

# PRODUCT DATASHEET SubstiTUBE T8 HF Value 8 W/4000 K 600 mm

SubstiTUBE T8 HF VALUE | Economic LED tubes for electronic high frequency control gears (ECG)



#### Areas of application

- General illumination within ambient temperatures from -20...+45 °C
- Corridors, stairways, parking garages
- Warehouses

#### Product benefits

- Easy installation
- Also suitable for operation at low temperatures
- No bending thanks to glass technology

#### **Product features**

- T8 LED tube made of glass with G13 base
- Compatible with many common electronic control gears (see also compatibility list)
- Low flicker according to EU 2019/2020
- Uniform illumination
- Lifetime: up to 30,000 h
- Mercury-free and RoHS compliant
- Type of protection: IP20





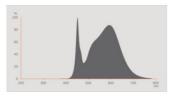
## TECHNICAL DATA

## Electrical data

| Nominal wattage           | 8 W      |
|---------------------------|----------|
| Construction wattage      | 8.00 W   |
| Nominal voltage           | 2040 V   |
| Operating mode            | ECG      |
| Nominal current           | 60 mA    |
| Type of current           | AC       |
| Inrush current            | 20 A     |
| Operating frequency       | 2075 kHz |
| Mains frequency           | 2075 kHz |
| Total harmonic distortion | < 20 %   |
| Power factor $\lambda$    | > 0.80   |

## Photometrical data

| Luminous flux                           | 800 lm     |
|---|------------|
| Luminous efficacy                       | 100 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                | 83         |
| Light color                             | 840        |
| Standard deviation of color matching    | ≤5 sdcm    |
| Flickering metric (Pst LM)              | <b>1</b>   |
| Stroboscope effect metric (SVM)         | °0,4       |



# Light technical data

| Beam angle | 190 ° |
|------------|-------|
|------------|-------|

| Warm-up time (60 %) | < 2.00 s |
|---------------------|----------|
| Starting time       | < 0.5 s  |

# Dimensions & Weight



| Overall length                              | 603.00 mm |
|---|-----------|
| Length with base excl. base pins/connection | 600.00 mm |
| Diameter                                    | 27.80 mm  |
| Tube diameter                               | 25,5 mm   |
| Base diameter                               | 25,7 mm   |
| Maximum diameter                            | 28 mm     |
| Product weight                              | 109.00 g  |

# Temperatures & operating conditions

| Ambient temperature range            | -20+45 °C |
|--------------------------------------|-----------|
| Maximum temperature at tc test point | 68 °C     |

# Lifespan

| Lifespan L70/B50 at 25 °C                    | 30000 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

## Certificates & Standards

| Energy efficiency class | F 1)           |
|-------------------------|----------------|
| Energy consumption      | 9.00 kWh/1000h |

| Type of protection                           | IP20 |
|--|------|
| Standards                                    | CE   |
| Photobiological safety group acc. to EN62778 | RG0  |

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

#### Country-specific categorizations

| Order reference                                      | LEDTUBE T8 HF V |
|--|-----------------|
| OGISTICAL 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   | 603.00 mm       |
| Height   | 27.80 mm        |
| Width  | 27.80 mm        |
| Chromaticity coordinate x                            | 0.381           |
| Chromaticity coordinate y                            | 0.379           |
| R9 Colour rendering index                            | 0.00            |
| Beam angle correspondence                            | SPHERE_360      |
| Survival factor                                      | 0.90            |
| Displacement factor                                  | 0.90            |
| LED light source replaces a fluorescent light source | No              |
| EPREL ID   | 519430          |
| Model number   | AC33867         |

#### 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 max temperature on the product prior to installation.

#### DOWNLOAD DATA

|     | Documents and certificates            |
|-----|---------------------------------------|
| POF | User instruction                      |
| POF | Installation guide                    |
| POF | Declarations Of Conformity CE         |
| POF | Declarations Of Conformity UKCA       |
|     |                                       |
|     | Photometric and lighting design files |
|     | IES file (IES)                        |
|     | LDT file (Eulumdat)                   |
|     | LDC typ polar                         |
|     | Spectral power distribution           |

#### LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume                |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4058075545366 | Sleeve<br>1                  | 610 mm x 31 mm x 31 mm               | 127.00 g     | 0.59 dm <sup>3</sup>  |
| 4058075545373 | Shipping box<br>10           | 662 mm x 210 mm x 115 mm             | 1630.00 g    | 15.99 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.