

PRODUCT DATASHEET LED TUBE T8 UNIVERSAL PERFORMANCE 1200 mm 14W 830

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



Areas of application

- General illumination within ambient temperatures from -20...+45 $^{\circ}\text{C}$
- Illumination of production areas
- Traffic zones and corridors
- Supermarkets and department stores
- Industry

Product benefits

- No bending thanks to glass technology
- Quick, simple and safe replacement without rewiring
- Energy savings of up to 66 % (compared to T8 fluorescent lamp)
- Very high resistance to switching loads
- High luminous flux for sophisticated lighting tasks
- Support the implementation of the HACCP concepts from production through to presentation
- Also suitable for operation at low temperatures

Product features

- LED replacement for classic T8 fluorescent lamps with G13 socket for use in CCG, ECG luminaires or on AC mains
- Compatible with conventional and many common electronic control gears (see also compatibility list) and line voltage
- Low flicker according to EU 2019-2020 (SVM \leq 0.4 / PstLM \leq 1)





- Lamp tube made of glass with splinter protection
- For especially uniform illumination
- Mercury-free and RoHS compliant
- Type of protection: IP20
- Lifetime up to 60,000 h

TECHNICAL DATA

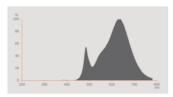
Electrical data

Nominal wattage	14 W
Construction wattage	14.00 W
Nominal voltage	220240 V
Operating mode	ECG, CCG, AC Mains 1)
Nominal current	63 mA
Type of current	AC
Inrush current	7 A
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	70
Max. lamp number on MCB B10 A - CCG with compensation	28
Max. lamp number on MCB B16 A	110
Max. lamp number on MCB B16 A - CCG without compensation	110
Max. lamp number on MCB B16 A - CCG with compensation	47
Total harmonic distortion	< 30 %
Power factor λ	0.90

¹⁾ Check ECG compatibility at ledvance.com/compatibility

Photometrical data

Luminous flux	1900 lm
Luminous efficacy	135 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	≤5 sdcm
Rated LLMF at 6,000 h	0.90
Flickering metric (Pst LM)	1.0
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	1211.00 mm
Length with base excl. base pins/connection	1200.00 mm
Diameter	27.80 mm
Product weight	254.00 g

Temperatures & operating conditions

Ambient temperature range	-20+45 °C ¹⁾	
Maximum temperature at tc test point	65 °C	
Performance temp. acc. to IEC 62717	45 °C ²⁾	

¹⁾ Temperature surrounding the lamp - for enclosed luminaires: temperature inside of the luminaire

Lifespan

Lifespan L70/B50 at 25 °C	60000 h
Lifespan L80/B50 at 25 °C	60000 h
Number of switching cycles	200000
Lumen maintenance at end of service lifetime	0.70

²⁾ In operation with CCG/AC. Tp: 50°C in ECG operation. / Tp rated. Tp point coincides with Tc point - marked on device

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	D 1)
Energy consumption	14.00 kWh/1000h
Type of protection	IP20
Standards	CE
	DOO
Photobiological safety group acc. to EN62778 1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations	RG0 vest efficiency)
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low	
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low	
Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations	vest efficiency)
Discreption of the contraction	vest efficiency)
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA	vest efficiency) LEDTUBE T8 UN P
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage	vest efficiency) LEDTUBE T8 UN P
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage Energy labelling regulation data acc EU 2019/2015	vest efficiency) LEDTUBE T8 UN P -20+80 °C
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage Energy labelling regulation data acc EU 2019/2015 Lighting technology used	vest efficiency) LEDTUBE T8 UN P -20+80 °C
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage Energy labelling regulation data acc EU 2019/2015 Lighting technology used Non-directional or directional	vest efficiency) LEDTUBE T8 UN P -20+80 °C LED NDLS
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference OGISTICAL DATA Temperature range at storage Energy labelling regulation data acc EU 2019/2015 Lighting technology used Non-directional or directional Mains or non-mains	vest efficiency) LEDTUBE T8 UN P -20+80 °C LED NDLS MLS
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage 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)	vest efficiency) LEDTUBE T8 UN P -20+80 °C LED NDLS MLS G13
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage 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)	vest efficiency) LEDTUBE T8 UN P -20+80 °C LED NDLS MLS G13 No
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage 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	vest efficiency) LEDTUBE T8 UN P -20+80 °C LED NDLS MLS G13 No No
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference OGISTICAL DATA Temperature range at storage 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	vest efficiency) LEDTUBE T8 UN P -20+80 °C LED NDLS MLS G13 No No No No
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference OGISTICAL DATA Temperature range at storage 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	vest efficiency) LEDTUBE T8 UN P -20+80 °C LED NDLS MLS G13 No No No No No No
1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (low Country-specific categorizations Order reference LOGISTICAL DATA Temperature range at storage 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	vest efficiency) LEDTUBE T8 UN P -20+80 °C LED NDLS MLS G13 No No No No No No No No No N

Height	27.80 mm
Width	27.80 mm
Chromaticity coordinate x	0.4339
Chromaticity coordinate y	0.4033
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	1317775
Model number	AC42585,AC42585

Safety advice

- Operation in outdoor applications in suitable damp-proof luminaires possible according to data sheet and installation instruction.
- The operating temperature range of LED tube is restricted. In case of doubt regarding suitability of the application please measure Tc temperature on the product prior to installation.
- For operation of LED TUBE T8 UN with a conventional control gear, the existing starter must be exchanged with the including LED starter in the LED tube packaging.
- All electrical connections must be made by a qualified person.
- Not suitable for emergency lighting.

DOWNLOAD DATA

	Documents and certificates	Document name	
POF	User instruction / safety instructions	LEDTUBE T8 UNIVERSAL Ledvance	
POF	Extended installation guide	Notes on the operation of LEDVANCE LED tubes in compensated luminaires	
POF	Extended installation guide	LEDVANCE Luminaire conversion checklist	
POF	Legal information	Informationstext 18 Abs 4 ElektroG	
POF	Declarations of conformity	LED TUBES T8 HF/UN	
POF	Declarations of conformity UKCA	LED TUBES T8 HF/UN UKCA	
POF	ECG compatibility list	Ballast compatibility LEDVANCE LED TUBE T5 HF_T8 HF_T8 UNIVERSAL 2025	

Photometric and lighting design files	Document name
IES file (IES)	LEDTUBE T8 UN P 1200 14W 830 LEDV
LDT file (Eulumdat)	LEDTUBE T8 UN P 1200 14W 830 LEDV
UGR file (UGR table)	LEDTUBE T8 UN P 1200 14W 830 LEDV
Light distribution curve type polar	LEDTUBE T8 UN P 1200 14W 830 LEDV
Spectral power distribution	EPREL data spectral diagram PROF LEDr 3000K

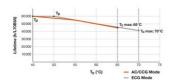
Tender texts	Document name
Tender documents	LED TUBE T8 UNIVERSAL P 1200 mm 14W 830-EN

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854026492	Sleeve 1	1,305 mm x 29 mm x 29 mm	283.00 g	1.10 dm ³
4099854026508	Shipping box 10	1,352 mm x 210 mm x 115 mm	3519.00 g	32.65 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.

ADDITIONAL CATALOG INFORMATION



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.