# PRODUCT DATASHEET SubstiTUBE T8 EM Star 6.6 W/6500 K 600 mm

SubstiTUBE® 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 1,500 mm T8 fluorescent lamp
- Instant flickerfree starting

#### **Product features**

- LED replacement for conventional compact fluorescent lamps 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





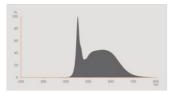
## **TECHNICAL DATA**

## Electrical data

Nominal wattage	6.6 W
Construction wattage	6.60 W
Nominal voltage	220240 V
Claimed equiv. conventional lamp power	18 W
Nominal current	35 mA
Type of current	AC
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp no. on circuit break. 10 A (B)	40
Max. lamp no. on circuit break. B10 A - CCG without compensation	60
Max. lamp no. on circuit break. B10 A - CCG with compensation	18
Max. lamp no. on circuit break. 16 A (B)	50
Max. lamp no. on circuit break. B16 A - CCG without compensation	75
Max. lamp no. on circuit break. B16 A - CCG with compensation	23
Power factor $\lambda$	> 0.90

## Photometrical data

Luminous flux	800 lm
Luminous efficacy	121 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	≤5 sdcm
Rated LLMF at 6,000 h	0.60
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
Rated beam angle (half peak value)	190.00 °

# **Dimensions & Weight**

Overall length	603.00 mm
Diameter	26.70 mm
Tube diameter	26,7 mm
Maximum diameter	27 mm
Product weight	100.00 g

# Temperatures & operating conditions

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

# Lifespan

Nominal lamp life time	30000 h
Number of switching cycles	200000
Lumen maintenance at end of serv	0.70
Rated lamp survival factor at 6,000	≥ 0.90

# Additional product data

Mercury content	0.0 mg
Capabilities	
Dimmable	No
Certificates & Standards	
Energy efficiency class	E
Energy consumption	7.00 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	
Temperature range at storage	-20+80 °C
Energy labellling 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	603.00 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

Beam angle

Survival factor	0.90
Displacement factor	0.90
LED light source replaces a fluorescent light source	yes
EPREL ID	563355
Model number	AC34990

#### **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**

	DOWNLOAD DATA
PDF	User instruction SubstiTUBE STAR
PDF	Installation guide SubstiTUBE® T8 T5
PDF	Installation guide Installationsanleitung SubstiTUBE T8 T5

#### **LOGISTICAL DATA**

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075594029	Sleeve 1	27 mm x 27 mm x 710 mm	145.00 g	0.52 dm <sup>3</sup>
4058075594036	Shipping box 8	755 mm x 184 mm x 130 mm	1957.00 g	18.06 dm³

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.