

# 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 <sup>1)</sup>
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)	24
Max. lamp no. on circuit break. 16 A (B)	30
Total harmonic distortion	< 120 %
Power factor $\lambda$	0.50

 $<sup>1) \ \</sup>mathsf{Check} \ \mathsf{ECG} \ \mathsf{compatibility} \ \mathsf{at} \ \mathsf{ledvance}.\mathsf{com/compatibility}$ 

# Photometrical data

Luminaus intensity	1150 cd
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

Product remark	All technical parameters apply to the entire lamp / Due to the corproduction process for light-emitting diodes, the typical values shor the technical LED parameters are purely statistical values that 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	
Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (local country-specific categorizations		
	owest efficiency)	
	LEDSMR165036 6,	
Country-specific categorizations		
Country-specific categorizations  Order reference		
Country-specific categorizations  Order reference  COGISTICAL DATA	LEDSMR165036 6,	
Order reference  OGISTICAL DATA  Temperature range at storage	LEDSMR165036 6,	
Country-specific categorizations  Order reference  COGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015	LEDSMR165036 6, -20+80 °C	
Country-specific categorizations  Order reference  COGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used	LEDSMR165036 6,  -20+80 °C	
Country-specific categorizations Order reference  COGISTICAL DATA Temperature range at storage Energy labelling regulation data acc EU 2019/2015 Lighting technology used Non-directional or directional	LEDSMR165036 6,  -20+80 °C  LED  DLS	
Country-specific categorizations  Order reference  COGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains	LEDSMR165036 6,  -20+80 °C  LED  DLS  NMLS	
Country-specific categorizations  Order reference  COGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)	LEDSMR165036 6,  -20+80 °C  LED  DLS  NMLS  GU5.3	
Country-specific categorizations  Order reference  COGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)	LEDSMR165036 6,  -20+80 °C  LED  DLS  NMLS  GU5.3  No	
Country-specific categorizations  Order reference  COGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)  Color-tuneable light source	LEDSMR165036 6,  -20+80 °C  LED  DLS  NMLS  GU5.3  No  No	
Country-specific categorizations  Order reference  COGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)  Color-tuneable light source  Envelope	LEDSMR165036 6,  -20+80 °C  LED  DLS  NMLS  GU5.3  No  No  No	
Country-specific categorizations  Order reference  COGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)  Color-tuneable light source  Envelope  High luminance light source	LEDSMR165036 6,  -20+80 °C  LED  DLS  NMLS  GU5.3  No  No  No  No	
Country-specific categorizations  Order reference  COGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)  Color-tuneable light source  Envelope  High luminance light source  Anti-glare shield	LEDSMR165036 6,  -20+80 °C  LED  DLS  NMLS  GU5.3  No  No  No  No  No  No	

Yes

44.00 mm

Claim of equivalent power

Length

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	

#### **DOWNLOAD DATA**

	Documents and certificates
PDF	Declarations Of Conformity CE
	Photometric and lighting design files

# IES file (IES)





#### **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 <sup>3</sup>
4058075617384	Shipping box 6	168 mm x 111 mm x 71 mm	320.00 g	1.32 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

#### **DISCLAIMER**

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