

# PRODUCT DATASHEET LED TUBE T8 EM FOOD P 1200 mm 11.6W 833

LED TUBE T8 EM FOOD P | LED tubes for electromagnetic control gear (CCG) and AC mains, 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  $^{\circ}\text{C}$

#### 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 74 % (compared to T8 fluorescent lamp)
- 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
- Also suitable for operation at low temperatures

#### 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



- ENEC 10 VDE mark
- Type of protection: IP20Mercury-free and RoHS compliant

## TECHNICAL DATA

## Electrical data

Nominal wattage	11.6 W
Construction wattage	11.60 W
Nominal voltage	220240 V
Operating mode	CCG, AC Mains
Nominal current	55 mA
Type of current	AC
Inrush current	6.12 A
Suitable for DC input	Yes
Input voltage DC	186260 V
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp number on MCB B10 A	98
Max. lamp number on MCB B10 A - CCG without compensation	98
Max. lamp number on MCB B10 A - CCG with compensation	13
Max. lamp number on MCB B16 A	122
Max. lamp number on MCB B16 A - CCG without compensation	122
Max. lamp number on MCB B16 A - CCG with compensation	16
Total harmonic distortion	< 20 %
Power factor $\lambda$	> 0.90

## Photometrical data

Luminous efficacy94 Im/WLumen main.fact.at end of nom.life time0.70Light color (designation)NATURAColor temperature3300 KColor rendering index Ra80Light color833Standard deviation of color matching≤6 sdcmRated LLMF at 6,000 h0.80	Luminous flux	1100 lm
Light color (designation) NATURA   Color temperature 3300 K   Color rendering index Ra 80   Light color 833   Standard deviation of color matching ≤6 sdcm	Luminous efficacy	94 lm/W
Color temperature       3300 K         Color rendering index Ra       80         Light color       833         Standard deviation of color matching       ≤6 sdcm	Lumen main.fact.at end of nom.life time	0.70
Color rendering index Ra 80  Light color 833  Standard deviation of color matching ≤6 sdcm	Light color (designation)	NATURA
Light color     833       Standard deviation of color matching     ≤6 sdcm	Color temperature	3300 K
Standard deviation of color matching ≤6 sdcm	Color rendering index Ra	80
	Light color	833
Rated LLMF at 6,000 h 0.80	Standard deviation of color matching	≤6 sdcm
	Rated LLMF at 6,000 h	0.80

# Light technical data

Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s

# Dimensions & Weight



Overall length	1212.00 mm
Length with base excl. base pins/connection	1200.00 mm
Diameter	26.70 mm
Tube diameter	25.8 mm
Maximum diameter	27 mm
Product weight	183.00 g

# Temperatures & operating conditions

Ambient temperature range	-20+50 °C <sup>1)</sup>
Maximum temperature at tc test point	65 °C

<sup>1)</sup> Temperature surrounding the lamp - for enclosed luminaires: temperature inside of the luminaire

## Lifespan

Lifespan L70/B50 at 25 °C	60000 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

## Capabilities

Dimmable	No
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#### Certificates & Standards

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

# Country-specific categorizations

Order reference	LEDTUBE T8 EM F
51G5. 16.6.6.165	225.052.052.00

## LOGISTICAL DATA

Temperature range at storage	-20+80 °C

# 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	1212.00 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.
- Not suitable for emergency lighting.
- Disconnect mains before installation.

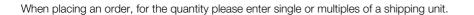
#### DOWNLOAD DATA

	Documents and certificates	Document name	
POF	User instruction / safety instruction	ns LEDTUBE T8 EM FOOD P	
POF	On-Pack-Info	ELR - exempt lamps	
POF	Legal information	Informationstext 18 Abs 4 ElektroG	
POF	Declarations of conformity	LEDTUBE T8 EM FOOD P	
POF	Declarations of conformity UKCA	LEDTUBE T8 EM FOOD P	
	Photometric and lighting design fil	es Document name	
	IES file (IES)	LEDTUBE T8 EM FOOD P 1200 11.6W 833 LEDV	
	LDT file (Eulumdat)	LEDTUBE T8 EM FOOD P 1200 11.6W 833 LEDV	
	Light distribution curve type polar	LEDTUBE T8 EM FOOD P 1200 11.6W 833 LEDV	
	Tender texts	Document name	
	Tender documents	LED TUBE T8 EM FOOD P 1200 mm 11.6W 833-EN	

#### LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854045004	Sleeve 1	1,305 mm x 29 mm x 29 mm	212.00 g	1.10 dm <sup>3</sup>
4099854045011	Shipping box 10	1,335 mm x 180 mm x 95 mm	2660.00 g	22.83 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.



#### References / Links

- For current information see www.ledvance.com/ledtube

#### 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.