

# PRODUCT DATASHEET LED TUBE T8 18 EM PLASTIC 600 mm 6.6W 830

LED TUBE T8 EM PLASTIC | Economic plastic LED tubes for electromagnetic control gear (CCG)



### Areas of application

- General illumination within ambient temperatures from -20...+45  $^{\circ}\text{C}$
- Corridors, stairways, parking garages
- Domestic applications

## Product benefits

- Extremely break resistant thanks to cover made of polycarbonate
- High color homogeneity
- Energy savings of up to 68 % 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 plastic 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 (0.6 m version)
- Type of protection: IP20





# TECHNICAL DATA

# Electrical data

Nominal wattage	6.6 W	
Construction wattage	6.60 W	
Nominal voltage	220240 V	
Operating mode Conventional control gear (CCG), AC Mains		
Nominal current	30 mA	
Type of current	AC	
Inrush current	8 A	
Input voltage DC	186260 V	
Operating frequency	50/60 Hz	
Mains frequency	50/60 Hz	
Max. lamp number on MCB B10 A	70	
Max. lamp number on MCB B10 A - CCG without compensation	60	
Max. lamp number on MCB B10 A - CCG with compensation	25	
Max. lamp number on MCB B16 A	88	
Max. lamp number on MCB B16 A - CCG without compensation	75	
Max. lamp number on MCB B16 A - CCG with compensation	32	
Total harmonic distortion	< 30 %	
Power factor $\lambda$	0.90	

# Photometrical data

Luminous flux	720 lm
Luminous efficacy	109 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Warm White
Color temperature	3000 K
Color rendering index Ra	80
Light color	830
Standard deviation of color matching	≤6 sdcm
Rated LLMF at 6,000 h	0.80
Flickering metric (Pst LM)	1
Stroboscope effect metric (SVM)	0.4



EPREL data spectral diagram PROF LEDr 3000K

# Light technical data

Beam angle	190 °
Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s

# Dimensions & Weight



Overall length	604.00 mm
Length with base excl. base pins/connection	600.00 mm
Diameter	26.80 mm
Tube diameter	25.8 mm
Maximum diameter	28 mm
Product weight	65.00 g

# Temperatures & operating conditions

Ambient temperature range	-20+45 °C <sup>1)</sup>
Maximum temperature at tc test point	70 °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
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
Certificates & Standards	
Energy efficiency class	F 1)
Energy consumption	7.00 kWh/1000h
Type of protection	IP20
Standards	CE / EAC / UKCA
Photobiological safety group acc. to EN62778	RG0
Order reference	LEDTUBE T8 18 E
Country-specific categorizations  Order reference	LEDTUBE T8 18 E
LOGISTICAL DATA	
Temperature range at storage	
	-20+80 °C
Energy labelling regulation data acc EU 2019/2015	-20+80 °C
Energy labelling regulation data acc EU 2019/2015  Lighting technology used	-20+80 °C
Lighting technology used	LED
Lighting technology used  Non-directional or directional	LED NDLS
Lighting technology used  Non-directional or directional  Mains or non-mains	LED NDLS MLS
Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)	LED NDLS MLS G13
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
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
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 No No
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
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
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  Correlated colour temperature type	LED NDLS MLS G13 No No No No No SINGLE_VALUE

Length	604.00 mm
Height	26.80 mm
Width	26.80 mm
Chromaticity coordinate x	0.44
Chromaticity coordinate y	0.403
R9 Colour rendering index	1
Beam angle correspondence	SPHERE_360
Survival factor	0.9
Displacement factor	0.9
LED light source replaces a fluorescent light source	No
EPREL ID	1334020,1529774
Model number	AC45427,AC51439

## **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.
- All electrical connections must be made by a qualified person.
- Disconnect mains before installation.

## DOWNLOAD DATA

	Documents and certificates	Document name
POF	User instruction / safety instructions	LEDTUBE T8 EM PC OSRAM
PDF	Legal information	Informationstext 18 Abs 4 ElektroG
PDF	Declarations of conformity	LEDTUBE T8 EM
PDF	Declarations of conformity	LED TUBE T8 EM
POF	Declarations of conformity UKCA	LED TUBE T8 EM

	Documents and certificates	Document name
PDF	Declarations of conformity UKCA	LEDTUBE T8 EM
	Photometric and lighting design files	Document name
	IES file (IES)	LEDTUBE T8 18 EM PC 600 6.6W 830 OSRAM
	LDT file (Eulumdat)	LEDTUBE T8 18 EM PC 600 6.6W 830 OSRAM
	UGR file (UGR table)	LEDTUBE T8 18 EM PC 600 6.6W 830 OSRAM
	Light distribution curve type polar	LEDTUBE T8 18 EM PC 600 6.6W 830 OSRAM
	Spectral power distribution	EPREL data spectral diagram PROF LEDr 3000K

## LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854038822	Sleeve 1	27 mm x 27 mm x 710 mm	110.00 g	0.52 dm <sup>3</sup>
4099854038839	Shipping box 8	755 mm x 143 mm x 100 mm	1235.00 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.