature at tc test point	Temperature range in operation	Temperature range at storage
LR18CP 560-L2050	65 °C	-30...65 °C <sup>1)</sup>	-30...90 °C
LR18CE 560-L2050	65 °C	-30...65 °C <sup>1)</sup>	-30...90 °C
LR28CA 560-L2050	65 °C	-30...65 °C <sup>1)</sup>	-30...90 °C

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

## Lifespan

Product description	Lifespan
LR18CP 560-L2050	50000 h <sup>1)</sup>
LR18CE 560-L2050	50000 h <sup>1)</sup>
LR28CA 560-L2050	50000 h <sup>2)</sup>

<sup>1)</sup> L70 at T<sub>c</sub> 65 °C

<sup>2)</sup> L70/B50 at T<sub>c</sub> 65 °C

## Capabilities

Product description	Dimmable
LR18CP 560-L2050	Yes
LR18CE 560-L2050	Yes
LR28CA 560-L2050	Yes

## Certificates & standards

Product description	Standards
LR18CP 560-L2050	CE/acc. to EC 61347-2-13/acc. to EN 55015/acc. to IEC 61547/acc. to IEC 61000-3-2/ENEC: 61347-2-13/acc.to IEC/EN 62384
LR18CE 560-L2050	CE/acc. to EC 61347-2-13/acc. to EN 55015/acc. to IEC 61547/acc. to IEC 61000-3-2/ENEC: 61347-2-13/acc.to IEC/EN 62384
LR28CA 560-L2050	CE/acc. to EC 61347-2-13/acc. to EN 55015/acc. to IEC 61547/acc. to IEC 61000-3-2/ENEC: 61347-2-13/acc.to IEC/EN 62384

## Equipment / Accessories

## Product family datasheet

- CONNECTsystem LR
- Mounting brackets LD-MB
- LT-ENDCAP-G2

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### Application advice

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

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### Additional product information

- Installation of LED modules (with power supplies) needs to be made under consideration of all valid regulations and norms.
- Installation by qualified electrician only.
- Please see the relevant application guides and instructions sheets for more detailed safety and mounting information. Additional information is available on request.
- Complies with IEC/EN 61547
- Complies with IEC/EN 61000-3-2
- Complies with EN 55015, CISPR 15
- Complies with IEC/EN 61347-1
- Complies with IEC/EN 61347-2-13
- Suitable for usage in furnitures (DIN 57710).
- LED modules are dimmable by means of PWM (pulse width modulation). It is recommended using the following OSRAM control gears: OPTOTRONIC OT DIM, OT DALI DIM, OT DALI DIM LI or OPTOTRONIC 24 V power supplies with integrated 1...10 V dimming interface.
- Parallel connection is mandatory for safe electrical operation. Serial connection of LED modules is strongly discouraged. Unbalanced voltage drop in serial connection can cause hazardous overload and damage the LED module.
- Electrical contact is achieved with the contact cables or the terminals of the module. Please refer to the technical data for maximum number of LED modules that can be operated on one control gear.
- In order to operate OSRAM LED modules safely, it is absolutely necessary to operate them with an electronically stabilized power supply that protects against short circuits, overload and overheating.
- In case other power supplies than OSRAM OPTOTRONIC are used, compliance to the necessary operating parameters (voltage, current, power) has to be ensured.
- Pay attention to polarity! Wrong polarity can cause destruction or malfunction of the module.
- Use only coordinated LR-4PIN CONNECTsystem for electrical installation.
- Conducting paths on the circuit board must not be damaged or destroyed during installation.
- Luminaire must be cleaned regularly to avoid loss of luminous flux.
- The LED module itself and all its components must not be stressed mechanically.
- Operation in or under water is prohibited.
- Protect against splashes!
- The module, as manufactured, has no inherent protection against corrosion. It is the user's responsibility to provide suitable protection against corrosive agents, such as moisture, condensation and other harmful elements.
- To avoid mechanical damage, the LED modules have to be attached securely to the intended mounting surface. It is recommended to avoid heavy vibration.

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### Sales and Technical Support























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

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### Country specific information






## Product family datasheet

### Download Data

File	
	Product Datasheet LINEARlight Colormix Power_Gesamtmodul - LR18CP (D)
	Product Datasheet LINEARlight Colormix Power_overall module - LR18CP (EN)
	Certificates VDEENEC Certification - LRxxx-OM
	Certificates VDEENEC Certification - LRxxx-OM
	Declarations of conformity LINEARlight RGB Overall Modules - EC-Declaration of Conformity
	Declarations of conformity EC-DoC LS LRXXX-Linear Rigid
	Declarations of conformity EC-Man DoC LS LRXXX-Linear Rigid
	Installation guide Installation instructions for linear LED modules (DE)
	Installation guide Installation instructions for linear LED modules (GB)
	CAD data LINEARlight Colormix Power Overall Module Drawing
	Eulumdat LINEARlight LR18CP-OM BLUE
	Eulumdat LINEARlight LR18CP-OM Green
	Eulumdat LINEARlight LR18CP-OM RED
	Eulumdat LINEARlight LR18CP-OM WHITE
	Product Datasheet LINEARlight Colormix Eco_overall module - LR18CE (EN)
	Product Datasheet LINEARlight Colormix Eco_Gesamtmodul - LR18CE (D)
	CAD data LINEARlight Colormix Eco Overall Module Drawing
	Eulumdat LINEARlight LR18CE-OM BLUE
	Eulumdat LINEARlight LR18CE-OM GREEN
	Eulumdat LINEARlight LR18CE-OM RED
	Eulumdat LINEARlight LR18CE-OM WHITE
	Product Datasheet LINEARlight Colormix Advanced - LR28CA (EN)

## Product family datasheet

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	Product Datasheet LINEARlight Colormix Advanced - LR28CA (D)
	CAD data LINEARlight Colormix Advanced Overall Module Drawing
	Eulumdat LINEARlight LR28CA-OM BLUE
	Eulumdat LINEARlight LR28CA-OM GREEN
	Eulumdat LINEARlight LR28CA-OM RED
	Eulumdat LINEARlight LR28CA-OM WHITE

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### Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4008321971753	LR18CP 560-L2050	Shipping carton box 8	602 mm x 46 mm x 403 mm	11.16 dm <sup>3</sup>	3404.00 g
4008321971777	LR18CE 560-L2050	Shipping carton box 8	602 mm x 403 mm x 46 mm	11.16 dm <sup>3</sup>	3404.00 g
4008321978561	LR28CA 560-L2050	Shipping carton box 8	602 mm x 403 mm x 46 mm	11.16 dm <sup>3</sup>	3404.00 g

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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.