

# **PRODUCT DATASHEET** HQL LED 2000 lm 15 W/4000K E27

# HQL LED PRO | LED replacement for HID lamps for outdoor application



## **AREAS OF APPLICATION**

- Streets
- Area lighting
- Pedestrian zones
- Parks
- Outdoor applications only in suitable luminaires

# PRODUCT BENEFITS

- Saves up to 78 % energy when used as replacement for mercury vapor lamps (HQL)
- Low maintenance costs thanks to long lifetime
- Instant 100 % light, no warm-up time

#### **PRODUCT FEATURES**

- Replacement for HQL: Suitable for operation with conventional control gear (CCG) for HQL or 230 V mains
- Replacement for other HID: Suitable for operation with line voltage without control gear
- Power factor: 0.9
- Type of protection: IP65
- High surge protection: up to 4 kV (L-N)



# **TECHNICAL DATA**

## Electrical data

Rated wattage	15.00 W
Nominal wattage	15.00 W
Nominal voltage	220240 V
Max. lamp no. on circuit break. 10 A (B)	94
Max. lamp no. on circuit break. 16 A (B)	150
Operating frequency	50/60 Hz
Inrush current	10 A
Power factor λ	> 0.90

#### Photometrical data

Nominal luminous flux	2000 lm
Rated luminous flux	2000 lm
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool White
Color temperature	4000 K
Luminous flux	2000 lm
Color rendering index Ra	≥80
Standard deviation of color matching	≤6 sdcm
Rated color temperature	4000 K
Color rendering index Ra	≥80

Warm-up time (60 %)	< 0.50 s
Beam angle	360 °
Starting time	< 0.5 s

# Dimensions & weight





#### PRODUCT DATASHEET

Overall length	135.0 mm
Diameter	56.0 mm
Outer bulb	-
Length	135.0 mm

#### Temperatures & operating conditions

Ambient temperature range	-20+60 °C
Maximum temperature at tc test point	105 °C

#### Lifespan

Nominal lamp life time	50000 h
Rated lamp life time	50000 h
Number of switching cycles	100000
Lumen maintenance at end of service life	0.70

#### Additional product data

Base (standard designation)	E27
Mercury content	0.0 mg
Mercury-free	Yes
Design / version	frosted
Show WEEE picto	Yes

#### Capabilities

#### Certificates & standards

Energy efficiency class	A++
Energy consumption	15 kWh/1000h

#### Country-specific categorizations

Order reference	HQLLED2000 15W/
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#### SAFETY ADVICE

The bulb may be larger and heavier than the replaced bulb. Before installation it must be checked, if the luminaire and especially the holder is capable of carrying the weight of the lamp. If possible, please install the safety rope included in the package containing the lamp for the types 46 W and 95 W.

Not suitable for operation with ignitors

Operation on the capacitor can lead to a reduction of the power factor of the system.

When installed horizontally, the  $t_c$  point of the lamp is located on the top side of the lamp.

Use in tight luminaires and luminaires with tight reflectors not recommended.

# LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075453869	Folding carton box 1	87 mm x 87 mm x 168 mm	260.00 g	1.27 dm³
4058075453876	Shipping carton box 6	275 mm x 190 mm x 185 mm	1732.00 g	9.67 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.

#### DISCLAIMER

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