

## PRODUCT DATASHEET

### SubstiTUBE T8 EM Food 17.9 W/3300 K 1500 mm

SubstiTUBE T8 EM 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

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## TECHNICAL DATA

### Electrical data

Nominal wattage	17.9 W
Construction wattage	17.90 W
Nominal voltage	220...240 V
Operating mode	CCG, AC Mains
Nominal current	80 mA
Type of current	AC
Inrush current	7,36 A
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp number on MCB B10 A	56
Max. lamp number on MCB B10 A - CCG without compensation	56
Max. lamp number on MCB B10 A - CCG with compensation	9
Max. lamp number on MCB B16 A	90
Max. lamp number on MCB B16 A - CCG without compensation	90
Max. lamp number on MCB B16 A - CCG with compensation	14
Total harmonic distortion	< 20 %
Power factor $\lambda$	> 0.90

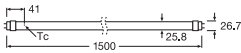
### Photometrical data

Luminous flux	1700 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

### Dimensions & Weight



Overall length	1513.00 mm
Length with base excl. base pins/connection	1500.00 mm
Diameter	26.70 mm
Tube diameter	25,8 mm
Maximum diameter	27 mm
Product weight	287.00 g

Temperatures & operating conditions

Ambient temperature range	-20...+50 °C
Maximum temperature at tc test point	69 °C

Lifespan

Lifespan L70/B50 at 25 °C	50000 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
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	18.00 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

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
Standby power	0 W
Claim of equivalent power	No
Length	1513.00 mm
Height	26.70 mm
Width	26.70 mm
Chromaticity coordinate x	0.3684
Chromaticity coordinate y	0.2816
R9 Colour rendering index	70
Beam angle correspondence	SPHERE_360
Survival factor	0.9
Displacement factor	0.9
LED light source replaces a fluorescent light source	No








## 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.

## DOWNLOAD DATA

Documents and certificates		Document name
	Legal information	Informationstext 18 Abs 4 ElektroG
	Declarations of conformity	LED SubstiTUBE T8 EM Food & MS
	Declarations of conformity UKCA	LEDTUBE T8 EM FOOD
Photometric and lighting design files		Document name
	IES file (IES)	LEDTUBE T8 EM FOOD 1500 17.9W 833
	LDT file (Eulumdat)	LEDTUBE T8 EM FOOD 1500 17.9W 833
	UGR file (UGR table)	LEDTUBE T8 EM FOOD 1500 17.9W 833
	Light distribution curve type polar	LEDTUBE T8 EM FOOD 1500 17.9W 833

## LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075292512	Sleeve 1	1,605 mm x 29 mm x 29 mm	321.00 g	1.35 dm <sup>3</sup>
4058075292529	Shipping box 10	1,652 mm x 210 mm x 115 mm	3720.00 g	39.90 dm <sup>3</sup>
4099854012617	Shipping box 10	1,635 mm x 180 mm x 95 mm	3940.00 g	27.96 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/substitube](http://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.