

# PRODUCT DATASHEET

## ST8A-EM 14 W/4000K 1200 mm

SubstiTUBE Advanced | High performance LED tubes for electromagnetic control gears, shatterproof



### AREAS OF APPLICATION

- General illumination within ambient temperatures from -20...+50 °C
- Illumination of production areas
- Traffic zones and corridors
- Supermarkets and department stores
- Industry

### PRODUCT BENEFITS

- No bending thanks to glass technology
- Quick, simple and safe replacement without rewiring
- Energy savings of up to 60 % (compared to T8 fluorescent lamp on CCG)
- Instant-on light, therefore ideally suitable in combination with sensor technology
- Very high resistance to switching loads
- Also suitable for operation at low temperatures
- Shatter protection thanks to special PET coating
- LED replacement for conventional compact fluorescent lamps for use in CCG luminaires or on AC mains
- Support the implementation of the HACCP concepts from production through to presentation

### PRODUCT FEATURES

- Bright, robust and durable
- Uniform illumination
- Single and tandem operation on conventional control gear (0.6 m version)



- Tube made of glass
- Mercury-free and RoHS compliant
- Type of protection: IP20
- Lamp tube made of glass with splinter protection e.g. for food industry applications
- VDE certified according to IEC62776

## TECHNICAL DATA

### Electrical data

Rated wattage	14.00 W
Nominal voltage	220...240 V
Operating frequency	50...60 Hz
Nominal wattage	14.00 W
Nominal current	0.064 A
Type of current	AC
Max. lamp no. on circuit break. 10 A (B)	70
Max. lamp no. on circuit break. B10 A - CCG without compensation	70
Max. lamp no. on circuit break. B10 A - CCG with compensation	15
Max. lamp no. on circuit break. B16 A - CCG without compensation	112
Max. lamp no. on circuit break. B16 A - CCG with compensation	24
Max. lamp no. on circuit break. 16 A (B)	112
Total harmonic distortion	< 20 %
Power factor $\lambda$	> 0.90

### Photometrical data

Rated color temperature	4000 K
Nominal luminous flux	2100 lm
Rated luminous flux	2100 lm
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool White
Color temperature	4000 K
Luminous flux	2100 lm
Color rendering index Ra	83
Standard deviation of color matching	$\leq 5$ sdcM

### 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>	1200.00 mm
<b>Tube diameter</b>	25.8 mm
<b>Base diameter</b>	26.7 mm
<b>Product weight</b>	200.00 g
<b>Overall length</b>	1212 mm

Temperatures & operating conditions

<b>Ambient temperature range</b>	-25...+50 °C
<b>Maximum temperature at tc test point</b>	67 °C

Lifespan

<b>Lifespan</b>	50000 h
<b>Nominal lamp life time</b>	50000 h
<b>Rated lamp life time</b>	50000 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/VDE
<b>Energy efficiency class</b>	A++
<b>Energy consumption</b>	14 kWh/1000h

## Country-specific categorizations

<b>Order reference</b>	ST8A-1.2M 14W/8
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## Logistical data

<b>Temperature range at storage</b>	-25...+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.

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
4058075136496	Sleeves 1	1305 mm x 29 mm x 29 mm	229.00 g	1.10 dm <sup>3</sup>
4058075136502	Shipping carton box 10	1352 mm x 210 mm x 115 mm	2979.00 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.

## 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.