

PRODUCT DATASHEET

LED TUBE T8 18 EM BIO-LUMILUX 600 mm 6.6W 965

LED TUBE T8 EM BIO-LUMILUX | LED tubes emitting light similar to daylight



Areas of application

- Applications where light similar to daylight is required
- General illumination within ambient temperatures from -20...+45 °C
- Domestic applications

Product benefits

- 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
- Emits light similar to daylight
- Very good color rendering index
- 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
Nominal voltage	220...240 V
Operating mode	CCG, AC Mains
Nominal current	30 mA
Type of current	AC
Inrush current	6.8 A
Input voltage DC	186...260 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 λ	0.90

Photometrical data

Luminous intensity	Not relevant
Luminous flux	800 lm
Luminous efficacy	121 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool Daylight
Color temperature	6500 K
Color rendering index Ra	95
Light color	965
Standard deviation of color matching	≤ 6 sdc _m
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 6500K CRI95

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	26.70 mm
Product weight	100.00 g

Temperatures & operating conditions

Ambient temperature range	-20...+45 °C ¹⁾
Maximum temperature at tc test point	80 °C

1) 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
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Additional product data

Base (standard designation)	G13
Mercury content	0.0 mg

Capabilities

Dimmable	No
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Certificates & Standards

Energy efficiency class	E ¹⁾
Energy consumption	7.00 kWh/1000h
Type of protection	IP20
Standards	CE / EAC / UKCA
Photobiological safety group acc. to EN62778	RG0

¹⁾ Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowest efficiency)

Country-specific categorizations

Order reference	LEDTUBE T8 18 E
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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
Correlated colour temperature type	SINGLE_VALUE
Claim of equivalent power	No
Length	604.00 mm
Height	26.70 mm

Width	26.70 mm
Chromaticity coordinate x	0.3123
Chromaticity coordinate y	0.3283
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	1619074
Model number	AC53625,AC53625

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
	User instruction / safety instructions	LEDTUBE T8 EM BIO
	Legal information	Informationstext 18 Abs 4 ElektroG
	Declarations of conformity	LED TUBES T8 EM
	Declarations of conformity UKCA	LED TUBES T8 EM
Photometric and lighting design files		Document name
	Spectral power distribution	EPREL data spectral diagram PROF LEDr 6500K CRI95

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854178252	Sleeve 1	27 mm x 27 mm x 710 mm	145.00 g	0.52 dm ³
4099854178269	Shipping box 8	755 mm x 143 mm x 100 mm	1515.00 g	10.80 dm ³

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.