

# PRODUCT DATASHEET

## HQL HIGHBAY 400 120 ° 140 W/4000 K E40

HQL LED HIGHBAY | LED replacement for HID lamps for high-bay luminaires



### Areas of application

- LED alternative for applications requiring a high luminous flux
- Industrial and storage facilities
- Outdoor applications only in suitable luminaires

### Product benefits

- Energy savings of up to 65 % when replacing mercury vapor lamps (HQL)
- Effective thermal management for wide operating temperature range
- 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: IP40
- High surge protection: up to 4 kV (L-N)



## TECHNICAL DATA

### Electrical data

Nominal wattage	140 W
Construction wattage	140.00 W
Nominal voltage	220...240 V
Claimed equiv. conventional lamp power	400 W
Nominal current	800 mA
Type of current	AC
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp no. on circuit break. 10 A (B)	6
Max. lamp no. on circuit break. B10 A - CCG without compensation	6
Max. lamp no. on circuit break. B10 A - CCG with compensation	3
Max. lamp no. on circuit break. 16 A (B)	10
Max. lamp no. on circuit break. B16 A - CCG without compensation	10
Max. lamp no. on circuit break. B16 A - CCG with compensation	5
Power factor $\lambda$	> 0.90

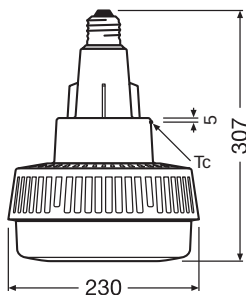
### Photometrical data

Luminous flux	20000 lm
Luminous efficacy	142 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	$\geq 80$
Light color	840
Standard deviation of color matching	$\leq 6$ sdc <sub>m</sub>
Rated LLMF at 6,000 h	0.80

### Light technical data

Beam angle	120 °
Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s
Rated beam angle (half peak value)	120.00 °

### Dimensions & Weight



Overall length	310.00 mm
Diameter	230 mm
Maximum diameter	230 mm
Product weight	1260.00 g

### Temperatures & operating conditions

Ambient temperature range	-20...+50 °C
Maximum temperature at tc test point	69.2 °C

### Lifespan

Nominal lamp life time	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)	E40
Mercury content	0.0 mg
Mercury-free	Yes

### Capabilities

Dimmable	No
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### Certificates & Standards

Energy efficiency class	A++ 1)
Energy consumption	140.00 kWh/1000h
Type of protection	IP40
Standards	CE

Photobiological safety group acc. to EN62778	RG1
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1) Energy efficiency class (EEC) on a scale of A++ (highest efficiency) to E (lowest efficiency)

### Country-specific categorizations

Order reference	HQLEDHB20000 14
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### LOGISTICAL DATA

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

Light source cap-type (or other electric interface)	E40
Length	310.00 mm
Height	230 mm
Width	230 mm





### EQUIPMENT / ACCESSORIES

- Safety sling for lamp included

### 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. Safety sling has to be installed.
- Only suitable for temperatures of up to 50°C inside of the luminaire.
- Not suitable for operation with ignitors
- Operation on the capacitor can lead to a reduction of the power factor of the system.
- To ensure full light efficiency and product lifetime, it is recommended to detach any glass or cover of the luminaire.

### DOWNLOAD DATA

DOWNLOAD DATA	
	User instruction HQL LED Highbay
	PRODUCT DATASHEET HQL HIGHBAY 400 120 140 W 4000K E40 DATASHEET
	IES file (IES) AC12531_HQLEDHB20000 140W 230V E40
	LDT file (Eulumdat) AC12531_HQLEDHB20000 140W 230V E40

**LOGISTICAL DATA**

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075135888	Folding box 1	247 mm x 247 mm x 333 mm	1481.00 g	20.32 dm <sup>3</sup>
4058075135895	Shipping box 4	515 mm x 515 mm x 355 mm	8060.00 g	94.15 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.

**DISCLAIMER**

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