

## PRODUCT DATASHEET

# SubstiTUBE T9 C EM 32 20 W/6500 K G10q

LED TUBE T9 EM | Circular LED tube for electromagnetic control gear (CCG) and AC mains



### Areas of application

- General illumination within ambient temperatures from -20...+45 °C
- Corridors, stairways, parking garages
- Domestic applications
- Decorative applications

### Product benefits

- Quick, simple and safe replacement without rewiring
- Energy savings of up to 50% (compared to T9 fluorescent lamp)
- Also suitable for operation at low temperatures

### Product features

- LED alternative to classic T9 fluorescent lamps in CCG luminaires
- Uniform illumination
- Lifetime: up to 30,000 h
- Mercury-free and RoHS compliant



## TECHNICAL DATA

### Electrical data

Nominal wattage	20 W
Construction wattage	20.00 W
Nominal voltage	220...240 V
Nominal current	100 mA
Type of current	AC
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp no. on circuit break. 10 A (B)	21
Max. lamp no. on circuit break. B10 A - CCG without compensation	65
Max. lamp no. on circuit break. B10 A - CCG with compensation	13
Max. lamp no. on circuit break. 16 A (B)	25
Max. lamp no. on circuit break. B16 A - CCG without compensation	105
Max. lamp no. on circuit break. B16 A - CCG with compensation	16
Total harmonic distortion	20 %
Power factor $\lambda$	> 0.90

### Photometrical data

Luminous flux	2200 lm
Luminous efficacy	110 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	$\geq 80$
Light color	865
Standard deviation of color matching	$\leq 6$ sdc <sub>m</sub>
Rated LLMF at 6,000 h	0.80
Flickering metric (Pst LM)	1
Stroboscope effect metric (SVM)	0.40



### Light technical data

Beam angle	120 °
Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s
Rated beam angle (half peak value)	120.00 °

### Dimensions & Weight

Overall length	300.00 mm
Diameter	300.00 mm
Tube diameter	30,0 mm
Maximum diameter	300 mm
Product weight	220.00 g

### Temperatures & operating conditions

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

### Lifespan

Lifespan	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

Base (standard designation)	G10q
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Mercury content	0.0 mg
Design / version	Frosted

### Capabilities

Dimmable	No
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### Certificates & Standards

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

<sup>1)</sup> Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowest efficiency)

### Country-specific categorizations

Order reference	LEDTUBE T9C EM
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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)	G10q
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
Claim of equivalent power	No
Length	300.00 mm
Height	300.00 mm
Width	300.00 mm
Chromaticity coordinate x	0.312

Chromaticity coordinate y	0.328
R9 Colour rendering index	0.00
Beam angle correspondence	SPHERE_360
Survival factor	0,90
Displacement factor	0,70
LED light source replaces a fluorescent light source	No
EPREL ID	716580
Model number	AC36310

### 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



User instruction



Declarations Of Conformity CE

#### Photometric and lighting design files



Spectral power distribution

### LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075604698	Folding box 1	38 mm x 308 mm x 348 mm	233.00 g	4.07 dm <sup>3</sup>
4058075604704	Shipping box 10	397 mm x 329 mm x 386 mm	2981.00 g	50.42 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.

### References / Links

- For current information see [www.ledvance.com/osram-substitute](http://www.ledvance.com/osram-substitute)

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### Legal advice

- When used to replace a T9 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.