

# PRODUCT DATASHEET LS VAL -600/840/5

LED STRIP VALUE-600 PROTECTED | IP65 protected LED strips with 600 lm/m for general applications



#### Areas of application

- General indoor illumination
- Decorative illumination
- Private living areas

# **Product benefits**

- Great scope of design options due to long and flexible LED strips
- 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 20,000 h at Tc max.:  $65^{\circ}$ C
- Luminous flux: 600 lm/m
- Color rendering index R<sub>a</sub>: > 80
- Available with light color: Warm White, White, Daylight





# **TECHNICAL DATA**

# **Electrical data**

Nominal wattage	27.00 W
Construction wattage	27.00 W
Nominal wattage per meter	5.5 W <sup>1)</sup>
Nominal voltage	24 V <sup>2)</sup>
Input voltage range	2325 V <sup>2)</sup>
Reverse Voltage	25 V <sup>2)</sup>
Type of current	DC
Nominal current	1042 mA

<sup>1)</sup> Value based on first meter of the product

# Photometrical data

Total useful luminous flux [PICOS]	570 lm
Luminous efficacy	104 lm/W <sup>1)</sup>
Luminous flux	2533 lm
Luminous flux per meter	570 lm <sup>1)</sup>
Luminous flux per module chain	2533 lm
Color temperature	4000 K
Color rendering index Ra	> 80
Light color LED	Cool white
Light color (designation)	Cool White
Standard deviation of color matching	≤6 sdcm

<sup>1)</sup> Value based on first meter of the product

# Light technical data

Beam angle	120 °
Rated beam angle (half peak value)	115.00 °

# LED MODULE INFORMATION

Number of LEDs per meter	60
Number of LEDs per module	300
Number of LEDs per smallest unit	6

<sup>2) &</sup>lt;sub>VDC</sub>

# **Dimensions & Weight**



Length	5000.00 mm
Length – smallest unit	100.0 mm
Cable length	500.000
Width	8.00 mm
Height	1.30 mm
Prewired	Yes
Conductor cross section	0.5 mm <sup>2</sup>
LED pitch	16.67 mm
Short pitch	No
Product weight	64.00 g

# Temperatures & operating conditions

Ambient temperature range	-20+40 °C <sup>1)</sup>	
Maximum temperature at tc test point	65 °C <sup>2)</sup>	
Temperature range in operation	-20+65 °C <sup>3)</sup>	

 $<sup>1) \ {\</sup>hbox{Providing that temperature at Tc point is below max value during operation}} \\$ 

Nominal lamp life time

# Lifespan

Capabilities		
Dimmable	Yes <sup>1)</sup>	
Lowest bending radius	30 mm	
Self-adhesive	Yes	
Reverse polarity protection	Up to maximum 25 V <sub>DC</sub>	

20000 h

# Certificates & Standards

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

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

Approval marks – approval	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	6.05 kWh/1000h <sup>1)</sup>
Energy efficiency class	F
Salt mist resistance acc. IEC 60068-2-52	No
UV resistance acc. IEC 60068-2-5	No

<sup>1)</sup> Value based on first meter of the product

#### **LOGISTICAL DATA**

Temperature range at storage -20+85 °C	
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#### 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 (H2S) 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 Tc 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 handelt 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.

# **LOGISTICAL DATA**

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075296930	Folding box 1	242 mm x 242 mm x 26 mm	255.00 g	1.52 dm <sup>3</sup>
4058075296947	Shipping box 10	260 mm x 260 mm x 265 mm	2941.00 g	17.91 dm³
4058075296954	Shipping box 40	540 mm x 280 mm x 555 mm	12771.00 g	83.92 dm³

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.