

PRODUCT DATASHEET

ST8U-EM 20 W/4000K 600 mm

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



AREAS OF APPLICATION

- Street and city lighting
- Industry

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

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	20.00 W
Nominal voltage	220...240 V
Operating frequency	50...60 Hz
Nominal wattage	20.00 W
Nominal current	0.093 A
Type of current	AC
Max. lamp no. on circuit break. 10 A (B)	50
Max. lamp no. on circuit break. B10 A - CCG without compensation	75
Max. lamp no. on circuit break. B10 A - CCG with compensation	75
Max. lamp no. on circuit break. B16 A - CCG without compensation	120
Max. lamp no. on circuit break. B16 A - CCG with compensation	120
Max. lamp no. on circuit break. 16 A (B)	85
Total harmonic distortion	25 %
Inrush current	15.0 A
Power factor λ	> 0.90

Photometrical data

Rated color temperature	4000 K
Nominal luminous flux	2800 lm
Rated luminous flux	2800 lm
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool White
Color temperature	4000 K
Luminous flux	2800 lm
Color rendering index Ra	≥ 80
Standard deviation of color matching	≤ 6 sdc

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



Product weight	213.00 g
Overall length	602.0 mm

Temperatures & operating conditions

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

Lifespan

Lifespan	50000 h
Nominal lamp life time	50000 h
Rated lamp life time	50000 h
Number of switching cycles	200000

Additional product data

Base (standard designation)	2G13
Mercury-free	Yes

Capabilities

Dimmable	No
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Certificates & standards

Type of protection	IP20
Standards	CE
Photobiological safety group EN62778	RG0
Energy efficiency class	A++
Energy consumption	20 kWh/1000h

Country-specific categorizations

Order reference	ST8-USHP0.6M 20
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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
4058075390188	Folding carton box 1	622 mm x 126 mm x 32 mm	381.00 g	2.51 dm ³
4058075390195	Shipping carton box 10	647 mm x 177 mm x 285 mm	4.29 g	32.64 dm ³

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.

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.