

# PRODUCT FAMILY DATASHEET

## SubstiTUBE Advanced

LED tubes for electromagnetic control gears



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### 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

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### PRODUCT BENEFITS

- No bending thanks to glass technology
- Quick, simple and safe replacement without rewiring
- Energy savings of up to 60 % (compared to T8 fluorescent lamp on CCG)
- Instant-on light, therefore ideally suitable in combination with sensor technology
- Very high resistance to switching loads
- Also suitable for operation at low temperatures
- Shatter protection thanks to special PET coating
- Support the implementation of the HACCP concepts from production through to presentation

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### PRODUCT FEATURES

- LED replacement for conventional compact fluorescent lamps for use in CCG luminaires or on AC mains
- Bright, robust and durable
- Uniform illumination
- Single and tandem operation on conventional control gear (0.6 m version)



- Tube made of glass
- Mercury-free and RoHS compliant
- Type of protection: IP20
- Lamp tube made of glass with splinter protection e.g. for food industry applications

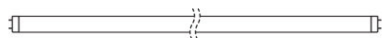
**TECHNICAL DATA**

Product description	Electrical data									Photometrical data
	Rated wattage	Nominal voltage	Operating frequency	Nominal wattage	Nominal current	Type of current	Max. lamp no. on circuit break. 10 A (B)	Max. lamp no. on circuit break. 16 A (B)	Total harmonic distortion	Color temperature
ST8A-EM 14 W/4000K 1200 mm	14.00 W	220...240 V	50/60 Hz	14.00 W	0.064 A	AC	70	112	< 20 %	4000 K
ST8A-EM 14 W/6500K 1200 mm	14.00 W	220...240 V	50/60 Hz	14.00 W	0.064 A	AC	70	112	< 20 %	6500 K
ST8A-EM 20.6 W/4000K 1500 mm	20.60 W	220...240 V	50/60 Hz	20.60 W	0.094 A	AC	48	76	< 20 %	4000 K
ST8A-EM 20.6 W/6500K 1500 mm	20.60 W	220...240 V	50/60 Hz	20.60 W	0.094 A	AC	48	76	< 20 %	6500 K

Product description	Nominal luminous flux	Rated luminous flux	Light color (designation)	Color temperature	Luminous flux	Color rendering index Ra	Light technical data		Dimensions & weight		Temperatures & operating conditions
							Starting time	Rated beam angle (half peak value)	Product weight	Overall length	Ambient temperature range
ST8A-EM 14 W/4000K 1200 mm	2100 lm	2100 lm	Cool White	4000 K	2100 lm	≥80	< 0.5 s	190.00 °	200.00 g	1212 mm	-20...+50 °C
ST8A-EM 14 W/6500K 1200 mm	2100 lm	2100 lm	Daylight	6500 K	2100 lm	≥80	< 0.5 s	190.00 °	200.00 g	1212 mm	-20...+50 °C
ST8A-EM 20.6 W/4000K 1500 mm	3100 lm	3100 lm	Cool White	4000 K	3100 lm	≥80	< 0.5 s	190.00 °	264.00 g	1513 mm	-20...+50 °C
ST8A-EM 20.6 W/6500K 1500 mm	3100 lm	3100 lm	Daylight	6500 K	3100 lm	≥80	< 0.5 s	190.00 °	264.00 g	1513 mm	-20...+50 °C

Product description	Maximum temperature at tc test point	Lifespan		Additional product data	Capabilities	Certificates & standards	Logistical data
		Nominal lamp life time	Number of switching cycles	Base (standard designation)	Dimmable	Type of protection	Temperature range at storage
ST8A-EM 14 W/4000K 1200 mm	75 °C	50000 h	200000	G13	No	IP20	-25...+80 °C

Product description	Maximum temperature at tc test point	Lifespan		Additional product data	Capabilities	Certificates & standards	Logistical data
		Nominal lamp life time	Number of switching cycles	Base (standard designation)	Dimmable	Type of protection	Temperature range at storage
ST8A-EM 14 W/6500K 1200 mm	75 °C	50000 h	200000	G13	No	IP20	-25...+80 °C
ST8A-EM 20.6 W/4000K 1500 mm	75 °C	50000 h	200000	G13	No	IP20	-25...+80 °C
ST8A-EM 20.6 W/6500K 1500 mm	75 °C	50000 h	200000	G13	No	IP20	-25...+80 °C



ST8A-EM 14 W/4000K 1200 mm, ST8A-EM 14 W/6500K 1200 mm, ST8A-EM 20.6 W/4000K 1500 mm, ST8A-EM 20.6 W/6500K 1500 mm

### EQUIPMENT / ACCESSORIES

- Suitable for operation with low-loss and conventional control gears

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**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.

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**APPLICATION ADVICE**

For more detailed application information and graphics please see product datasheet.

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**LOGISTICAL DATA**

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075392793	Shipping carton box 10	1313 mm x 212 mm x 115 mm	3477.00 g	32.01 dm <sup>3</sup>
4058075392816	Shipping carton box 10	1313 mm x 212 mm x 115 mm	3477.00 g	32.01 dm <sup>3</sup>
4058075392830	Shipping carton box 10	1613 mm x 212 mm x 115 mm	4418.00 g	39.32 dm <sup>3</sup>
4058075392854	Shipping carton box 10	1613 mm x 212 mm x 115 mm	4418.00 g	39.32 dm <sup>3</sup>

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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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**REFERENCES / LINKS**

For current information see

▶ [www.ledvance.com/substitute](http://www.ledvance.com/substitute)

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**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.

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**DISCLAIMER**

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.