

PRODUCT DATASHEET

ST8A-UN 7.5 W/6500 K 600 mm

SubstiTUBE Advanced UN | LED tubes for electronic and electromagnetic control gears



Areas of application

- General illumination within ambient temperatures from -20...+50 °C
- Supermarkets and department stores
- Industry
- Illumination of production areas

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

- Compatible with conventional and many common electronic control gears (see also compatibility list) and line voltage
- Lamp tube made of glass with splinter protection e.g. for food industry applications
- For especially uniform illumination



TECHNICAL DATA

Electrical data

Nominal wattage	7.5 W
Construction wattage	7.50 W
Nominal voltage	220...240 V
Operating mode	Electronic control gear (ECG), Conventional control gear (CCG), Line voltage
Nominal current	45 mA ¹⁾
Type of current	AC
Inrush current	42 A
Operating frequency	50...60 Hz
Mains frequency	50...60 Hz ²⁾
Max. lamp no. on circuit break. 10 A (B)	113
Max. lamp no. on circuit break. B10 A - CCG without compensation	113
Max. lamp no. on circuit break. B10 A - CCG with compensation	37
Max. lamp no. on circuit break. 16 A (B)	166
Max. lamp no. on circuit break. B16 A - CCG without compensation	166
Max. lamp no. on circuit break. B16 A - CCG with compensation	62
Power factor λ	0.80

1) 378 mA for ECG (HF)

2) 20-75KHz for ECG (HF)

Photometrical data

Luminous flux	1100 lm
Luminous efficacy	146 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	83
Light color	865
Standard deviation of color matching	≤ 5 sdc
Rated LLMF at 6,000 h	0.80

Light technical data

Beam angle	160 °
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Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s

Dimensions & Weight

Overall length	600.00 mm
Length with base excl. base pins/connection	598,00 mm
Diameter	28.00 mm
Tube diameter	26,7 mm
Base diameter	28,0 mm
Maximum diameter	28 mm
Product weight	139.00 g

Temperatures & operating conditions

Ambient temperature range	-20...+50 °C
Maximum temperature at tc test point	53 °C

Lifespan

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

Capabilities

Dimmable	No
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Certificates & Standards

Energy efficiency class	A++ 1)
Energy consumption	8.00 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	RL-T8 18 S 7,5W
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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

Light source cap-type (or other electric interface)	G13
Length	600.00 mm
Height	28.00 mm
Width	28.00 mm

Safety advice

- Operation in outdoor applications in suitable damp-proof luminaires possible according to data sheet and installation instruction.

DOWNLOAD DATA

Documents and certificates



Installation guide

Photometric and lighting design files



IES file (IES)



LDT file (Eulumdat)



LDC typ polar

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4008597184192	Sleeve 1	695 mm x 29 mm x 29 mm	157.00 g	0.58 dm ³
4008597484193	Shipping box 10	742 mm x 210 mm x 115 mm	1999.00 g	17.92 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/substitute

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.