

## PRODUCT DATASHEET

### ST8-EM 20 W/3000 K 1500 mm

SubstiTUBE Advanced Wide Voltage | High performance LED tubes for electromagnetic control gears



#### Areas of application

- General illumination within ambient temperatures from -20...+45 °C
- Illumination of production areas
- Traffic zones and corridors
- Supermarkets and department stores
- Industry

#### 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
- Also suitable for operation at low temperatures

#### Product features

- LED alternative to classic T8 fluorescent lamps in CCG luminaires
- Bright, robust and durable
- Uniform illumination
- Tube made of glass
- Mercury-free and RoHS compliant
- Type of protection: IP20
- Integrated ECG with high power factor



## TECHNICAL DATA

### Electrical data

|                        |             |
|------------------------|-------------|
| Nominal wattage        | 20 W        |
| Construction wattage   | 20.00 W     |
| Nominal voltage        | 100...240 V |
| Nominal current        | 235 mA      |
| Type of current        | AC          |
| Operating frequency    | 50/60 Hz    |
| Mains frequency        | 50/60 Hz    |
| Power factor $\lambda$ | > 0.90      |

### Photometrical data

|                                         |                     |
|-----------------------------------------|---------------------|
| Luminous flux                           | 2160 lm             |
| Nominal useful luminous flux 90°        | 2160 lm             |
| Luminous efficacy                       | 108 lm/W            |
| Lumen main.fact.at end of nom.life time | 0.70                |
| Light color (designation)               | Warm White          |
| Color temperature                       | 3000 K              |
| Color rendering index Ra                | ≥80                 |
| Light color                             | 830                 |
| Standard deviation of color matching    | ≤6 sdc <sub>m</sub> |

### Light technical data

|               |         |
|---------------|---------|
| Beam angle    | 160 °   |
| Starting time | < 0.5 s |

### Dimensions & Weight

|                |            |
|----------------|------------|
| Overall length | 1513.00 mm |
| Diameter       | 28.00 mm   |
| Product weight | 235.00 g   |

### Temperatures & operating conditions

|                                      |              |
|--------------------------------------|--------------|
| Ambient temperature range            | -20...+45 °C |
| Maximum temperature at tc test point | <75 °C       |

### Lifespan

|                                              |        |
|----------------------------------------------|--------|
| Number of switching cycles                   | 100000 |
| Lumen maintenance at end of service lifetime | 0.70   |

### Additional product data

|                             |        |
|-----------------------------|--------|
| Base (standard designation) | G13    |
| Mercury content             | 0.0 mg |

### Capabilities

|          |    |
|----------|----|
| Dimmable | No |
|----------|----|

### Certificates & Standards

|           |                      |
|-----------|----------------------|
| Standards | CB / ROHS / SASO2902 |
|-----------|----------------------|

### Country-specific categorizations

|                 |                 |
|-----------------|-----------------|
| Order reference | ST8A-1.5M 20W/8 |
|-----------------|-----------------|

### Energy labelling regulation data acc EU 2019/2015

|                                                     |              |
|-----------------------------------------------------|--------------|
| Light source cap-type (or other electric interface) | G13          |
| Correlated colour temperature type                  | SINGLE_VALUE |
| Length                                              | 1513.00 mm   |
| Height                                              | 28.00 mm     |
| Width                                               | 28.00 mm     |

### 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                |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4058075690912 | Sleeve<br>1                  | 1,585 mm x 28 mm x 28 mm             | 254.00 g     | 1.27 dm <sup>3</sup>  |
| 4058075690929 | Shipping box<br>25           | 1,640 mm x 167 mm x 185 mm           | 7578.00 g    | 50.67 dm <sup>3</sup> |

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.