

## PRODUCT DATASHEET

### P MR16 20 36 ° DIM 4.5 W/4000 K GU5.3

PARATHOM® PRO MR16 | Dimmable low-voltage LED reflector lamps MR16 with retrofit pin base



#### 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
- Stepless dimming
- Very high dimmer compatibility, see also [www.ledvance.com/dim](http://www.ledvance.com/dim)
- Compatible with many common conventional and electronic control gears (see also compatibility list)
- 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:  $\leq 3$  SDCM
- Dimmable
- Base: GU5.3



- Lamp made of glass
- Excellent color rendering CRI > 97
- Lifetime up to 40,000 h

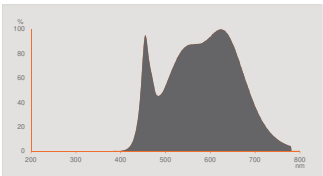
TECHNICAL DATA

Electrical data

Nominal wattage	4.5 W
Construction wattage	4.50 W
Nominal voltage	12 V
Claimed equiv. conventional lamp power	20 W
Nominal current	620 mA
Type of current	AC/DC
Operating frequency	50...60 Hz
Mains frequency	50...60 Hz
Power factor $\lambda$	> 0.50

Photometrical data

Luminous intensity	600 cd
Luminous flux	230 lm
Nominal useful luminous flux 90°	230 lm
Luminous efficacy	51 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool White
Color temperature	4000 K
Color rendering index Ra	97
Light color	940
Standard deviation of color matching	≤3 sdc <sub>m</sub>
Rated peak intensity	600 cd
Rated LLMF at 6,000 h	0.80



OS GW P9LR33.CM 8 C 4000K

Light technical data

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

### Dimensions & Weight

Overall length	46.00 mm
Diameter	51.00 mm
Maximum diameter	51 mm
Product weight	38.00 g

### Temperatures & operating conditions

Ambient temperature range	-20...+40 °C
Maximum temperature at tc test point	80 °C

### Lifespan

Number of switching cycles	1000000
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	Yes
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### Certificates & Standards

Energy efficiency class	A <sup>1)</sup>
Energy consumption	5.00 kWh/1000h
Type of protection	IP20
Standards	CE / EAC

<sup>1)</sup> Energy efficiency class (EEC) on a scale of A++ (highest efficiency) to E (lowest efficiency)







## Country-specific categorizations

Order reference	LPMR16D2036 4,5
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## Energy labelling regulation data acc EU 2019/2015

Light source cap-type (or other electric interface)	GU5.3
Length	46.00 mm
Height	51.00 mm
Width	51.00 mm

## DOWNLOAD DATA

Photometric and lighting design files	Document name
 IES file (IES)	AC07563_MR16 20 4,5W 12V GU5
 LDT file (Eulumdat)	AC07563_MR16 20 4,5W 12V GU5
 UGR file (UGR table)	LPMR16D2036 4,5W 940 12V GU5.3 FS1 OSRAM
 Light distribution curve type cone	LPMR16D2036 4,5W 940 12V GU5.3 FS1 OSRAM
 Light distribution curve type polar	LPMR16D2036 4,5W 940 12V GU5.3 FS1 OSRAM
 Spectral power distribution	OS GW P9LR33.CM 8 C 4000K

## LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075095625	Folding box 1	49 mm x 49 mm x 62 mm	45.00 g	0.15 dm <sup>3</sup>
4058075095632	Shipping box 10	257 mm x 110 mm x 70 mm	498.00 g	1.98 dm <sup>3</sup>

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 dimming conformity see [www.ledvance.com/dim](http://www.ledvance.com/dim)
- For further products and actual information concerning LED lamps see [www.ledvance.com/ledlamps](http://www.ledvance.com/ledlamps)
- For Guarantee see [www.ledvance.com/guarantee](http://www.ledvance.com/guarantee)
- Further information see [www.ledvance.com/low-voltage-ledlamps](http://www.ledvance.com/low-voltage-ledlamps)

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