PRODUCT DATASHEET
LED Star MR16 50 36° 6.5W 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

– Low energy consumption
– 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
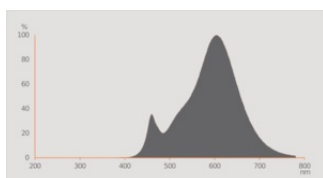– Mercury-free lamps

TECHNICAL DATA

Electrical data

Nominal wattage	6.5 W
Construction wattage	6.50 W
Nominal voltage	12 V
Operating mode	CCG, ECG [1]
Claimed equiv. conventional lamp power	50 W
Nominal current	770 mA
Type of current	AC/DC
Inrush current	11.2 A
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp no. on circuit break. 10 A (B)	22
Max. lamp no. on circuit break. 16 A (B)	36
Total harmonic distortion	< 120 %
Power factor λ	0.50

[1] Check ECG compatibility at ledvance.com/compatibility

Photometrical data

Luminous intensity	1150 cd
Luminous flux	621 lm
Nominal useful luminous flux 90°	621 lm
Luminous efficacy	95 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Warm White
Color temperature	2700 K
Color rendering index Ra	80
Light color	827
Standard deviation of color matching	≤6 sdcm
Rated peak intensity	1150 cd
Rated LLMF at 6,000 h	0.80
Flickering metric (Pst LM)	1,0
Stroboscope effect metric (SVM)	0,4

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	38.00 g

Temperatures & operating conditions

Ambient temperature range	-20...+40 °C
Maximum temperature at tc test point	102 °C

Lifespan

Lifespan L70/B50 at 25 °C	15000 h
Number of switching cycles	100000
Lumen maintenance at end of service lifetime	0.70
Rated lamp survival factor at 6,000 h	≥ 0.90

Additional product data

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

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	F [1)
Energy consumption	7.00 kWh/1000h
Type of protection	IP20
Standards	CE / UKCA / EAC
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	LEDSMR165036 6,

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
Standby power	0 W
Networked standby power for CLS	0 W
Claim of equivalent power	Yes
Length	44.00 mm

Height	50.00 mm
Width	50.00 mm
Chromaticity coordinate x	0,458
Chromaticity coordinate y	0,410
R9 Colour rendering index	1
Beam angle correspondence	NARROW_CONE_90
Survival factor	0.9
Displacement factor	0.00
LED light source replaces a fluorescent light source	No
EPREL ID	1368234
Model number	AC45629

DOWNLOAD DATA

	Documents and certificates
PDF	Declarations Of Conformity CE

	Photometric and lighting design files
	Spectral power distribution

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854115356	Folding box 2	51 mm x 102 mm x 95 mm	91.00 g	0.49 dm³
4099854115363	Shipping box 6	174 mm x 115 mm x 74 mm	367.00 g	1.48 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.

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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