

PRODUCT FAMILY DATASHEET

SubstiTUBE MOTION SENSOR

High performance LED tubes with integrated microwave sensor for electromagnetic control gears, shatterproof



AREAS OF APPLICATION

- General illumination within ambient temperatures from -20...+50 °C
- Corridors, stairways, parking garages
- Warehouses
- Walkways and corridors
- Storage rooms
- Logistics areas, transport facilities and corridors
- Car parks

PRODUCT BENEFITS

- Energy savings of up to 90 % compared to conventional fluorescent lamp
- Quick, simple and safe replacement of fluorescent lamps without rewiring the CCG
- 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
- LED replacement for conventional compact fluorescent lamps for use in CCG luminaires or on AC mains
- Suitable for closed luminaires thanks to microwave technology
- Also suitable for operation at low temperatures

PRODUCT FEATURES

- Integrated microwave sensor with motion detection
- Automatic dimming to 20 % light output after 5 minutes without motion detection
- Automatic light switch off 7 minutes after the last motion detection



- Microwave sensor with 5,8 GHz
- Motion detection up to 5 m
- Recommended maximum mounting height: 5 m
- Lamp tube made of glass with splinter protection e.g. for food industry applications
- Mercury-free and RoHS compliant
- VDE certified according to IEC62776
- Replacement for fluorescent lamps with G13 base

TECHNICAL DATA

Product description	Electrical data								
	Rated wattage	Nominal voltage	Operating frequency	Nominal wattage	Nominal current	Type of current	Max. lamp no. on circuit break. B10 A - CCG without compensation	Max. lamp no. on circuit break. B16 A - CCG without compensation	Max. lamp no. on circuit break. B10 A - CCG with compensation
ST8MS-EM 7.3 W/4000K 600 mm EM	7.30 W	220...240 V	50...60 Hz	7.30 W	0.035 A	AC	130	208	15
ST8MS-EM 14 W/4000K 1200 mm EM	14.00 W	220...240 V	50...60 Hz	14.00 W	0.065 A	AC	70	110	15
ST8MS-EM 20.6 W/4000K 1500 mm EM	20.60 W	220...240 V	50...60 Hz	20.60 W	0.095 A	AC	47	76	8

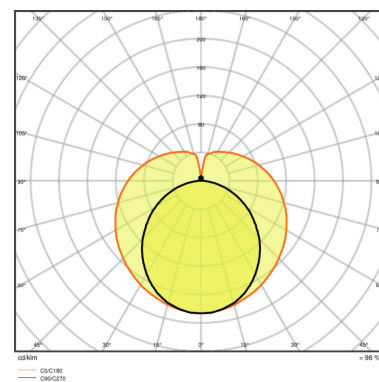
Product description	Photometrical data							
	Max. lamp no. on circuit break. 10 A (B)	Max. lamp no. on circuit break. B16 A - CCG with compensation	Max. lamp no. on circuit break. 16 A (B)	Total harmonic distortion	Color temperature	Nominal luminous flux	Rated luminous flux	Lumen main.fact.at end of nom.life time
ST8MS-EM 7.3 W/4000K 600 mm EM	130	25	208	< 20 %	4000 K	1100 lm	1100 lm	0.70
ST8MS-EM 14 W/4000K 1200 mm EM	70	24	110	< 20 %	4000 K	2100 lm	2100 lm	0.70
ST8MS-EM 20.6 W/4000K 1500 mm EM	47	14	76	< 20 %	4000 K	3100 lm	3100 lm	0.70

Product description	Light technical data					Dimensions & weight					
	Light color (designation)	Color temperature	Luminous flux	Color rendering index Ra	Warm-up time (60 %)	Rated beam angle (half peak value)	Starting time	Tube diameter	Base diameter	Product weight	Overall length
ST8MS-EM 7.3 W/4000K 600 mm EM	Cool White	4000 K	1100 lm	83	< 0.50 s	190.00 °	< 0.5 s	25.8 mm	26.7 mm	110.00 g	604.0 mm
ST8MS-EM 14 W/4000K 1200 mm EM	Cool White	4000 K	2100 lm	83	< 0.50 s	190.00 °	< 0.5 s	25.8 mm	26.7 mm	200.00 g	1212 mm

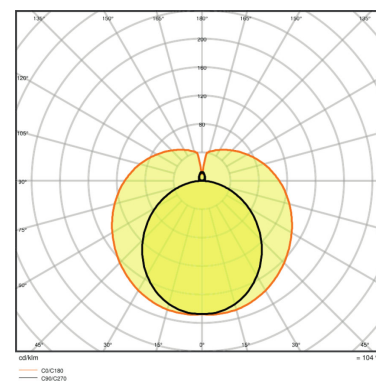
Product description	Light color (designation)	Color temperature	Luminous flux	Color rendering index Ra	Light technical data			Dimensions & weight			
					Warm-up time (60 %)	Rated beam angle (half peak value)	Starting time	Tube diameter	Base diameter	Product weight	Overall length
ST8MS-EM 20.6 W/4000K 1500 mm EM	Cool White	4000 K	3100 lm	83	< 0.50 s	190.00 °	< 0.5 s	25.8 mm	26.7 mm	275.00 g	1513 mm

Product description	Temperatures & operating conditions		Lifespan		Additional product data		Capabilities	Certificates & standards
	Ambient temperature range	Maximum temperature at tc test point	Nominal lamp life time	Number of switching cycles	Base (standard designation)	Mercury-free	Dimmable	Type of protection
ST8MS-EM 7.3 W/4000K 600 mm EM	-20...+50 °C	62 °C	50000 h	200000	G13	Yes	No	IP20
ST8MS-EM 14 W/4000K 1200 mm EM	-20...+50 °C	65 °C	50000 h	200000	G13	Yes	No	IP20
ST8MS-EM 20.6 W/4000K 1500 mm EM	-20...+50 °C	70 °C	50000 h	200000	G13	Yes	No	IP20

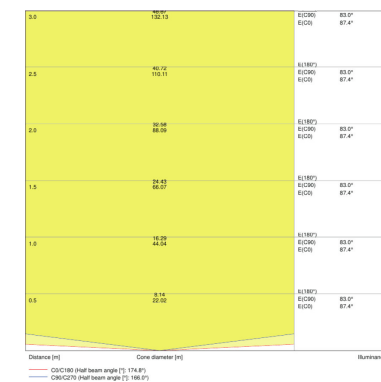
Product description	Logistical data
	Temperature range at storage
ST8MS-EM 7.3 W/4000K 600 mm EM	-20...+80 °C
ST8MS-EM 14 W/4000K 1200 mm EM	-20...+80 °C
ST8MS-EM 20.6 W/4000K 1500 mm EM	-20...+80 °C



ST8MS-EM 7.3 W/4000K 600 mm EM



ST8MS-EM 14 W/4000K 1200 mm EM



ST8MS-EM 20.6 W/4000K 1500 mm EM

ST8MS-EM 7.3 W/4000K 600 mm EM,
ST8MS-EM 14 W/4000K 1200 mm EM,
ST8MS-EM 20.6 W/4000K 1500 mm EM

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.

APPLICATION ADVICE

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

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075292420	Shipping carton box 8	753 mm x 182 mm x 125 mm	2018.00 g	17.13 dm ³
4058075292444	Shipping carton box 8	1367 mm x 182 mm x 125 mm	3812.00 g	31.10 dm ³

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075292468	Shipping carton box 8	1660 mm x 182 mm x 125 mm	4892.00 g	37.77 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.