

# PRODUCT DATASHEET HQL LED 12000 lm 70 W/4000 K E40

HQL LED HE | Super high luminous efficacy LED replacement for HID lamps



#### Areas of application

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

#### Product benefits

- Saves up to 72 % 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 100-240V 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 4 kV (L-N)



# TECHNICAL DATA

# Electrical data

| Nominal wattage                        | 70 W                                      |
|--|---|
| Construction wattage                   | 70.00 W                                   |
| Nominal voltage                        | 100240 V                                  |
| Operating mode                         | AC Mains, Conventional control gear (CCG) |
| Claimed equiv. conventional lamp power | 250 W                                     |
| Nominal current                        | 750 mA                                    |
| Type of current                        | AC  |
| Operating frequency                    | 50/60 Hz                                  |
| Mains frequency                        | 50/60 Hz                                  |
| Total harmonic distortion              | < 20 %                                    |
| Power factor λ                         | 0.90                                      |

# Photometrical data

| Luminous flux                    | 12000 lm   |
|----------------------------------|------------|
| Nominal useful luminous flux 90° | 12000 lm   |
| Luminous efficacy                | 171 lm/W   |
| Light color (designation)        | Cool White |
| Color temperature                | 4000 K     |
| Color rendering index Ra         | ≥80        |
| Light color                      | 840        |

# Light technical data

| Beam angle          | 280 °    |
|---------------------|----------|
| Warm-up time (60 %) | < 0.50 s |
| Starting time       | < 0.5 s  |

# Dimensions & Weight

| Overall length   | 270.00 mm |
|------------------|-----------|
| Diameter         | 110.00 mm |
| Maximum diameter | 110 mm    |
| Product weight   | 1400.00 g |

# Temperatures & operating conditions

| Ambient temperature range | -20+50 °C |
|---------------------------|-----------|
|---------------------------|-----------|

#### Lifespan

| Number of switching cycles | 100000 |
|----------------------------|--------|
| Additional product data    |        |

#### Additional product data

| Base (standard designation) | E40    |
|-----------------------------|--------|
| Mercury content             | 0.0 mg |

# Capabilities

#### Certificates & Standards

| Type of protection                           | IP65 |
|--|------|
| Standards                                    | СВ   |
| Photobiological safety group acc. to EN62778 | RG1  |

# Country-specific categorizations

| Order reference | HQLLED 70W/840 |
|-----------------|----------------|
|                 |                |

# Energy labelling regulation data acc EU 2019/2015

| Light source cap-type (or other electric interface) | E40       |
|---|-----------|
| Length  | 270.00 mm |
| Height  | 110.00 mm |
| Width   | 110.00 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 37W E40 and 70W E40.
- 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  $t_{\text{C}}$  point of the lamp is located on the top side of the lamp.
- Use in tight luminaires and luminaires with tight reflectors not recommended.

# LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume                |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4058075724723 | Folding box<br>1             | 117 mm x 117 mm x 301 mm             | 1518.00 g    | 4.12 dm <sup>3</sup>  |
| 4058075724730 | Shipping box<br>6            | 360 mm x 245 mm x 326 mm             | 9526.00 g    | 28.75 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.