

# PRODUCT DATASHEET HQL LED 4000 lm 29 W/4000 K 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 6 kV (L-N)



## **TECHNICAL DATA**

## **Electrical data**

Nominal wattage	29 W
Construction wattage	29.00 W
Nominal voltage	220240 V
Claimed equiv. conventional lamp power	80 W
Nominal current	140 mA
Type of current	AC
Inrush current	10 A
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp no. on circuit break. 10 A (B)	48
Max. lamp no. on circuit break. B10 A - CCG without compensation	40
Max. lamp no. on circuit break. B10 A - CCG with compensation	40
Max. lamp no. on circuit break. 16 A (B)	76
Max. lamp no. on circuit break. B16 A - CCG without compensation	64
Max. lamp no. on circuit break. B16 A - CCG with compensation	64
Total harmonic distortion	< 25 %
Power factor $\lambda$	> 0.90

## Photometrical data

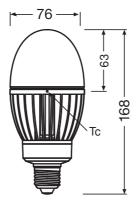
Luminous flux	4000 lm
Nominal useful luminous flux 90°	4000 lm
Luminous efficacy	137 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool White
Color temperature	4000 K
Color rendering index Ra	≥80
Light color	840
Standard deviation of color matching	≤6 sdcm
Rated LLMF at 6,000 h	0.80

## Light technical data

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

Starting time	< 0.5 s
Rated beam angle (half peak value)	360.00 °

## **Dimensions & Weight**



Overall length	168.00 mm
Diameter	76 mm
Maximum diameter	76 mm
Product weight	380.00 g

## Temperatures & operating conditions

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

## Lifespan

Lifespan	50000 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)	E27
Mercury content	0.0 mg
Mercury-free	Yes
Design / version	Frosted

## Capabilities

Dimmable	No

## **Certificates & Standards**

Energy efficiency class	D <sup>1)</sup>
Energy consumption	29.00 kWh/1000h
Type of protection	IP65
Standards	CE / EAC
Photobiological safety group acc. to EN62778	RG1

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

## **Country-specific categorizations**

Order reference	HQLLED4000 29W/
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## Energy labelling regulation data acc EU 2019/2015

Light source cap-type (or other electric interface)	E27
Length	168.00 mm
Height	76 mm
Width	76 mm

#### 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 90 W lamps.

- 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  $_{\rm c}$  point of the lamp is located on the top side of the lamp.
- Use in tight luminaires and luminaires with tight reflectors not recommended.

## DOWNLOAD DATA

	DOWNLOAD DATA
PDF	User instruction
PDF	Declarations of conformity
1	IES file (IES)

## DOWNLOAD DATA

LDT file (Eulumdat)

## LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075453944	Folding box 1	107 mm x 107 mm x 203 mm	446.00 g	2.32 dm <sup>3</sup>
4058075453951	Shipping box 6	335 mm x 230 mm x 220 mm	3290.00 g	16.95 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.