# PRODUCT DATASHEET P PIN 20 1.8 W/2700 K G4

# PARATHOM® LED PIN 12V | Low-voltage 12 V LED lamps with retrofit pin base



#### Areas of application

- Decorative applications
- Atmospheric accent lighting throughout the home
- Shops, hotels and restaurants
- Outdoor applications only in suitable luminaires

#### **Product benefits**

- Variable use at Direct Current and Alternating Current
- Good all-around light emission
- Ideal for decorative and free-burning applications
- Long lifetime of up to 15,000 h
- Four year guarantee

#### **Product features**

- Compatible with many common conventional and electronic control gears (see also compatibility list)
- LED alternative to low voltage halogen lamps
- Base: G4, GY6.35



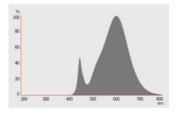
# **TECHNICAL DATA**

#### **Electrical data**

Nominal wattage	1.8 W
Construction wattage	1.80 W
Nominal voltage	12 V
Claimed equiv. conventional lamp power	20 W
Nominal current	230 mA
Type of current	AC/DC
Inrush current	17.7 A
Max. lamp no. on circuit break. 10 A (B)	33
Max. lamp no. on circuit break. 16 A (B)	42
Total harmonic distortion	< 120 %
Power factor $\lambda$	> 0.50

# Photometrical data

Luminous flux	200 lm
Nominal useful luminous flux 90°	200 lm
Luminous efficacy	111 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Warm White
Color temperature	2700 К
Color rendering index Ra	≥80
Light color	827
Standard deviation of color matching	≤6 sdcm
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	320 °
Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s
Rated beam angle (half peak value)	320.00 °

#### **Dimensions & Weight**

Overall length	36.00 mm
Diameter	13.00 mm
Maximum diameter	13 mm
Product weight	3.00 g

# Temperatures & operating conditions

Ambient temperature range	-20+40 °C
Maximum temperature at tc test point	77 °C

# Lifespan

Nominal lamp life time	15000 h
Number of switching cycles	100000
Lumen maintenance at end of serv	0.70
Rated lamp survival factor at 6,000	≥ 0.90

# Additional product data

Base (standard designation)	G4
Mercury content	0.0 mg
Design / version	Clear

# Capabilities

Dimmable	No
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# Certificates & Standards

Energy efficiency class	F <sup>1)</sup>
Energy consumption	2.00 kWh/1000h
Type of protection	IP20
Standards	CE / 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 LEDPPIN20 CL 1,
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#### LOGISTICAL DATA

Temperature range at storage	-20+80 °C
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# Energy labellling regulation data acc EU 2019/2015

Lighting technology used	LED
Non-directional or directional	NDLS
Mains or non-mains	NMLS
Light source cap-type (or other electric interface)	G4
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	0.00
Claim of equivalent power	Yes
Length	36.00 mm
Height	13.00 mm
Width	13.00 mm
Chromaticity coordinate x	0.458
Chromaticity coordinate y	0.410
Beam angle	SPHERE_360