

PRODUCT DATASHEET

SubstiTUBE T8 EM Food 11.6 W/3300 K 1200 mm EM

SubstiTUBE® FOOD | LED tubes for electromagnetic control gears (CCG), shatterproof, for food presentation



Areas of application

- Food presentation in e.g. butchers, bakeries, supermarkets or meat processors
- Suitable for ambient temperatures of -20 to +50° C

Product benefits

- Food looks fresh and appetizing without unduly “beautifying” it
- Quick, simple and safe replacement of fluorescent lamps without rewiring the CCG
- Energy savings of up to 60 % (compared to T8 fluorescent lamp on CCG)
- Shatter protection thanks to special PET coating
- Support the implementation of the HACCP concepts from production through to presentation
- No bending thanks to glass tube

Product features

- Specially tailored spectral distribution (comparable to T8 FL NATURA 76)



- LED replacement for classic T8 fluorescent lamps with G13 socket for use in CCG luminaires or on AC mains
- Lamp tube made of glass with splinter protection e.g. for food industry applications
- VDE certified according to IEC62776
- Type of protection: IP20
- Replacement for fluorescent lamps with G13 base
- Mercury-free and RoHS compliant

TECHNICAL DATA

Electrical data

Nominal wattage	11.6 W
Construction wattage	11.60 W
Nominal voltage	220...240 V
Claimed equiv. conventional lamp power	36 W
Nominal current	56 mA
Type of current	AC
Inrush current	7 A
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp no. on circuit break. 10 A (B)	81
Max. lamp no. on circuit break. B10 A - CCG without compensation	81
Max. lamp no. on circuit break. B10 A - CCG with compensation	16
Max. lamp no. on circuit break. 16 A (B)	129
Max. lamp no. on circuit break. B16 A - CCG without compensation	129
Max. lamp no. on circuit break. B16 A - CCG with compensation	25
Total harmonic distortion	< 20 %
Power factor λ	> 0.90

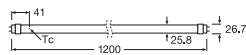
Photometrical data

Luminous flux	1100 lm
Luminous efficacy	94 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	NATURA
Color temperature	3300 K
Color rendering index Ra	≥80
Light color	833
Standard deviation of color matching	≤5 sdcn

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	1212.00 mm
Length with base excl. base pins/connection	1200 mm
Diameter	26.70 mm
Tube diameter	25.8 mm
Maximum diameter	27 mm
Product weight	213.00 g

Temperatures & operating conditions

Ambient temperature range	-20...+50 °C
Maximum temperature at tc test point	65 °C

Lifespan

Nominal lamp life time	50000 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)	G13
Mercury content	0.0 mg
Mercury-free	Yes
Product remark	Not for general lighting

Capabilities

Dimmable	No
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Certificates & Standards

Energy consumption	12.00 kWh/1000h
Type of protection	IP20
Standards	CE; VDE / CB
Photobiological safety group acc. to EN62778	RG0

Country-specific categorizations

Order reference	LEDTUBE T8 EM F
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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

Light source cap-type (or other electric interface)	G13
Length	1212.00 mm
Height	26.70 mm
Width	26.70 mm

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
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Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075292499	Sleeve 1	1,305 mm x 29 mm x 29 mm	242.00 g	1.10 dm ³
4058075292505	Shipping box 10	1,352 mm x 210 mm x 115 mm	3109.00 g	32.65 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.
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DISCLAIMER

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.