

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

- 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

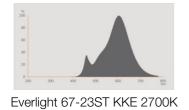
Electrical data

Nominal wattage	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 number on MCB B10 A	24
Max. lamp number on MCB B16 A	30
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)	0.2
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	87.3 °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

	All technical parameters apply to the entire lamp / Due to the complex
	production process for light-emitting diodes, the typical values shown
Product remark	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	/
LED light source replaces a fluorescent light source	No
EPREL ID	1403205,523010,1368234
Model number	AC32715,AC45629,AC24594

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	MR16 M3 M2 M1 GU5.3	
		2	
	Photometric and lighting design files	Document name	
	IES file (IES)	MR16 M3 50 36 2700K GU5.3	
	LDT file (Eulumdat)	MR16 M3 50 36 2700K GU5.3	
	Light distribution curve type polar	MR16 M3 50 36 2700K GU5.3	
1	Spectral power distribution	Everlight 67-23ST KKE 2700K	

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075433762	Folding box 1	49 mm x 49 mm x 95 mm	48.00 g	0.23 dm ³
4058075617384	Shipping box 6	168 mm x 111 mm x 71 mm	320.00 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

DISCLAIMER

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.