

# PRODUCT DATASHEET

## ST8U-EM 8 W/4000K 300 mm

SubstiTUBE U-Shape | U-shaped LED tubes for electromagnetic control gears



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### AREAS OF APPLICATION

- Street and city lighting
- Industry

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### PRODUCT BENEFITS

- Quick, simple and safe replacement without rewiring
- Energy savings of up to 65 % (compared to T8 fluorescent lamp on CCG)
- Operation directly on 230 V AC mains possible
- Instant-on light, therefore ideally suitable in combination with sensor technology
- Very high resistance to switching loads
- Also suitable for operation at low temperatures

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### PRODUCT FEATURES

- Double-capped LED alternative to classic T8 U-shaped fluorescent lamps in CCG luminaires
- Uniform illumination
- Mercury-free and RoHS compliant
- High luminous efficacy: up to 137 lm/W
- Lifetime: up to 50,000 h
- Type of protection: IP20



## TECHNICAL DATA

### Electrical data

Rated wattage	8.00 W
Nominal voltage	220...240 V
Operating frequency	50...60 Hz
Nominal wattage	8.00 W
Nominal current	0.037 A
Type of current	AC
Max. lamp no. on circuit break. 10 A (B)	130
Max. lamp no. on circuit break. B10 A - CCG without compensation	170
Max. lamp no. on circuit break. B10 A - CCG with compensation	170
Max. lamp no. on circuit break. B16 A - CCG without compensation	270
Max. lamp no. on circuit break. B16 A - CCG with compensation	270
Max. lamp no. on circuit break. 16 A (B)	210
Total harmonic distortion	12 %
Inrush current	15.0 A
Power factor $\lambda$	> 0.90

### Photometrical data

Rated color temperature	4000 K
Nominal luminous flux	1100 lm
Rated luminous flux	1100 lm
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool White
Color temperature	4000 K
Luminous flux	1100 lm
Color rendering index Ra	$\geq 80$
Standard deviation of color matching	$\leq 6$ sdcn

### Light technical data

Starting time	< 0.5 s
Warm-up time (60 %)	< 0.50 s
Rated beam angle (half peak value)	160.00 °

Dimensions & weight



<b>Product weight</b>	139.00 g
<b>Overall length</b>	305.0 mm

Temperatures & operating conditions

<b>Ambient temperature range</b>	-20...+45 °C
<b>Maximum temperature at tc test point</b>	75 °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>	2G13
<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>Photobiological safety group EN62778</b>	RG0
<b>Energy efficiency class</b>	A++
<b>Energy consumption</b>	8 kWh/1000h

Country-specific categorizations

<b>Order reference</b>	ST8-USHP0.3M 8W
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**EQUIPMENT / ACCESSORIES**

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

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**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.

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**LOGISTICAL DATA**

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075390164	Folding carton box 1	322 mm x 126 mm x 32 mm	232.00 g	1.30 dm <sup>3</sup>
4058075390171	Shipping carton box 10	347 mm x 177 mm x 285 mm	2.63 g	17.50 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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**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.