

PRODUCT DATASHEET SubstiTUBE T8 EM Star 15 W/6500 K 1200 mm

SubstiTUBE T8 EM STAR | Economic LED tubes for electromagnetic control gears



Areas of application

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

Product benefits

- High color homogeneity
- Energy savings of up to 68 % compared to conventional T8 fluorescent lamps
- Instant flickerfree starting

Product features

- LED replacement for classic T8 fluorescent lamps with G13 socket for use in CCG luminaires or on AC mains
- T8 LED tube made of glass with G13 base
- Low flicker according to EU 2019-2020 (SVM \leq 0,4 / PstLM \leq 1)
- Mercury-free and RoHS compliant
- Single and tandem operation on conventional control gear (0.6 m version)
- Type of protection: IP20





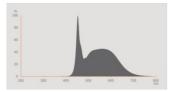
TECHNICAL DATA

Electrical data

Nominal wattage	15 W
Construction wattage	15.00 W
Nominal voltage	220240 V
Operating mode	Conventional control gear (CCG), AC Mains
Nominal current	75 mA
Type of current	AC
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp no. on circuit break. 10 A (B)	32
Max. lamp no. on circuit break. B10 A - CCG without compensation	48
Max. lamp no. on circuit break. B10 A - CCG with compensation	9
Max. lamp no. on circuit break. 16 A (B)	40
Max. lamp no. on circuit break. B16 A - CCG without compensation	60
Max. lamp no. on circuit break. B16 A - CCG with compensation	11
Total harmonic distortion	52 %
Power factor λ	> 0.90

Photometrical data

Luminous intensity	Not relevant
Luminous flux	1800 lm
Luminous efficacy	120 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 sdcm
Rated LLMF at 6,000 h	0.80
Flickering metric (Pst LM)	1
Stroboscope effect metric (SVM)	0.4



Light technical data

Beam angle	190 °
Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s

Dimensions & Weight

Overall length	1212.00 mm
Length with base excl. base pins/connection	1200.00 mm
Diameter	26.70 mm
Tube diameter	26,7 mm
Maximum diameter	27 mm
Product weight	190.00 g

Temperatures & operating conditions

Ambient temperature range	-20+45 °C
Maximum temperature at tc test point	65 °C

Lifespan

Lifespan L70/B50 at 25 °C	30000 h
Number of switching cycles	200000
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
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Mercury content	0.0 mg			
Capabilities	Capabilities			
Dimmable	No			
Certificates & Standards				
Energy efficiency class	E			
Energy consumption	15.00 kWh/1000h			
Type of protection	IP20			
Standards	CE / EAC			
Photobiological safety group acc. to EN62778	RG0			
Country-specific categorizations				
Order reference	LEDTUBE T8 EM S			
LOGISTICAL DATA				
	20 , 190 %			
Temperature range at storage -20+80 °C				
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			
Claim of equivalent power	No			
Length	1212.00 mm			
Height	26.70 mm			
Width	26.70 mm			
Chromaticity coordinate x	0.312			
Chromaticity coordinate y	0.328			
R9 Colour rendering index	0.00			

SPHERE_360

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Beam angle correspondence

Survival factor	0.9
Displacement factor	0.9
LED light source replaces a fluorescent light source	No
EPREL ID	563358
Model number	AC34994

EQUIPMENT / ACCESSORIES

- Suitable for operation on magnetic control gear

Safety advice

- Operation in outdoor applications in suitable damp-proof luminaires possible according to data sheet and installation instruction.
- The Tc Point is located underneath the product label on the front side of the lamp.

DOWNLOAD DATA

	Documents and certificates
PDF	User instruction
PDF	Installation guide
PDF	Declarations Of Conformity CE
PDF	Declarations Of Conformity UKCA
	Photometric and lighting design files
<u></u>	Spectral power distribution

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075594081	Sleeve 1	27 mm x 27 mm x 1,310 mm	267.00 g	0.95 dm³
4058075594098	Shipping box 8	1,355 mm x 184 mm x 130 mm	3733.00 g	32.41 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/substitube

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.