PRODUCT DATASHEET
LED TUBE T8 36 UNIVERSAL 1200 mm 18W 840

LED TUBE T8 UNIVERSAL | LED tubes for electronic control gear (ECG) and electromagnetic control gear (CCG)

Areas of application

- General illumination within ambient temperatures from -20…+45 °C
- Corridors, stairways, parking garages
- Domestic applications

Product benefits

- High color homogeneity
- Energy savings of up to 58 % (compared to T8 fluorescent lamp)
- Instant flickerfree starting

Product features

- LED replacement for classic T8 fluorescent lamps with G13 socket for use in CCG luminaires and many common ECG luminaires (see compatibility list) or on AC mains
- T8 LED tube made of glass with G13 base
- Low flicker according to EU 2019-2020 (SVM ≤ 0.4 / PstLM ≤ 1)
- Mercury-free and RoHS compliant
- Type of protection: IP20

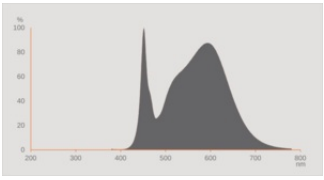
TECHNICAL DATA

Electrical data

Nominal wattage	18 W
Construction wattage	18.00 W
Nominal voltage	220…240 V
Operating mode	ECG / CCG / Mains
Nominal current	75 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

Photometrical data

Luminous flux	2000 lm
Luminous efficacy	111 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool White
Color temperature	4000 K
Color rendering index Ra	80
Light color	840
Standard deviation of color matching	≤5 sdcm
Flickering metric (Pst LM)	1.0
Stroboscope effect metric (SVM)	≤0.4



EPREL data spectral diagram PROF LEDr 4000K

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
Tube diameter	25,5 mm
Maximum diameter	28 mm
Product weight	254.00 g

Temperatures & operating conditions

Ambient temperature range	-20…+45 °C [1)]
Maximum temperature at tc test point	70 °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
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	The declared values in the data sheet refer to the operation of the LED tube on AC mains operation 230VAC 50Hz

Capabilities

Dimmable	No

Certificates & Standards

Energy efficiency class	E [1)]
Energy consumption	18.00 kWh/1000h
Type of protection	IP20
Standards	CE
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 36 U

LOGISTICAL DATA

Temperature range at storage	-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

Claim of equivalent power	No
Length	1211.00 mm
Height	27.80 mm
Width	27.80 mm
Chromaticity coordinate x	0.3818
Chromaticity coordinate y	0.3797
R9 Colour rendering index	>0
Beam angle correspondence	SPHERE_360
Survival factor	>0.9
Displacement factor	0.9
LED light source replaces a fluorescent light source	No
EPREL ID	1317767,1407622
Model number	AC42596,AC47856,AC47856

Safety advice

- Operation in outdoor applications in suitable damp-proof luminaires possible according to data sheet and installation instruction.
- All electrical connections must be made by a qualified person.
- Disconnect mains before installation.
- Not suitable for emergency lighting.

DOWNLOAD DATA

	Documents and certificates	Document name
PDF	User instruction / safety instructions	SubstiTUBE T8 UNIVERSAL LED tube
PDF	Legal information	Informationstext 18 Abs 4 ElektroG
PDF	Declarations of conformity	LED TUBES T8 HF/UN
PDF	Declarations of conformity UKCA	LED TUBES T8 HF/UN UKCA

	Photometric and lighting design files	Document name
IES	IES file (IES)	LEDTUBE T8 36 UN 1200 18W 840 OSRAM
LDT	LDT file (Eulumdat)	LEDTUBE T8 36 UN 1200 18W 840 OSRAM

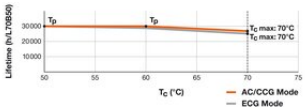
	Photometric and lighting design files	Document name
	UGR file (UGR table)	LEDTUBE T8 36 UN 1200 18W 840 OSRAM
	Light distribution curve type polar	LEDTUBE T8 36 UN 1200 18W 840 OSRAM
	Spectral power distribution	EPREL data spectral diagram PROF LEDr 4000K

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854033162	Sleeve 1	27 mm x 27 mm x 1,310 mm	331.00 g	0.95 dm^3
4099854033179	Shipping box 8	1,355 mm x 143 mm x 100 mm	3226.00 g	19.38 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/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.