PRODUCT DATASHEET
LED MR16 20 36° V 2W 840 GU5.3

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



VALUE CLASS

Areas of application

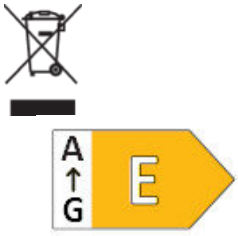
- Shops and exhibition rooms
- Domestic applications
- Commercial applications
- Accent lighting
- Outdoor use in suitable outdoor luminaires only

Product benefits

- Quick, simple and safe replacement without rewiring
- Design, dimensions, luminous flux comparable to an incandescent or halogen lamp
- Low maintenance costs thanks to long lifetime
- No UV and near-IR radiation in the light beam
- Instant 100 % light, no warm-up time
- Lower energy consumption than incandescent or halogen lamps

Product features

- LED alternative to low voltage halogen lamps
- High color consistency: ≤ 6 SDCM
- Not dimmable
- Base: GU5.3
- Lamp made of glass
- Good quality of light; color rendering index CRI ≥ 80
- Lifetime up to 15,000 h



TECHNICAL DATA

Electrical data

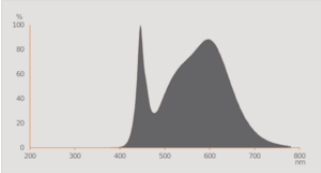
Nominal wattage	2 W
Construction wattage	2.00 W
Nominal voltage	12 V
Operating mode	12V AC/DC [1)]
Claimed equiv. conventional lamp power	20 W
Nominal current	270 mA
Type of current	AC/DC
Inrush current	4.78 A
Max. lamp number on MCB B10 A	15
Max. lamp number on MCB B16 A	23
Maximum total harmonic distortion	88 %
Power factor λ	> 0.50

1) Check ECG compatibility at ledvance.com/compatibility

Photometrical data

Luminous intensity	450 cd
Luminous flux	210 lm
Nominal useful luminous flux 90°	210 lm
Luminous efficacy	105 lm/W
Lumen main.fact.at end of nom.life time	0.93
Light color (designation)	Cool White
Color temperature	4000 K
Color rendering index Ra	80
Light color	840
Standard deviation of color matching	≤6 sdcm
Rated peak intensity	450 cd
Flickering metric (Pst LM)	1.0
Stroboscope effect metric (SVM)	0.4

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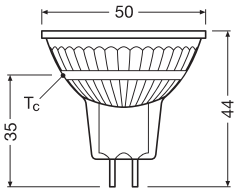


OS S8x8 4000K

Light technical data

Beam angle	36 °
Warm-up time (60 %)	‹ 0.50 s
Starting time	< 0.5 s

Dimensions & Weight



Overall length	44.00 mm
Diameter	50.00 mm
Maximum diameter	50 mm
Product weight	30.00 g

Temperatures & operating conditions

Ambient temperature range	-20…+40 °C
Maximum temperature at tc test point	57.3 °C

Lifespan

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

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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

Certificates & Standards

Energy efficiency class	E [1)]
Energy consumption	2.00 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	LED MR162036 2W

LOGISTICAL DATA

Temperature range at storage	-20…+80 °C

Energy labelling regulation data acc EU 2019/2015

Lighting technology used	LED
Non-directional or directional	DLS
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

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Standby power	0 W
Claim of equivalent power	Yes
Length	44.00 mm
Height	50.00 mm
Width	50.00 mm
Chromaticity coordinate x	0.3818
Chromaticity coordinate y	0.3797
R9 Colour rendering index	1
Beam angle correspondence	NARROW_CONE_90
Survival factor	0.90
Displacement factor	≥ 0.5
LED light source replaces a fluorescent light source	No
EPREL ID	2176408,2363522
Model number	AC70584,AC83956,AC83956

EQUIPMENT / ACCESSORIES

– Equipped with high-power LEDs

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
PDF	Declarations of conformity	LED MR16 GU5.3
PDF	Declarations of conformity	LED lamp
PDF	Declarations of conformity UKCA	LED MR16 GU5.3
PDF	Declarations of conformity UKCA	LED lamp

	Photometric and lighting design files	Document name
	Spectral power distribution	OS S8x8 4000K

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LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854457807	Folding box 1	49 mm x 49 mm x 62 mm	37.00 g	0.15 dm^3
4099854457814	Shipping box 10	255 mm x 107 mm x 72 mm	423.00 g	1.96 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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