

# PRODUCT DATASHEET

## ST8V-EM 20 W/4000K 1500 mm

SubstiTUBE Value | Economic LED tubes for electromagnetic control gears (CCG)



### AREAS OF APPLICATION

- General illumination within ambient temperatures from -20...+45 °C
- Corridors, stairways, parking garages
- Industry
- Warehouses
- Cooling and storage rooms
- Warehouses
- Domestic applications
- Supermarkets and department stores

### PRODUCT BENEFITS

- No bending thanks to glass technology
- Energy savings of up to 65 % (compared to T8 fluorescent lamp on CCG)
- Quick, simple and safe replacement without rewiring
- Instant-on light, therefore ideally suitable in combination with sensor technology
- Very high resistance to switching loads
- Also suitable for operation at low temperatures

### PRODUCT FEATURES

- LED replacement for classic T8 fluorescent lamps with G13 socket for use in CCG luminaires or on AC mains
- Uniform illumination
- Mercury-free and RoHS compliant
- Single and tandem operation on conventional control gear (0.6 m version)
- Tube made of glass



## TECHNICAL DATA

### Electrical data

Rated wattage	20.00 W
Nominal voltage	220...240 V
Operating frequency	50...60 Hz
Nominal wattage	20.00 W
Nominal current	0.095 A
Type of current	AC
Max. lamp no. on circuit break. 10 A (B)	73
Max. lamp no. on circuit break. B10 A - CCG without compensation	73
Max. lamp no. on circuit break. B10 A - CCG with compensation	14
Max. lamp no. on circuit break. B16 A - CCG without compensation	73
Max. lamp no. on circuit break. B16 A - CCG with compensation	22
Max. lamp no. on circuit break. 16 A (B)	117
Total harmonic distortion	< 20 %
Power factor $\lambda$	> 0.90

### Photometrical data

Rated color temperature	4000 K
Nominal luminous flux	2200 lm
Rated luminous flux	2200 lm
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool White
Color temperature	4000 K
Luminous flux	2200 lm
Luminous efficacy	110 lm/W
Color rendering index Ra	$\geq 80$
Standard deviation of color matching	$\leq 6$ sdc

### Light technical data

Starting time	< 0.5 s
Warm-up time (60 %)	< 0.50 s
Rated beam angle (half peak value)	190.00 °

Dimensions & weight



<b>Length with base excl. base pins/connection</b>	1500.00 mm
<b>Tube diameter</b>	25.8 mm
<b>Base diameter</b>	26.7 mm
<b>Product weight</b>	230.00 g
<b>Overall length</b>	1513 mm

Temperatures & operating conditions

<b>Ambient temperature range</b>	-20...+45 °C
<b>Maximum temperature at tc test point</b>	75 °C

Lifespan

<b>Nominal lamp life time</b>	30000 h
<b>Rated lamp life time</b>	30000 h
<b>Number of switching cycles</b>	200000

Additional product data

<b>Base (standard designation)</b>	G13
<b>Mercury-free</b>	Yes

Capabilities

<b>Dimmable</b>	No
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Certificates & standards

<b>Type of protection</b>	IP20
<b>Standards</b>	CE
<b>Energy efficiency class</b>	A+
<b>Energy consumption</b>	20 kWh/1000h

Country-specific categorizations

<b>Order reference</b>	ST8V-1.5M 20W/8
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## Logistical data

<b>Temperature range at storage</b>	-20...+80 °C
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**EQUIPMENT / ACCESSORIES**

- Suitable for operation with low-loss and conventional control gears

**SAFETY ADVICE**

Not suitable for operation with electronic control gear.

The Tc Point is located underneath the product label on the front side of the lamp.

Operation in outdoor applications in suitable damp-proof luminaires possible according to data sheet and installation instruction.

**LOGISTICAL DATA**

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075454583	Sleeves 1	1555 mm x 29 mm x 29 mm	264.00 g	1.31 dm <sup>3</sup>
4058075454590	Shipping carton box 10	1590 mm x 210 mm x 105 mm	3510.00 g	35.06 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.

**REFERENCES / LINKS**

For current information see

- ▶ [www.ledvance.com/substitute](http://www.ledvance.com/substitute)

**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.