PRODUCT DATASHEET
LS VAL -1400/840/5

LED STRIP PERFORMANCE-1500 | High performance LED strips with 1500 lm/m for high requirements



Areas of application

- General indoor 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°C
- Luminous flux: 1400 lm/m
- Color rendering index R_a: > 80
- Available with light color: Warm White, White, Daylight
- Dimmable with suitable drivers, see also www.ledvance.com/dim

TECHNICAL DATA

Electrical data

Nominal wattage	61.00 W
Construction wattage	61.00 W
Nominal wattage per meter	12 W [1)]
Nominal voltage	24 V [2)]
Input voltage range	23…25 V [2)]
Reverse Voltage	25 V [2)]
Type of current	DC
Nominal current	2000.000 mA

1) Value based on first meter of the product

2) V_{DC}

Photometrical data

Total useful luminous flux [PICOS]	1450 lm
Luminous efficacy	121 lm/W [1)]
Luminous flux	5618 lm
Luminous flux per meter	1450 lm [1)]
Luminous flux per module chain	5618 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	≤5 sdcm

1) 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

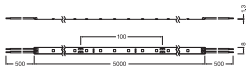
Number of LEDs per meter	70
Number of LEDs per module	350
Number of LEDs per smallest unit	7





© 2022, LEDVANCE GmbH. All rights reserved.

Dimensions & Weight



Length	5000.00 mm
Length – smallest unit	100 mm
Cable length	500.000
Width	8.00 mm
Height	1.30 mm
Prewired	Yes
Conductor cross section	0.5 mm^2
LED pitch	14.3 mm
Short pitch	No
Product weight	74.00 g

Temperatures & operating conditions

Ambient temperature range	-20…+40 °C [1)]
Maximum temperature at tc test point	65 °C [2)]
Temperature range in operation	-20…+65 °C [3)]

1) Providing that temperature at Tc 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_c point

Lifespan

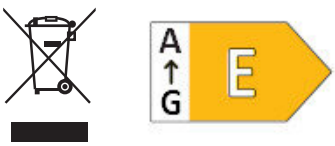
Nominal lamp life time	20000 h

Capabilities

Dimmable	Yes [1)]
Lowest bending radius	30 mm
Self-adhesive	Yes
Reverse polarity protection	Up to maximum 25 V_{DC}

1) Dimmable with suitable drivers, see also www.ledvance.com/dim

Certificates & Standards



© 2022, LEDVANCE GmbH. All rights reserved.

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	13.20 kWh/1000h [1)]
Energy efficiency class	A+
Salt mist resistance acc. IEC 60068-2-52	No
UV resistance acc. IEC 60068-2-5	No

1) Value based on first meter of the product

LOGISTICAL DATA

Temperature range at storage	-20...+85 °C

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 orignial LEDVANCE packaging (wheel / ESD bag). Repacking is not allowed. Cutted IP 6x LED strips can be stored only with mounted endcaps.





© 2022, LEDVANCE GmbH. All rights reserved.

DOWNLOAD DATA

	DOWNLOAD DATA
PDF	User instruction
PDF	Declarations of conformity
	IES file (IES)
	IES files (IES, additional)
	LDT file (Eulumdat)
	LDT files (Eulumdat, additional)
PDF	Catalogs

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075296909	Folding box 1	242 mm x 242 mm x 26 mm	265.00 g	1.52 dm^3
4058075296916	Shipping box 10	260 mm x 260 mm x 265 mm	3041.00 g	17.91 dm^3
4058075296923	Shipping box 40	540 mm x 280 mm x 555 mm	13171.00 g	83.92 dm^3

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.





© 2022, LEDVANCE GmbH. All rights reserved.