

PRODUCT DATASHEET

HQL LED 3000 lm 22 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	22 W
Construction wattage	22.00 W
Nominal voltage	220...240 V
Operating mode	AC, Conventional control gear (CCG)
Claimed equiv. conventional lamp power	80 W
Nominal current	120 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)	66
Max. lamp no. on circuit break. B10 A - CCG without compensation	55
Max. lamp no. on circuit break. B10 A - CCG with compensation	55
Max. lamp no. on circuit break. 16 A (B)	105
Max. lamp no. on circuit break. B16 A - CCG without compensation	88
Max. lamp no. on circuit break. B16 A - CCG with compensation	88
Total harmonic distortion	< 25 %
Power factor λ	> 0.90

Photometrical data

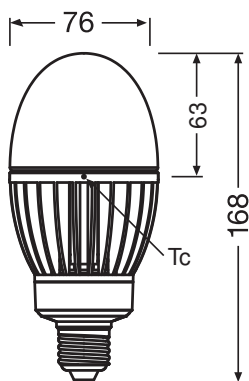
Luminous flux	3000 lm
Nominal useful luminous flux 90°	3000 lm
Luminous efficacy	136 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool White
Color temperature	4000 K
Color rendering index Ra	≥80
Light color	840
Standard deviation of color matching	≤6 sdcM
Rated LLMF at 6,000 h	0.80

Light technical data

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

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

Number of switching cycles	100000
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)	E27
Mercury content	0.0 mg
Mercury-free	Yes
Design / version	Frosted

Capabilities

Dimmable	No
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Certificates & Standards

Energy efficiency class	D ¹⁾
Energy consumption	22.00 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	HQLLED3000 22W/
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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_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

Documents and certificates	
	User instruction
	Declarations Of Conformity CE
Photometric and lighting design files	
	IES file (IES)

Photometric and lighting design files



LDT file (Eulumdat)



LDC typ polar

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075453906	Folding box 1	107 mm x 107 mm x 203 mm	446.00 g	2.32 dm ³
4058075453913	Shipping box 6	335 mm x 230 mm x 220 mm	3277.00 g	16.95 dm ³

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.