# PRODUCT DATASHEET
# HQL LED FILAMENT V 5400LM 38W 827 E40

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




VALUE CLASS

### 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)







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## TECHNICAL DATA

### Electrical data

| | |
|---|---|
| Nominal wattage | 38 W |
| Construction wattage | 38.00 W |
| Nominal voltage | 220…240 V |
| Operating mode | CCG, AC Mains |
| Claimed equiv. conventional lamp power | 125 W |
| Nominal current | 160 mA |
| Type of current | AC |
| Inrush current | 7.3 A |
| Operating frequency | 50/60 Hz |
| Mains frequency | 50/60 Hz |
| Max. lamp no. on circuit break. 10 A (B) | 4 |
| Max. lamp no. on circuit break. B10 A - CCG without compensation | 5 |
| Max. lamp no. on circuit break. B10 A - CCG with compensation | 9 |
| Max. lamp no. on circuit break. 16 A (B) | 6 |
| Max. lamp no. on circuit break. B16 A - CCG without compensation | 8 |
| Max. lamp no. on circuit break. B16 A - CCG with compensation | 15 |
| Total harmonic distortion | 10 % |
| Power factor λ | > 0.90 |

### Photometrical data

| | |
|---|---|
| Luminous intensity | Not relevant |
| Luminous flux | 5400 lm |
| Nominal useful luminous flux 90° | 5400 lm |
| Luminous efficacy | 142 lm/W |
| Lumen main.fact.at end of nom.life time | 0.70 |
| Light color (designation) | Warm White |
| Color temperature | 2700 K |
| Color rendering index Ra | 80 |
| Light color | 827 |
| 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 |


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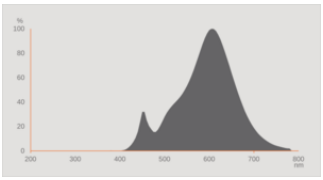

## Light technical data

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

## Dimensions & Weight



| | |
|---|---|
| Overall length | 202.00 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 L70/B50 at 25 °C | 25000 h |
| 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) | E40 |
| Mercury content | 0.0 mg |


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| | |
|---|---|
| Mercury-free | Yes |

## Capabilities

| | |
|---|---|
| Dimmable | No |

## Certificates & Standards

| | |
|---|---|
| Energy efficiency class | D [1)] |
| Energy consumption | 38.00 kWh/1000h |
| Type of protection | IP65 |
| Standards | CE / EAC / UKCA |
| Photobiological safety group acc. to EN62778 | RG1 |

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

## Country-specific categorizations

| | |
|---|---|
| Order reference | HQL LED FIL V 5 |

## 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) | E40 |
| 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 |
| Claim of equivalent power | No |
| Length | 202.00 mm |
| Height | 90.00 mm |
| Width | 90.00 mm |
| Chromaticity coordinate x | 0,463 |
| Chromaticity coordinate y | 0,42 |
| R9 Colour rendering index | 0.00 |


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| | |
|---|---|
| Beam angle correspondence | SPHERE_360 |
| Survival factor | 0.9 |
| Displacement factor | 0.9 |
| LED light source replaces a fluorescent light source | No |
| EPREL ID | 1371168 |
| Model number | AC46356,AC46356 |

## 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 $t_c$ point of the lamp is located on the top side of the lamp.
- Use in tight luminaires and luminaires with tight reflectors not recommended.
- 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 |
| PDF | Declarations Of Conformity CE |
| PDF | Declarations Of Conformity UKCA |

| | Photometric and lighting design files |
|---|---|
| IES | IES file (IES) |
| LDT | LDT file (Eulumdat) |
| | UGR file (UGR table) |
| | LDC typ polar |
| | Spectral power distribution |

## LOGISTICAL DATA


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| Product code | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume |
|---|---|---|---|---|
| 4099854071898 | Folding box<br>1 | 112 mm x 112 mm x 233 mm | 291.00 g | 2.92 $dm^3$ |
| 4099854071904 | Shipping box<br>6 | 356 mm x 242 mm x 263 mm | 2163.00 g | 22.66 $dm^3$ |

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

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