

# PRODUCT DATASHEET HQL LED FIL V 4000LM 24W 840 E27

HQL LED FIL V | LED replacement for HQL lamps in design-oriented outdoor applications



#### Areas of application

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

#### **Product benefits**

- Same design as traditional HQL lamps with frosted, ellipsoid full glass bulb
- Full use of reflector of existing luminaire thanks to 360 degree beam angle
- Saves up to 78 % energy when used as replacement for mercury vapor lamps (HQL)
- 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
- Surge protection: up to 2 kV (L-N)





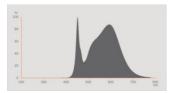
## **TECHNICAL DATA**

## **Electrical data**

Nominal wattage	24 W
Construction wattage	24.00 W
Nominal voltage	220240 V
Claimed equiv. conventional lamp power	80 W
Nominal current	105 mA
Type of current	AC
Inrush current	9.1 A
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp no. on circuit break. 10 A (B)	3
Max. lamp no. on circuit break. B10 A - CCG without compensation	3
Max. lamp no. on circuit break. B10 A - CCG with compensation	6
Max. lamp no. on circuit break. 16 A (B)	5
Max. lamp no. on circuit break. B16 A - CCG without compensation	5
Max. lamp no. on circuit break. B16 A - CCG with compensation	9
Total harmonic distortion	19 %
Power factor $\lambda$	> 0.90

# Photometrical data

Luminous intensity	N/A
Luminous flux	4000 lm
Nominal useful luminous flux 90°	4000 lm
Luminous efficacy	166 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
Flickering metric (Pst LM)	1
Stroboscope effect metric (SVM)	0,4



# 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	217.00 mm
Diameter	90.00 mm
Maximum diameter	90 mm
Product weight	210.00 g

## Temperatures & operating conditions

Ambient temperature range	-20+50 °C
Maximum temperature at tc test point	80 °C

# Lifespan

Lifespan	25000 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

	PRODUCT DATASHEET
Mercury-free	Yes
Product remark	Available from June 2023
Capabilities	
Dimmable	No
Certificates & Standards	
Certificates & Standards	
Energy efficiency class	C <sup>1)</sup>
Energy consumption	24.00 kWh/1000h
Type of protection	IP65
Standards	CE / EAC / UKCA
Photobiological safety group acc. to EN62778	RG1
1)-	
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (li	owest efficiency)
Country-specific categorizations	
Order reference	HQL LED FIL V 4

LOGISTICAL DATA	
Temperature range at storage	-20+80 °C

# Energy labelling regulation data acc EU 2019/2015

Lighting technology used	LED
Non-directional or directional	NDLS
Mains or non-mains	MLS
Light source cap-type (or other electric interface)	E27
Connected light source (CLS)	No
Color-tuneable light source	No
Envelope	No
High luminance light source	No
Anti-glare shield	No
Correlated colour temperature type	SINGLE_VALUE
Standby power	N/A
Networked standby power for CLS	N/A
Claim of equivalent power	No
Length	217.00 mm
Height	90.00 mm
Width	90.00 mm

Chromaticity coordinate x	0,38
Chromaticity coordinate y	0,38
R9 Colour rendering index	>0
Beam angle correspondence	SPHERE_360
Survival factor	0,9
Displacement factor	0.9
LED light source replaces a fluorescent light source	No
EPREL ID	1371166
Model number	AC46353

## Safety advice

- 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<sub>c</sub> point of the lamp is located on the top side of the lamp.
- Use in tight luminaires and luminaires with tight reflectors not recommended.
- Only suitable for temperatures of up to 50°C inside of the luminaire. Use in tight luminaires and luminaires with tight reflectors not recommended.

#### **DOWNLOAD DATA**

	Documents and certificates
PDF	User instruction
POF	Declarations Of Conformity CE
	Photometric and lighting design files
	IES file (IES)
	LDT file (Eulumdat)
	UGR file (UGR table)
	LDC typ polar
	Spectral power distribution

#### **LOGISTICAL DATA**

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854071836	Folding box 1	112 mm x 112 mm x 248 mm	294.00 g	3.11 dm <sup>3</sup>
4099854071843	Shipping box 6	356 mm x 242 mm x 278 mm	2195.00 g	23.95 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.