

PRODUCT DATASHEET

LED Star MR16 50 120° 5.3W/827 GU5.3

LED STAR MR16 12 V | Low-voltage LED reflector lamps MR16 with retrofit pin base



Areas of application

- Shops
- Hospitality
- Museums, art galleries
- Residential interiors
- As a downlight for marking walkways, doors, stairs, etc.
- Spotlighting for accents
- Display cabinets and shop windows
- Spotlighting heat-sensitive objects such as food, plants, etc.
- Outdoor use in suitable outdoor luminaires only

Product benefits

- Lower energy consumption than incandescent or halogen lamps
- Easy replacement of halogen lamps due to compact full glass design and single optic
- Instant 100 % light, no warm-up time
- Ideal for economical spotlighting

Product features

- LED alternative to low voltage halogen lamps
- Mercury-free lamps



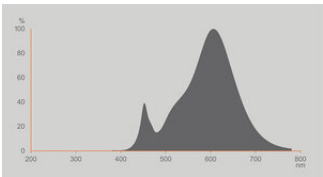
TECHNICAL DATA**Electrical data**

Nominal wattage	5.3 W
Construction wattage	5.30 W
Nominal voltage	12 V
Operating mode	12V AC/DC ¹⁾
Claimed equiv. conventional lamp power	50 W
Nominal current	650 mA
Type of current	AC/DC
Inrush current	3.28 A
Max. lamp number on MCB B10 A	10
Max. lamp number on MCB B16 A	17
Total harmonic distortion	73.6 %
Power factor λ	> 0.50

¹⁾ Check ECG compatibility at [ledvance.com/compatibility](https://www.ledvance.com/compatibility)

Photometrical data

Luminous intensity	210 cd
Luminous flux	630 lm
Nominal useful luminous flux 90°	630 lm
Luminous efficacy	118 lm/W
Lumen main.fact.at end of nom.life time	0.93
Light color (designation)	Warm White
Color temperature	2700 K
Color rendering index Ra	80
Light color	827
Standard deviation of color matching	≤6 sdc _m
Rated peak intensity	210 cd
Flickering metric (Pst LM)	1.0
Stroboscope effect metric (SVM)	0.4



LED MR16 50 GU5.3

Light technical data

Beam angle	120 °
Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s

Dimensions & Weight

Overall length	46.00 mm
Diameter	50.00 mm
Maximum diameter	50 mm
Product weight	37.00 g

Temperatures & operating conditions

Ambient temperature range	-20...+40 °C
Maximum temperature at tc test point	88 °C

Lifespan

Lifespan L70/B50 at 25 °C	15000 h
Number of switching cycles	100000
Lumen maintenance at end of service lifetime	0.93

Additional product data

Base (standard designation)	GU5.3
Mercury content	0.0 mg
Mercury-free	Yes

Design / version	Spot
Product remark	All technical parameters apply to the entire lamp / Due to the complex production process for light-emitting diodes, the typical values shown for the technical LED parameters are purely statistical values that do not necessarily match the actual technical parameters of each individual product, which can vary from the typical value

Capabilities

Dimmable	No
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Certificates & Standards

Energy efficiency class	E ¹⁾
Energy consumption	6.00 kWh/1000h
Type of protection	IP20
Standards	CE / EAC / UKCA
Photobiological safety group acc. to EN62778	RG1

¹⁾ Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowest efficiency)

Country-specific categorizations

Order reference	LSMR1650120 5,3
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LOGISTICAL DATA

Temperature range at storage	-20...+80 °C
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Energy labelling regulation data acc EU 2019/2015

Lighting technology used	LED
Non-directional or directional	NDLS
Mains or non-mains	NMLS
Light source cap-type (or other electric interface)	GU5.3
Connected light source (CLS)	No
Color-tuneable light source	No
Envelope	No
High luminance light source	No
Anti-glare shield	No
Correlated colour temperature type	SINGLE_VALUE
Standby power	0 W
Claim of equivalent power	Yes
Length	46.00 mm

Height	50.00 mm
Width	50.00 mm
Chromaticity coordinate x	0.4578
Chromaticity coordinate y	0.4101
R9 Colour rendering index	1
Beam angle correspondence	SPHERE_360
Survival factor	0.90
Displacement factor	≥ 0.5
LED light source replaces a fluorescent light source	No
EPREL ID	2176373,2363506
Model number	AC70612,AC83978

Safety advice

- Do not touch the lamp if broken.
- Must not be used if outer bulb is defective.

DOWNLOAD DATA

Documents and certificates		Document name
	Declarations of conformity	LED MR16 GU5.3
	Declarations of conformity	LED lamp
	Declarations of conformity UKCA	LED MR16 GU5.3
	Declarations of conformity UKCA	LED lamp
Photometric and lighting design files		Document name
	Spectral power distribution	LED MR16 50 GU5.3

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854458460	Folding box 1	49 mm x 49 mm x 95 mm	47.00 g	0.23 dm ³

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854458477	Shipping box 6	168 mm x 111 mm x 71 mm	357.00 g	1.32 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.

References / Links

- For further products and actual information concerning LED lamps see www.ledvance.com/ledlamps
- For Guarantee see www.ledvance.com/guarantee
- Further information see www.ledvance.com/low-voltage-ledlamps

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