PRODUCT DATASHEET
ST8PRO-EM 18.8 W/4000K 1500 mm

SubstiTUBE PRO EM | High performance LED tubes for electromagnetic control gears, shatterproof



AREAS OF APPLICATION

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

PRODUCT BENEFITS

- No bending thanks to glass technology
- Shatter protection thanks to special PET coating
- Support the implementation of the HACCP concepts from production through to presentation
- Very high resistance to switching loads
- High luminous flux for sophisticated lighting tasks
- Quick, simple and safe replacement without rewiring
- Energy savings of up to 63 % (compared to T8 fluorescent lamp on CCG)
- 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
- Low flicker according to EU 2019/2020
- Lamp tube made of glass with splinter protection e.g. for food industry applications



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- VDE certified according to IEC62776
- Single and tandem operation on conventional control gear (0.6 m version)
- Lifetime: up to 60,000 h
- Type of protection: IP20
- Mercury-free and RoHS compliant
- For especially uniform illumination

TECHNICAL DATA

Electrical data

Rated wattage	18.80 W
Nominal voltage	220…240 V
Operating frequency	50…60 Hz
Nominal wattage	18.80 W
Nominal current	0.088 A
Type of current	AC
Max. lamp no. on circuit break. 10 A (B)	51
Max. lamp no. on circuit break. B10 A - CCG without compensation	51
Max. lamp no. on circuit break. B10 A - CCG with compensation	8
Max. lamp no. on circuit break. B16 A - CCG without compensation	82
Max. lamp no. on circuit break. B16 A - CCG with compensation	14
Max. lamp no. on circuit break. 16 A (B)	82
Total harmonic distortion	< 20 %
Power factor λ	> 0.90

Photometrical data

Rated color temperature	4000 K
Nominal luminous flux	3100 lm
Rated luminous flux	3100 lm
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool White
Color temperature	4000 K
Luminous flux	3100 lm
Color rendering index Ra	83
Standard deviation of color matching	≤5 sdcm

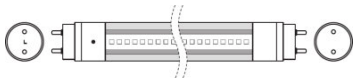
Light technical data

Starting time	< 0.5 s
Warm-up time (60 %)	< 0.50 s
Rated beam angle (half peak value)	190.00 °

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Dimensions & weight





Length with base excl. base pins/connection	1500.00 mm
Tube diameter	25.8 mm
Base diameter	26.7 mm
Product weight	232.00 g
Overall length	1513 mm

Temperatures & operating conditions

Ambient temperature range	-20…+50 °C
Maximum temperature at tc test point	75 °C

Lifespan

Nominal lamp life time	60000 h
Rated lamp life time	60000 h
Number of switching cycles	200000

Additional product data

Base (standard designation)	G13
Mercury-free	Yes

Capabilities

Dimmable	No

Certificates & standards

Type of protection	IP20
Standards	CE; VDE
Energy efficiency class	A++
Energy consumption	19 kWh/1000h

Country-specific categorizations

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Order reference	ST8PRO-1.5M 18,

Logistical data

Temperature range at storage	-20…+80 °C

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.

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075454248	Sleeves 1	1605 mm x 29 mm x 29 mm	266.00 g	1.35 dm^3
4058075454255	Shipping carton box 10	1652 mm x 210 mm x 115 mm	3500.00 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.

REFERENCES / LINKS

For current information see
- www.ledvance.com/substitube

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.

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