

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
- Suitable for closed luminaires thanks to microwave technology
- Also suitable for operation at low temperatures

PRODUCT FEATURES

- LED replacement for conventional compact fluorescent lamps for use in CCG luminaires or on AC mains
- 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 with 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 | 25 | 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 | 24 | 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 | 14 | 8 |

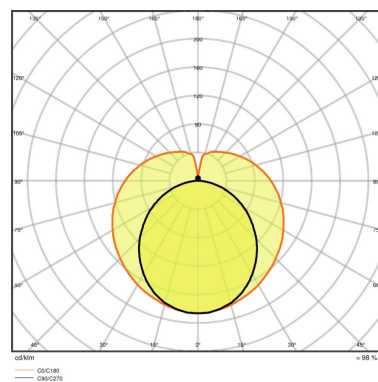
| Product description | Photometrical data | | | | | | | |
|----------------------------------|--|--|--|---------------------------|-------------------|-----------------------|---------------------|---|
| | Max. lamp no. on circuit break. 10 A (B) | Max. lamp no. on circuit break. B16 A - CCG without 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 | 208 | 208 | < 20 % | 4000 K | 1100 lm | 1100 lm | 0.70 |
| ST8MS-EM 14 W/4000K 1200 mm EM | 70 | 110 | 110 | < 20 % | 4000 K | 2100 lm | 2100 lm | 0.70 |
| ST8MS-EM 20.6 W/4000K 1500 mm EM | 47 | 76 | 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 %) | Starting time | Rated beam angle (half peak value) | 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 | < 0.5 s | 190.00 ° | 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 | < 0.5 s | 190.00 ° | 25.8 mm | 26.7 mm | 200.00 g | 1212 mm |

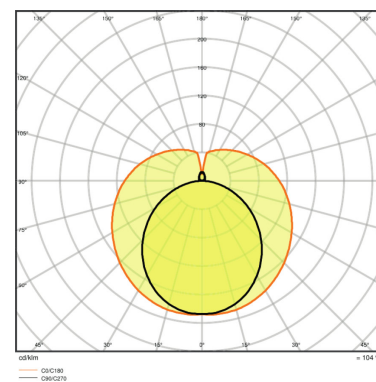
| Product description | Light color (designation) | Color temperature | Luminous flux | Color rendering index Ra | Light technical data | | | Dimensions & weight | | | |
|----------------------------------|---------------------------|-------------------|---------------|--------------------------|----------------------|---------------|------------------------------------|---------------------|---------------|----------------|----------------|
| | | | | | Warm-up time (60 %) | Starting time | Rated beam angle (half peak value) | 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 | < 0.5 s | 190.00 ° | 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 |

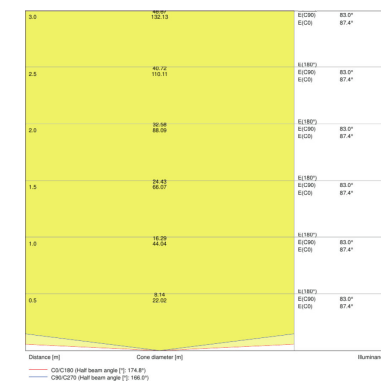
| Product description | Logistical data |
|----------------------------------|------------------------------|
| | Temperature range at storage |
| ST8MS-EM 7.3 W/4000K 600 mm EM | -20...+80 °C |
| ST8MS-EM 14 W/4000K 1200 mm EM | -20...+80 °C |
| ST8MS-EM 20.6 W/4000K 1500 mm EM | -20...+80 °C |



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.