

# PRODUCT DATASHEET LED TUBE T8 EM PERFORMANCE 1500 mm 19.3W/23.1W 865

LED TUBE T8 EM PERFORMANCE | LED tubes for electromagnetic control gear (CCG) and AC mains, shatterproof



### Areas of application

- General illumination within ambient temperatures from -20...+50  $^{\circ}\text{C}$
- Illumination of production areas
- Traffic zones and corridors
- Supermarkets and department stores
- Industry

#### Product benefits

- Energy savings of up to 67 % (compared to T8 fluorescent lamp)
- Quick, simple and safe replacement with or without rewiring
- Highly versatile thanks to selectable power/lumen steps (1200 mm, 1500 mm)
- No bending thanks to glass technology
- Support the implementation of the HACCP concepts from production through to presentation
- Very high resistance to switching loads
- Instant-on light, therefore ideally suitable in combination with sensor technology
- Also suitable for operation at low temperatures

#### **Product features**

- LED replacement for classic T8 fluorescent lamps with G13 socket for use in CCG luminaires or on AC mains
- Multi Lumen function: 2 power steps selectable (1200 mm, 1500 mm)
- LED tube made of glass with shatter protection e.g. for food industry applications





mm 19.3W/23.1W 865

- Single and tandem operation on conventional control gear (0.6 m version)
- Very long lifetime: up to 75,000 h
- Type of protection: IP20
- Mercury-free and RoHS compliant
- Low flicker according to EU 2019-2020 (SVM  $\leq 0.4$  / PstLM  $\leq$  1)

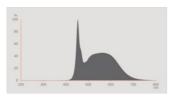
# TECHNICAL DATA

## Electrical data

Nominal wattage	23.10 W / 19.3 W
Construction wattage	23.10 W
Nominal voltage	220240 V
Operating mode	CCG, AC Mains
Nominal current	100mA / 83 mA
Type of current	AC
Inrush current	7.52 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	59
Max. lamp number on MCB B10 A - CCG without compensation	25
Max. lamp number on MCB B10 A - CCG with compensation	19
Max. lamp number on MCB B16 A	95
Max. lamp number on MCB B16 A - CCG without compensation	40
Max. lamp number on MCB B16 A - CCG with compensation	30
Total harmonic distortion	< 20 %
Power factor $\lambda$	0.90

# Photometrical data

Luminous flux	3700 lm / 3100 lm
Luminous efficacy	160 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	80
Light color	865
Standard deviation of color matching	≤5 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 6500K

# Adjustable attributes

Nominal wattage	Color temperature	Luminous flux	Luminous efficacy
23.1 W	6500 K	3700 lm	160 lm/W
19.3 W	6500 K	3100 lm	160 lm/W

# Light technical data

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

# Dimensions & Weight



Overall length	1513.00 mm
Length with base excl. base pins/connection	1500.00 mm
Diameter	26.70 mm
Product weight	235.00 g

# Temperatures & operating conditions

Ambient temperature range	-20+50 °C <sup>1)</sup>
Maximum temperature at tc test point	83 °C
Performance temp. acc. to IEC 62717	55 °C <sup>2)</sup>

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

<sup>2)</sup> Tp rated. Tp point coincides with Tc point - marked on device  $\,$ 

## Lifespan

Lifespan L70/B50 at 25 °C	75000 h
Lifespan L80/B50 at 25 °C	75000 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
Product remark	Available from June 2025
Added function	MULTI LUMEN

# Capabilities

## Certificates & Standards

Energy efficiency class	C 1)
Energy consumption	24.00 kWh/1000h
Type of protection	IP20
Standards	CE / UKCA / EAC
Photobiological safety group acc. to EN62778	RG0

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

# Country-specific categorizations

Temperature range at storage

Order reference	LEDTUBE T8 EM P
LOGISTICAL DATA	

-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
Correlated colour temperature type	SINGLE_VALUE
Standby power	<0.5 W
Claim of equivalent power	No
Length	1513.00 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	2150927,2340246
Model number	AC69468,AC81615

## **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
PDF	User instruction / safety instructions	
PDF	Extended installation guide	Installation instructions LED TUBE T8, T5 und DULUX LED 2024 10 EN

	Documents and certificates	Document name		
POF	Legal information	Informationstext 18 Abs 4 ElektroG		
POF	Declarations of conformity	LEDTUBE		
POF	Declarations of conformity	LED tube		
POF	Declarations of conformity UKCA	LEDTUBE		
POF	Certificates	LEDTUBE T8 EM P 1500		
	Photometric and lighting design files	Document name		
	IES file (IES)	LEDTUBE T8 EM P 1500 19.3W 865 LEDV		
	IES file (IES)	LEDTUBE T8 EM P 1500 23.1W 865 LEDV		
	LDT file (Eulumdat)	LEDTUBE T8 EM P 1500 19.3W 865 LEDV		
	LDT file (Eulumdat)	LEDTUBE T8 EM P 1500 23.1W 865 LEDV		
	UGR file (UGR table)	LEDTUBE T8 EM P 1500 19.3W 865 LEDV		
	UGR file (UGR table)	LEDTUBE T8 EM P 1500 23.1W 865 LEDV		
	Light distribution curve type polar	LEDTUBE T8 EM P 1500 19.3W 865 LEDV		
	Light distribution curve type polar	LEDTUBE T8 EM P 1500 23.1W 865 LEDV		
	Spectral power distribution	EPREL data spectral diagram PROF LEDr 6500K		

# LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854432729	Sleeve 1	1,605 mm x 29 mm x 29 mm	259.00 g	1.35 dm <sup>3</sup>
4099854432736	Shipping box 10	1,635 mm x 175 mm x 95 mm	3232.00 g	27.18 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.

#### ADDITIONAL CATALOG INFORMATION

#### References / Links

- For Guarantee see www.ledvance.com/guarantee

## 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.