

# PRODUCT DATASHEET

## LS PFM -2000/830/5/IP66

**LED STRIP PERFORMANCE-2000 PROTECTED | High performance IP66 protected LED strips with 2000 lm/m for high requirements**



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### AREAS OF APPLICATION

- General indoor illumination
- General outdoor illumination
- Industry
- Offices, retail outlets and conference rooms
- Architecture lighting

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### PRODUCT BENEFITS

- Great scope of design options due to long and flexible LED strips
- Easy installation, no tools required for connection
- Easy mounting on many smooth surfaces thanks to self-adhesive tape
- Suitable for use in damp conditions thanks to high type of protection
- Maximum flexibility due to large range of accessories
- Simple connection thanks to integrated cables on both sides

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### PRODUCT FEATURES

- Flexible and cuttable LED strip
- Smallest cuttable unit: 100 mm
- Lifetime (L70/B50): up to 35,000 h at Tc max.: 75°C
- Luminous flux: 2000 lm/m
- Color rendering index  $R_a$ : > 80
- Initial color consistency:  $\leq 4$  SDCM



- Large range of color temperatures: from warm white to cool daylight
- Type of protection: IP66
- Dimmable with suitable drivers, see also [www.ledvance.com/dim](http://www.ledvance.com/dim)
- UV resistance (acc. IEC 60068-2-5)
- Salt mist resistance (acc. IEC 60068-2-52)

## TECHNICAL DATA

### Electrical data

<b>Rated wattage</b>	72.00 W
<b>Nominal wattage</b>	72.00 W
<b>Nominal wattage per meter</b>	14.4 W
<b>Nominal voltage</b>	24 V <sup>1)</sup>
<b>Input voltage range</b>	23...25 V <sup>1)</sup>
<b>Reverse Voltage</b>	25 V <sup>1)</sup>

<sup>1)</sup>V<sub>DC</sub>

### Photometrical data

<b>Color temperature</b>	3000 K
<b>Standard deviation of color matching</b>	≤4 sdcn
<b>Color rendering index Ra</b>	>80
<b>Light color LED</b>	White
<b>Luminous flux per meter</b>	1750 lm
<b>Luminous flux</b>	8750 lm
<b>Luminous efficacy</b>	121.5 lm/W

### Light technical data

<b>Beam angle</b>	105 °
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### LED module information

<b>Number of LEDs per meter</b>	70
<b>Number of LEDs per module</b>	350
<b>Number of LEDs per smallest unit</b>	7

Dimensions & weight



<b>LED pitch</b>	14.3 mm
<b>Length</b>	5000 mm
<b>Length – smallest unit</b>	100.0 mm
<b>Width</b>	10.0 mm
<b>Height</b>	4.50 mm
<b>Cable length</b>	500 mm
<b>Product weight</b>	285.00 g
<b>Short pitch</b>	No
<b>Prewired</b>	Yes
<b>Conductor cross section</b>	0.5 mm <sup>2</sup>

Colors & materials

<b>Cover material</b>	Silicone
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Temperatures & operating conditions

<b>Ambient temperature range</b>	-15...+45 °C <sup>1)</sup>
<b>Temperature range in operation</b>	-15...+75 °C <sup>2)</sup>
<b>Maximum temperature at tc test point</b>	75 °C <sup>3)</sup>

<sup>1)</sup> Providing that temperature at Tc point is below max value during operation

<sup>2)</sup> At the T<sub>c</sub> point

<sup>3)</sup> Exceeding the maximum specified ratings can reduce expected life time or destroy the LED strip

Lifespan

<b>Lifespan</b>	35000 h <sup>1)</sup>
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<sup>1)</sup> L70/B50 at Tc max. 75 °C

Capabilities

<b>Lowest bending radius</b>	25 mm
<b>Self-adhesive</b>	Yes

<b>Dimmable</b>	Yes
<b>Reverse polarity protection</b>	Yes <sup>1)</sup>

<sup>1)</sup> Up to maximum 25 V<sub>DC</sub>

### Certificates & standards

<b>Salt mist resistance acc. IEC 60068-2-52</b>	Yes
<b>UV resistance acc. IEC 60068-2-5</b>	Yes
<b>Energy consumption</b>	80 kWh/1000h
<b>Energy efficiency class</b>	A+ <sup>1)</sup>
<b>Type of protection</b>	IP66
<b>Standards</b>	Acc. to IEC 62471/Acc. to IEC 60598-1/Acc. to EN 60529/Acc. to EN 62031/Acc. to EN 55015/Acc. to EN 61547

<sup>1)</sup> Applicable on entire product

### Logistical data

<b>Temperature range at storage</b>	-35...+85 °C
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## EQUIPMENT / ACCESSORIES



- Connectors, profiles and covers for several mounting options available
- Endcaps have to be ordered separately

## ADDITIONAL PRODUCT INFORMATION

- All the technical parameters apply to the entire LED 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.
- All LED strips have a self-adhesive tape on the reverse side. LED strips can be attached to suitable materials, e.g. aluminum profiles. The surface of the material must be free of grease, oil, silicone and dirt particles. The adhesive tape can be used only one time, if the LED strip will be removed from the mounting surface, there could be a damage of the LED strips and the mounting material. The surface temperature of the mounting material should be in the temperature range of 18°C...35°C. Complete adhesion takes up to 72 h.
- According IPC 6013C – Use A the LED strips are designed for static installation. Vibrations, respective torsion and elongation/compression must be considered.
- In a wide temperature range operation field (e.g. outdoor installation) and a LED strip length with more than 2m suitable mounting surface is required. To avoid stress due to mismatch in expansion of the different materials, there should be an extra thicker adhesive tape between LED strip and mounting surface. Additionally, the LED strip should have enough space for thermal expansion at higher temperatures.
- Compensation due to chemical corrosion is excluded. A suitable protection against corrosive agents such as moisture, condensation etc. must be provided. Hydrogen sulfide (H<sub>2</sub>S) will cause an accelerated corrosion which leads to shortened lifetime or premature failure.
- IP00 LED strips have not surface coating. Consequently, they have no protection against contact and corrosion.
- Installation of the LED strip has to be done by a qualified electrician.
- Handle with care to avoid mechanical product damage
- If the maximum operating and storage temperature ratings will be exceeded, the expected lifetime will be reduced or even the LED strip will be destroyed. It is not allowed to operate the LED strip over the specified T<sub>c</sub> temperature (acc. EN 60598-1 under steady state conditions)

- It is not allowed to exceed the maximum operation voltage. This could cause a hazardous overload and will destroy the LED strip.
- The applicable electrical and safety standards have to be maintained for a LED strip installations
- Pay attention on correct polarity. Incorrect polarity or wrong wiring can cause unpredictable permanent damage or even failure of the product.
- Galvanic Insulation between LED strip and mounting surface must be ensured. This Insulation is needed especially in the area of connections or cut ends.
- In installations of LED strips ESD safety must be taken in account. Adequate precautions during installation and operation for the products are required.
- LED strip can be operated only by a SELV LED driver, which comply with the applicable lighting standards and fits to LED strips rating. A safety operation of the LED strips require a SELV LED driver with an electronically stabilized power supply protection against short circuits, overload and overheating.
- To avoid a damage of the LED strip, the unmounted LED strip should be handled and stored only in the original LEDVANCE packaging (wheel / ESD bag). Repacking is not allowed. Cutted IP 6x LED strips can be stored only with mounted endcaps.

## DOWNLOAD DATA

File
 User instruction LED STRIP PERFORMANCE IP66
 Declarations of conformity EU Declaration of conformity 3563397 LS PFM

## LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075236516	Shipping carton box 10	300 mm x 280 mm x 285 mm	5721.00 g	23.94 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

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