PRODUCT DATASHEET
SubstiTUBE T8 UN Pro Ultra Output 23 W/4000 K 1500 mm

SubstiTUBE® PRO UO UN | LED tubes for electronic control gears (ECG), electromagnetic control gears (CCG) and mains, shatterproof



Areas of application

- General illumination within ambient temperatures from -20...+45 °C
- Supermarkets and department stores
- Industry

Product benefits

- No bending thanks to glass technology
- Shatter protection thanks to special PET coating
- Also suitable for operation at low temperatures
- High luminous flux for sophisticated lighting tasks
- Easy installation

Product features

- T8 LED tube made of glass with G13 base
- Compatible with conventional and many common electronic control gears (see also compatibility list) and line voltage
- Low flicker according to EU 2019/2020
- Lamp tube made of glass with splinter protection e.g. for food industry applications
- Mercury-free and RoHS compliant





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- Type of protection: IP20
- Lifetime: up to 60,000 h

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TECHNICAL DATA

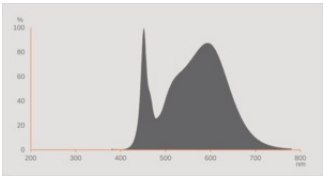
Electrical data

Nominal wattage	23 W
Construction wattage	23.00 W
Nominal voltage	220...240 V
Claimed equiv. conventional lamp power	58 W
Nominal current	125 mA
Type of current	AC
Inrush current	15 A
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp no. on circuit break. 10 A (B)	65
Max. lamp no. on circuit break. B10 A - CCG without compensation	65
Max. lamp no. on circuit break. B10 A - CCG with compensation	25
Max. lamp no. on circuit break. 16 A (B)	100
Max. lamp no. on circuit break. B16 A - CCG without compensation	100
Max. lamp no. on circuit break. B16 A - CCG with compensation	35
Total harmonic distortion	< 20 %
Power factor λ	> 0.90

Photometrical data

Luminous flux	3700 lm
Luminous efficacy	160 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	83
Light color	840
Standard deviation of color matching	≤5 sdcm
Flickering metric (Pst LM)	1.0
Stroboscope effect metric (SVM)	0.4

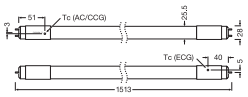
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Light technical data

Beam angle	190 °
Warm-up time (60 %)	‹ 2.00 s
Starting time	< 0.5 s
Rated beam angle (half peak value)	190.00 °

Dimensions & Weight



Overall length	1513.10 mm
Diameter	27.80 mm
Tube diameter	25,5 mm
Maximum diameter	28 mm
Product weight	272.00 g

Temperatures & operating conditions

Ambient temperature range	-20…+45 °C
Maximum temperature at tc test point	74 °C [1)]

1) at CCG+Mains operation, ECG operation: 73°C

Lifespan

Lifespan	60000 h
Number of switching cycles	200000
Lumen maintenance at end of serv	0.70
Rated lamp survival factor at 6,000	≥ 0.90

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Additional product data

Base (standard designation)	G13
Mercury content	0.0 mg
Mercury-free	Yes

Capabilities

Dimmable	No

Certificates & Standards

Energy efficiency class	C [1)]
Energy consumption	23.00 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 E (lowest efficiency)

Country-specific categorizations

Order reference	LEDTUBE T8 UN P

LOGISTICAL DATA

Temperature range at storage	-20...+80 °C

Energy labellling 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	1513.10 mm
Height	27.80 mm
Width	27.80 mm

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Chromaticity coordinate x	0.381
Chromaticity coordinate y	0.379
Beam angle	SPHERE_360
Survival factor	0.90
Displacement factor	0.90
LED light source replaces a fluorescent light source	not applicable
EPREL ID	519437
Model number	AC33874,AC33874

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 max temperature on the product prior to installation.
- For operation of LEDTUBE T8 UN with a conventional control gear, the existing starter must be exchanged with the including LED starter in the LED tube packaging.

DOWNLOAD DATA

	DOWNLOAD DATA
PDF	User instruction SubstiTUBE T8 Universal LED tube
PDF	Installation guide SubstiTUBE® T8 T5
PDF	Installation guide Installationsanleitung SubstiTUBE T8 T5
	IES file (IES) ST8PROU 1.5M 23W 840 UN OSRAM
	LDT file (Eulumdat) ST8PROU 1.5M 23W 840 UN OSRAM

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075546851	Sleeve 1	1,605 mm x 29 mm x 29 mm	306.00 g	1.35 dm^3
4058075546868	Shipping box 10	1,652 mm x 210 mm x 115 mm	3900.00 g	39.90 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.

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DISCLAIMER

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