

# PRODUCT DATASHEET LED TUBE T8 18 EM FLUORA 600 mm 6.6W

LED TUBE T8 EM FLUORA | LED tubes supporting plant growth



#### Areas of application

- Wherever there is not enough natural daylight for plants
- For ambient temperatures from -20...+45 °C

#### Product benefits

- Promotes plant growth
- High color homogeneity
- Energy savings of up to 69 % compared to conventional T8 fluorescent lamps
- Instant flickerfree starting

#### Product features

- LED replacement for classic T8 fluorescent lamps with G13 socket for use in CCG luminaires
- T8 LED tube made of glass with G13 base
- Low flicker according to EU 2019-2020 (SVM  $\leq 0.4$  / PstLM  $\leq$  1)
- Mercury-free and RoHS compliant
- Single and tandem operation on conventional control gear (≤ 0.9 m versions)
- Type of protection: IP20



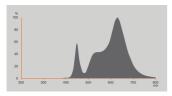
## TECHNICAL DATA

## Electrical data

Nominal wattage	6.6 W
Construction wattage	6.60 W
Nominal voltage	220240 V
Operating mode	CCG, AC Mains
Nominal current	30 mA
Type of current	AC
Inrush current	6.8 A
Input voltage DC	186260 V
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp number on MCB B10 A	88
Max. lamp number on MCB B10 A - CCG without compensation	70
Max. lamp number on MCB B10 A - CCG with compensation	25
Max. lamp number on MCB B16 A	110
Max. lamp number on MCB B16 A - CCG without compensation	88
Max. lamp number on MCB B16 A - CCG with compensation	32
Total harmonic distortion	< 30 %
Power factor $\lambda$	0.90

## Photometrical data

Luminous intensity	Not relevant
Luminous flux	450 lm
Luminous efficacy	68 lm/W
Lumen main.fact.at end of nom.life time	0.70
Color temperature	2500 K
Color rendering index Ra	80
Light color	825
Rated LLMF at 6,000 h	0.80
Flickering metric (Pst LM)	1
Stroboscope effect metric (SVM)	0,4



Spectral diagram T8 EM FLUORA

# Light technical data

Beam angle	100 °
Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s

## Dimensions & Weight

0 3 133 D 1

Overall length	604.00 mm
Length with base excl. base pins/connection	600.00 mm
Diameter	26.70 mm
Product weight	100.00 g

# Temperatures & operating conditions

Ambient temperature range	-20+45 °C <sup>1)</sup>
Maximum temperature at tc test point	80 °C

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

## Lifespan

Lifespan L70/B50 at 25 °C	30000 h
Number of switching cycles	200000
Rated lamp survival factor at 6,000 h	≥ 0.90

## Additional product data

Base (standard designation)	G13

Mercury content	0.0 mg
Capabilities	
Dimmable	No
Certificates & Standards	
Energy consumption	7.00 kWh/1000h
Type of protection	IP20
Standards	CE / EAC / UKCA
Photobiological safety group acc. to EN62778	RG0
Country-specific categorizations	
Order reference	LEDTUBE T8 18 E
LOGISTICAL DATA	
_	-20+80 °C
Temperature range at storage	-20+00 U
Energy labelling regulation data acc EU 2019/2015	
Energy labelling regulation data acc EU 2019/2015  Lighting technology used	LED
Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional	LED NDLS
Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains	LED NDLS MLS
Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)	LED NDLS MLS G13
Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)	LED NDLS MLS G13 No
Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)  Color-tuneable light source	LED NDLS MLS G13
Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)  Color-tuneable light source  Envelope	LED NDLS MLS G13 No
Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)  Color-tuneable light source	LED NDLS MLS G13 No No
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Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)  Color-tuneable light source  Envelope  High luminance light source	LED NDLS MLS G13 No No No No
Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)  Color-tuneable light source  Envelope  High luminance light source  Anti-glare shield	LED NDLS MLS G13 No No No No No No
Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)  Color-tuneable light source  Envelope  High luminance light source  Anti-glare shield  Claim of equivalent power	LED NDLS MLS G13 No
Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)  Color-tuneable light source  Envelope  High luminance light source  Anti-glare shield  Claim of equivalent power  Length	LED NDLS MLS G13 No
Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)  Color-tuneable light source  Envelope  High luminance light source  Anti-glare shield  Claim of equivalent power  Length  Height	LED NDLS MLS G13 No No No No No No No O No No O No No O
Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)  Color-tuneable light source  Envelope  High luminance light source  Anti-glare shield  Claim of equivalent power  Length  Height  Width	LED  NDLS  MLS  G13  No  No  No  No  No  No  26.70 mm
Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)  Color-tuneable light source  Envelope  High luminance light source  Anti-glare shield  Claim of equivalent power  Length  Height  Width  Chromaticity coordinate x	LED  NDLS  MLS  G13  No  No  No  No  No  No  26.70 mm  0.485
Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)  Color-tuneable light source  Envelope  High luminance light source  Anti-glare shield  Claim of equivalent power  Length  Height  Width  Chromaticity coordinate x  Chromaticity coordinate y	LED NDLS MLS G13 No No No No No No O No No O No O No O

0,9

Displacement factor

LED light source replaces a fluorescent light source	No
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#### **EQUIPMENT / ACCESSORIES**

- Suitable for operation on magnetic control gear

#### Safety advice

- Operation in outdoor applications in suitable damp-proof luminaires possible according to data sheet and installation instruction.
- The Tc Point is located underneath the product label on the front side of the lamp.
- Not suitable for emergency lighting.
- Not suitable for general lighting
- All electrical connections must be made by a qualified person.
- Disconnect mains before installation.

#### **DOWNLOAD DATA**

	Documents and certificates	Document name	
PDF	User instruction / safety instructions	LEDTUBE T8 EM FLUORA	
POF	On-Pack-Info	ELR - exempt lamps	
POF	Legal information	Informationstext 18 Abs 4 ElektroG	
POF	Declarations of conformity	LED TUBES T8 EM	
PDF	Declarations of conformity UKCA	LED TUBES T8 EM	
	Photometric and lighting design files	Document name	
	Spectral power distribution	Spectral diagram T8 EM FLUORA	

#### LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854178115	Sleeve 1	27 mm x 27 mm x 710 mm	145.00 g	0.52 dm <sup>3</sup>
4099854178122	Shipping box 8	755 mm x 143 mm x 100 mm	1515.00 g	10.80 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-led-tube

## 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.