

PRODUCT DATASHEET

ST8E-EM 20 W/6500 K 1500 mm

SubstiTUBE Entry EM | LED tubes for electromagnetic control gears



Product benefits

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

Product features

- T8 LED tube made of glass with G13 base
- Mercury-free and RoHS compliant
- Type of protection: IP20



TECHNICAL DATA

Electrical data

Nominal wattage	20 W
Construction wattage	20.00 W
Nominal voltage	220...240 V
Type of current	AC
Operating frequency	50...60 Hz
Mains frequency	50...60 Hz
Power factor λ	> 0.70

Photometrical data

Luminous flux	2300 lm
Nominal useful luminous flux 90°	2300 lm
Luminous efficacy	115 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool Daylight
Color temperature	6500 K
Color rendering index Ra	≥80
Light color	865
Standard deviation of color matching	≤6 sdc _m
Flickering metric (Pst LM)	1
Stroboscope effect metric (SVM)	0.4



EPREL data spectral diagram PROF
LEDr 6500K

Light technical data

Beam angle	360 °
Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s

Dimensions & Weight

Overall length	1513.00 mm
Length with base excl. base pins/connection	1500 mm
Diameter	25.6 mm
Base diameter	25,5 mm
Maximum diameter	27 mm
Product weight	230.00 g

Temperatures & operating conditions

Ambient temperature range	-20...+45 °C
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Lifespan

Lifespan L70/B50 at 25 °C	30000 h
Number of switching cycles	50000
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
Design / version	Frosted

Capabilities

Dimmable	No
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Certificates & Standards

Energy efficiency class	E 1)
Energy consumption	20.00 kWh/1000h
Type of protection	IP20
Standards	CE / CB
Photobiological safety group acc. to EN62778	RG0

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

Country-specific categorizations

Order reference	ST8E-1.5M 20W/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


Lighting technology used	LED
Non-directional or directional	NDLS
Mains or non-mains	MLS
Light source cap-type (or other electric interface)	G13
Connected light source (CLS)	No
Color-tuneable light source	No
Envelope	No
High luminance light source	No
Anti-glare shield	No
Correlated colour temperature type	SINGLE_VALUE
Standby power	0.00 W
Networked standby power for CLS	0.00 W
Claim of equivalent power	Yes
Length	1513.00 mm
Height	25.6 mm
Width	25.6 mm
Chromaticity coordinate x	0.3123
Chromaticity coordinate y	0.3282
R9 Colour rendering index	>=0.00
Beam angle correspondence	SPHERE_360
Survival factor	0.9
Displacement factor	>=0.7
LED light source replaces a fluorescent light source	Yes
EPREL ID	686638,2076152
Model number	AC32677,AC66706

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.

DOWNLOAD DATA

Documents and certificates		Document name
	Declarations of conformity	SubstiTUBE Entry EM

Photometric and lighting design files		Document name
	Spectral power distribution	EPREL data spectral diagram PROF LEDr 6500K

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075818033	Sleeve 1	29 mm x 29 mm x 1,635 mm	249.00 g	1.38 dm ³
4058075818040	Shipping box 25	1,610 mm x 155 mm x 165 mm	7760.00 g	41.18 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.

References / Links

– For current information see 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.