# PRODUCT DATASHEET
# LED TUBE T8 HF PERFORMANCE 1200 mm 14W 840

LED TUBE T8 HF PERFORMANCE | LED tubes for electronic high frequency control gear (ECG), shatterproof


PERFOR-
MANCE
CLASS

## Areas of application

- General illumination within ambient temperatures from -20…+45 °C
- Illumination of production areas
- Traffic zones and corridors
- Supermarkets and department stores
- Industry

## Product benefits

- No bending thanks to glass tube
- Shatter protection thanks to special PET coating
- Very high resistance to switching loads
- Quick, simple and safe replacement without rewiring
- Energy savings of up to 66 % (compared to T8 fluorescent lamp)
- Also suitable for operation at low temperatures

## Product features

- LED replacement for classic T8 fluorescent lamps with G13 socket for use in ECG luminaires
- Compatible with many common electronic control gears (see also compatibility list)
- Low flicker according to EU 2019-2020 (SVM ≤ 0.4 / PstLM ≤ 1)
- Lamp tube made of glass with splinter protection
- For especially uniform illumination

- Mercury-free and RoHS compliant
- Type of protection: IP20
- Lifetime up to 75,000 h

## TECHNICAL DATA

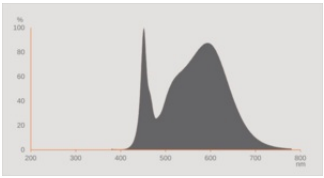
### Electrical data

| | |
|---|---|
| Nominal wattage | 14 W |
| Construction wattage | 14.00 W |
| Nominal voltage | 40…65 V |
| Operating mode | ECG [1)] |
| Nominal current | 350 mA |
| Type of current | AC |
| Inrush current | 15 A |
| Operating frequency | 35…75 kHz |
| Mains frequency | 35…75 kHz |
| Max. lamp number on MCB B10 A | 17 |
| Max. lamp number on MCB B16 A | 28 |
| Total harmonic distortion | < 10 % |
| Power factor λ | 0.90 |

1) Check ECG compatibility at ledvance.com/compatibility

### Photometrical data

| | |
|---|---|
| Luminous flux | 2100 lm |
| Luminous efficacy | 150 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 | ≤5 sdcm |
| Rated LLMF at 6,000 h | 0.90 |
| Flickering metric (Pst LM) | 1.0 |
| Stroboscope effect metric (SVM) | ≤0.4 |



EPREL data spectral diagram PROF LEDr 4000K

## Light technical data

| | |
|---|---|
| Beam angle | 190 ° |
| Warm-up time (60 %) | ‹ 2.00 s |
| Starting time | < 0.5 s |

## Dimensions & Weight

| | |
|---|---|
| Overall length | 1211.00 mm |
| Length with base excl. base pins/connection | 1200.00 mm |
| Diameter | 27.80 mm |
| Product weight | 238.00 g |

## Temperatures & operating conditions

| | |
|---|---|
| Ambient temperature range | -20…+45 °C [1)] |
| Maximum temperature at tc test point | 70 °C |
| Performance temp. acc. to IEC 62717 | 50 °C [2)] |

1) Temperature surrounding the lamp - for enclosed luminaires: temperature inside of the luminaire

2) Tp rated. Tp point coincides with Tc point - marked on device

## Lifespan

| | |
|---|---|
| Lifespan L70/B50 at 25 °C | 75000 h |
| Lifespan L80/B50 at 25 °C | 75000 h |
| Number of switching cycles | 200000 |

| | |
|---|---|
| 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) | G13 |
| Mercury content | 0.0 mg |
| Mercury-free | Yes |

## Capabilities

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

## Certificates & Standards

| | |
|---|---|
| Energy efficiency class | D [1)] |
| Energy consumption | 14.00 kWh/1000h |
| Type of protection | IP20 |
| Standards | CE |
| Photobiological safety group acc. to EN62778 | RG0 |

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

## Country-specific categorizations

| | |
|---|---|
| Order reference | LEDTUBE T8 HF P |

## 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 | NMLS |
| Light source cap-type (or other electric interface) | G13 |
| 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 | 1211.00 mm |
| Height | 27.80 mm |
| Width | 27.80 mm |
| Chromaticity coordinate x | 0.3818 |
| Chromaticity coordinate y | 0.3797 |
| 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 | 1317752 |
| Model number | AC42562 |

## Safety advice

- Not suitable for operation with low-loss and conventional control gears and main voltage.
- Operation in outdoor applications in suitable damp-proof luminaires possible according to data sheet and installation instruction.
- The operating temperature range of LED tube is restricted. In case of doubt regarding suitability of the application please measure Tc temperature on the product prior to installation.
- All electrical connections must be made by a qualified person.
- Not suitable for emergency lighting.

## DOWNLOAD DATA

| | Documents and certificates | Document name |
|---|---|---|
| PDF | User instruction / safety instructions | LEDTUBE T8 HF Ledvance |
| PDF | Legal information | Informationstext 18 Abs 4 ElektroG |
| PDF | Declarations of conformity | LED TUBES T8 HF/UN |
| PDF | Declarations of conformity UKCA | LED TUBES T8 HF/UN UKCA |
| PDF | ECG compatibility list | Ballast compatibility LEDVANCE LED TUBE T5 HF_T8 HF_T8 UNIVERSAL 2025 |

| | Photometric and lighting design files | Document name |
|---|---|---|
| IES | IES file (IES) | LEDTUBE T8 HF P 1200 14W 840 LEDV |

| | Photometric and lighting design files | Document name |
|---|---|---|
| | LDT file (Eulumdat) | LEDTUBE T8 HF P 1200 14W 840 LEDV |
| | UGR file (UGR table) | LEDTUBE T8 HF P 1200 14W 840 LEDV |
| | Light distribution curve type polar | LEDTUBE T8 HF P 1200 14W 840 LEDV |
| | Spectral power distribution | EPREL data spectral diagram PROF LEDr 4000K |

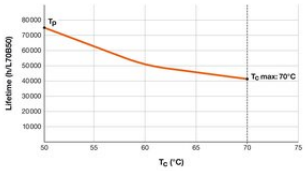
| | Tender texts | Document name |
|---|---|---|
| | Tender documents | LED TUBE T8 HF P 1200 mm 14W 840-EN |

## LOGISTICAL DATA

| Product code | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume |
|---|---|---|---|---|
| 4099854025938 | Sleeve<br>1 | 1,220 mm x 31 mm x 31 mm | 261.00 g | 1.17 $dm^3$ |
| 4099854025945 | Shipping box<br>10 | 1,272 mm x 210 mm x 115 mm | 3243.00 g | 30.72 $dm^3$ |

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.

## ADDITIONAL CATALOG INFORMATION




## References / Links

– For current information see www.ledvance.com/ledtube

## Legal advice

– When used to replace a T8 fluorescent lamp the total energy efficiency and light distribution depends on the design of the lighting system.

## DISCLAIMER

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