

# PRODUCT DATASHEET

## SubstiTUBE T8 EM Food 17.9 W/3300 K 1500 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	17.9 W
Construction wattage	17.90 W
Nominal voltage	220...240 V
Claimed equiv. conventional lamp power	58 W
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 no. on circuit break. 10 A (B)	56
Max. lamp no. on circuit break. B10 A - CCG without compensation	56
Max. lamp no. on circuit break. B10 A - CCG with compensation	9
Max. lamp no. on circuit break. 16 A (B)	90
Max. lamp no. on circuit break. B16 A - CCG without compensation	90
Max. lamp no. on circuit break. B16 A - CCG with compensation	14
Total harmonic distortion	< 20 %
Power factor $\lambda$	> 0.90

### Photometrical data

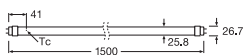
Luminous flux	1700 lm
Luminous efficacy	94 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	NATURA
Color temperature	3300 K
Color rendering index Ra	$\geq 80$
Light color	833
Standard deviation of color matching	$\leq 5$ sdcm

### 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	1513.00 mm
Length	1513.00 mm
Width (incl. round luminaires)	26.70 mm
Height (incl. round luminaires)	26.70 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

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	18.00 kWh/1000h
Type of protection	IP20

