

# PRODUCT DATASHEET

## HQL LED 6000 lm 46 W/4000K E40

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



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### AREAS OF APPLICATION

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

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### 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

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### 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	46.00 W
Nominal wattage	46.00 W
Nominal voltage	220...240 V
Max. lamp no. on circuit break. 10 A (B)	23
Max. lamp no. on circuit break. B10 A - CCG without compensation	23
Max. lamp no. on circuit break. B16 A - CCG without compensation	36
Max. lamp no. on circuit break. 16 A (B)	36
Operating frequency	50/60 Hz
Inrush current	3.60 A
Power factor $\lambda$	0.90

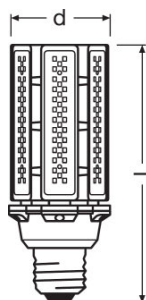
### Photometrical data

Nominal luminous flux	6000 lm
Rated luminous flux	6000 lm
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool White
Color temperature	4000 K
Luminous flux	6000 lm
Color rendering index Ra	$\geq 80$
Standard deviation of color matching	$\leq 6$ sdc <sub>m</sub>
Rated color temperature	4000 K
Color rendering index Ra	$\geq 80$

### Light technical data

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

## Dimensions & weight



<b>Overall length</b>	204.0 mm
<b>Diameter</b>	80.0 mm
<b>Outer bulb</b>	-
<b>Length</b>	204.0 mm

## Temperatures & operating conditions

<b>Ambient temperature range</b>	-20...+50 °C
<b>Maximum temperature at tc test point</b>	89 °C

## Lifespan

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

## Additional product data

<b>Base (standard designation)</b>	E40
<b>Mercury content</b>	0.0 mg
<b>Mercury-free</b>	Yes
<b>Design / version</b>	clear
<b>Show WEEE picto</b>	Yes

## Capabilities

<b>Dimmable</b>	No
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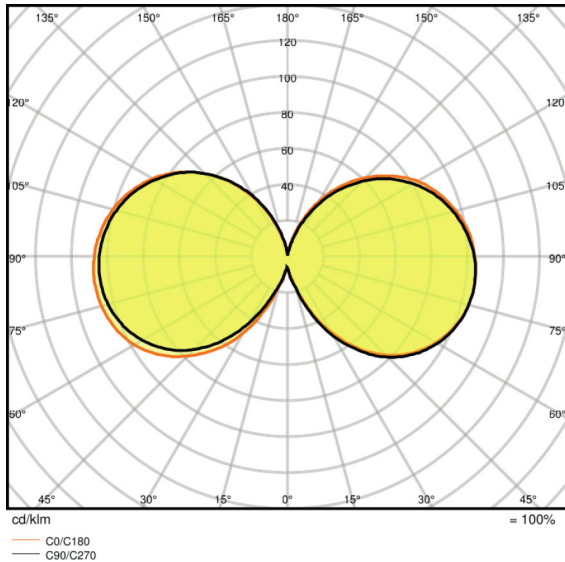
## Certificates & standards

<b>Photobiological safety group EN62778</b>	RG1
<b>Energy efficiency class</b>	A++
<b>Energy consumption</b>	46 kWh/1000h

Country-specific categorizations

<b>Order reference</b>	HQLLED6000 46W/
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Light Distribution



— LDC typ polar

**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
4058075124943	Folding carton box 1	87 mm x 87 mm x 231 mm	763.00 g	1.75 dm <sup>3</sup>
4058075124950	Shipping carton box 6	270 mm x 185 mm x 256 mm	4866.00 g	12.79 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.

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**DISCLAIMER**

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