

## PRODUCT DATASHEET

### ST8V-UN 16 W/4000 K 1200 mm

SubstiTUBE T8 UNIVERSAL VALUE | LED tubes for electronic control gears (ECG), electromagnetic control gears (CCG) and mains



#### Areas of application

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

#### Product benefits

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

#### Product features

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



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**TECHNICAL DATA****Electrical data**

Nominal wattage	16 W
Construction wattage	16.00 W
Nominal voltage	220...240 V
Operating mode	Electronic control gear (ECG), Conventional control gear (CCG), Line voltage
Nominal current	76 mA <sup>1)</sup>
Type of current	AC
Inrush current	56 A
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz <sup>2)</sup>
Max. lamp number on MCB B10 A	68
Max. lamp number on MCB B10 A - CCG without compensation	68
Max. lamp number on MCB B10 A - CCG with compensation	37
Max. lamp number on MCB B16 A	103
Max. lamp number on MCB B16 A - CCG without compensation	103
Max. lamp number on MCB B16 A - CCG with compensation	62
Power factor $\lambda$	> 0.90

1) 390 mA for ECG (HF)

2) 20-75KHz for ECG (HF)

**Photometrical data**

Luminous flux	1700 lm
Luminous efficacy	106 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 sdc <sub>m</sub>
Rated LLMF at 6,000 h	0.80

**Light technical data**

Beam angle	160 °
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Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s

### Dimensions & Weight

Overall length	1200.00 mm
Length with base excl. base pins/connection	1198 mm
Diameter	28.00 mm
Tube diameter	26,7 mm
Base diameter	28,0 mm
Maximum diameter	28 mm
Product weight	230.00 g

### Temperatures & operating conditions

Ambient temperature range	-20...+45 °C
Maximum temperature at tc test point	53 °C

### Lifespan

Lifespan L70/B50 at 25 °C	30000 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)	G13
Mercury content	0.0 mg
Mercury-free	Yes

### Capabilities

Dimmable	No
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### Certificates & Standards

Energy efficiency class	F 1)
Energy consumption	16.00 kWh/1000h
Type of protection	IP20
Standards	CE

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

### Country-specific categorizations

Order reference	ST8V-1.2M 16W/8
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## LOGISTICAL DATA

Temperature range at storage	-20...+80 °C
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## Energy labelling regulation data acc EU 2019/2015

Light source cap-type (or other electric interface)	G13
Length	1200.00 mm
Height	28.00 mm
Width	28.00 mm

## Safety advice

- 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 T<sub>c</sub> temperature on the product prior to installation.
- For operation of LED TUBE T8 UN with a conventional control gear, the existing starter must be exchanged with the including LED starter in the LED tube packaging.
- All electrical connections must be made by a qualified person.
- Not suitable for emergency lighting.

## DOWNLOAD DATA

Documents and certificates		Document name
	Extended installation guide	Installation instructions for SubstiTube
	Extended installation guide	SubstiTUBE® T8 T5
Photometric and lighting design files		Document name
	IES file (IES)	ST8V 1,2M 16W 840 UN
	LDT file (Eulumdat)	ST8V 1,2M 16W 840 UN
	Light distribution curve type polar	ST8V 1,2M 16W 840 UN

## LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075137486	Sleeve 1	1,305 mm x 29 mm x 29 mm	259.00 g	1.10 dm <sup>3</sup>

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075137493	Shipping box 10	1,352 mm x 210 mm x 115 mm	3279.00 g	32.65 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.

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### References / Links

- For current information see [www.ledvance.com/substitute](http://www.ledvance.com/substitute)

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### 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.

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### DISCLAIMER

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