

# PRODUCT DATASHEET

## LS PFM -300/827/5

LED STRIP PERFORMANCE-300 | High performance LED strips with 300 lm/m for high requirements



### Areas of application

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

### 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
- Maximum flexibility due to large range of accessories
- Simple connection thanks to integrated cables on both sides

### 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: 300 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
- Dimmable with suitable drivers, see also [www.ledvance.com/dim](http://www.ledvance.com/dim)



## TECHNICAL DATA

### Electrical data

Nominal wattage	13.50 W
Construction wattage	13.50 W
Nominal wattage per meter	2.7 W
Nominal voltage	24 V <sup>1)</sup>
Input voltage range	23...25 V <sup>1)</sup>
Reverse Voltage	25 V <sup>1)</sup>
Type of current	DC
Nominal current	562.000 mA

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

### Photometrical data

Luminous efficacy	118.5 lm/W
Luminous flux	1600 lm
Luminous flux per meter	320 lm
Luminous flux per module chain	1600 lm
Color temperature	2700 K
Color rendering index Ra	> 80
Light color LED	Warm white
Light color (designation)	Warm White
Standard deviation of color matching	≤4 sdc <sub>m</sub>

### Light technical data

Beam angle	120 °
Rated beam angle (half peak value)	120.00 °

### LED MODULE INFORMATION

Number of LEDs per meter	70
Number of LEDs per module	350
Number of LEDs per smallest unit	7

### Dimensions & Weight



Length	5000.00 mm
Length – smallest unit	100 mm
Cable length	500.000
Width	8.00 mm
Height	1.40 mm
Prewired	Yes
Conductor cross section	0.5 mm <sup>2</sup>
LED pitch	14.3 mm
Short pitch	No
Product weight	80.00 g

### Temperatures & operating conditions

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

1) Providing that temperature at T<sub>c</sub> point is below max value during operation

2) Exceeding the maximum specified ratings can reduce expected life time or destroy the LED strip

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

### Lifespan

Nominal lamp life time	35000 h
Number of switching cycles	100000

### Capabilities

Dimmable	Yes <sup>1)</sup>
Lowest bending radius	25 mm
Self-adhesive	Yes
Reverse polarity protection	Up to maximum 25 V <sub>DC</sub>

1) Dimmable with suitable drivers, see also [www.ledvance.com/dim](http://www.ledvance.com/dim)

### Certificates & Standards

Approval marks – approval	TUV / RoHS / CE / REACH
Standards	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
Type of protection	IP00
Energy consumption	14.85 kWh/1000h
Energy efficiency class	A+
Salt mist resistance acc. IEC 60068-2-52	No
UV resistance acc. IEC 60068-2-5	No

## LOGISTICAL DATA








Temperature range at storage	-35...+85 °C
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## Accessories Mandatory

Product image	Product name	EAN
	DR-VAL -120/220-240/24	4058075240131
	DR-VAL -30/220-240/24	4058075240056
	DR-PFM -150/220-240/24/P	4058075239975
	DR DIM-PFM -20/220-240/24/P	4058075239951
	DR DIM-PFM -100/220-240/24/P	4058075240070
	DR-PFM -30/220-240/24/P	4058075239890
	DR-VAL -150/220-240/24	4058075240179

Product image	Product name	EAN
	DR DIM-PFM -40/220-240/24/P	4058075239999
	DR DIM-PFM -40/220-240/24/P	4058075379176
	DR DIM-PFM -60/220-240/24/P	4058075240018
	DR DIM-PFM -60/220-240/24/P	4058075379190
	DR DIM-PFM -150/220-240/24/P	4058075240117
	DR-PFM -100/220-240/24/P	4058075239937
	DR-VAL -60/220-240/24	4058075240094
	DR-PFM -250/220-240/24/P	4058075240032
	DR DIM-PFM -250/220-240/24/P	4058075240155
	DR-PFM -60/220-240/24/P	4058075239913

Accessories Optional

Product image	Product name	EAN
	LS AY -PF03/UW/25X7/12/1	4058075278257
	LS AY -PM01/UW/21,5X12/10/1	4058075278318
	LS AY -PW03/U/26X26/14/2	4058075401501
	LS AY -PF02/U/16X5/10/2	4058075401563
	LS AY -PW02/UW/39X26/14/2	4058075401471
	LS AY -PM06/E/18X18/12/1	4058075279308
	LS AY PFM -CP/P2/500	4058075272200
	LS AY -PM03/E/19X19/10/2	4058075401716
	LS AY -PF01/UW/22X6/10/2	4058075401532
	LS AY -PW01/U/26X8/14/2	4058075401440
	LS AY -PM01/UW/21,5X12/10/2	4058075401655

Product image	Product name	EAN
	LS AY PFM -CSD/P2	4058075275393
	LS AY -PM06/E/18X18/12/2	4058075401808
	LS AY -PM04/UW/23X15,5/10/1	4058075278400
	LS AY -PM04/UW/23X15,5/10/2	4058075401747
	LS AY -PM02/R/18X15,5/10/1	4058075278349
	LS AY -PW03/U/26X26/14/1	4058075278165
	LS AY -PM05/U/17,5X14,5/10/1	4058075279278
	LS AY -PF01/UW/22X6/10/1	4058075278196
	LS AY -PW01/U/26X8/14/1	4058075278103
	LS AY -PF04/U/17X7/12/2	4058075401624
	LS AY PFM -CSW/P2/50	4058075272231

Product image	Product name	EAN
	LS AY -PF03/UW/25X7/12/2	4058075401594
	LS AY -PM03/E/19X19/10/1	4058075278370
	LS AY -PM05/U/17,5X14,5/10/2	4058075401778
	LS AY PFM -8/SMB	4058075275645
	LS AY -PM02/R/18X15,5/10/2	4058075401686
	LS AY -PF04/U/17X7/12/1	4058075278288
	LS AY -PF02/U/16X5/10/1	4058075278226
	LS AY -PW02/UW/39X26/14/1	4058075278134

## EQUIPMENT / ACCESSORIES

- Connectors, profiles and covers for several mounting options available

## Safety advice






- All electrical connections must be made by a qualified person.


## 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

Documents and certificates		Document name
	User instruction / safety instructions	LED STRIP PERFORMANCE IP00
	Declarations of conformity	EU Declaration of conformity 3563397 LS PFM
Photometric and lighting design files		Document name
	IES file (IES)	LS PFM-300-827-5
	IES files (IES, additional)	LS PFM-300-827-5-0.1M
	LDT file (Eulumdat)	LS PFM-300-827-5

Photometric and lighting design files		Document name
	LDT files (Eulumdat, additional)	LS PFM-300-827-5-0.1M

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075236387	Folding box 1	242 mm x 242 mm x 26 mm	271.00 g	1.52 dm <sup>3</sup>
4058075236394	Shipping box 10	260 mm x 260 mm x 265 mm	3101.00 g	17.91 dm <sup>3</sup>
4058075253636	Shipping box 40	540 mm x 280 mm x 555 mm	13411.00 g	83.92 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.