

# PRODUCT DATASHEET

## LED TUBE T9 C 40 EM V 24W 840 G10Q

LED TUBE T9 EM V | Circular LED tube for electromagnetic control gear (CCG) and AC mains



### Areas of application

- General illumination within ambient temperatures from -20...+45 °C
- Corridors, stairways, parking garages
- Domestic applications
- Decorative applications

### Product benefits

- Quick, simple and safe replacement without rewiring
- Energy savings of up to 50 % (compared to T9 fluorescent lamp)
- Also suitable for operation at low temperatures
- Operation directly on 230 V AC mains possible

### Product features

- LED alternative to classic T9 fluorescent lamps in CCG luminaires
- Uniform illumination
- Lifetime up to 30,000 h
- Mercury-free and RoHS compliant



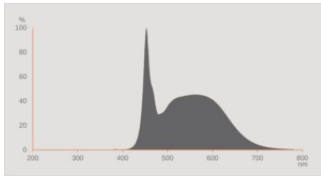
## TECHNICAL DATA

### Electrical data

|  |               |
|--|---------------|
| Nominal wattage  | 24 W          |
| Construction wattage                                     | 24.00 W       |
| Nominal voltage  | 220...240 V   |
| Operating mode   | CCG, AC Mains |
| Nominal current  | 107 mA        |
| Type of current  | AC            |
| Inrush current   | 16 A          |
| Operating frequency                                      | 50/60 Hz      |
| Mains frequency  | 50/60 Hz      |
| Max. lamp number on MCB B10 A                            | 16            |
| Max. lamp number on MCB B10 A - CCG without compensation | 37            |
| Max. lamp number on MCB B10 A - CCG with compensation    | 11            |
| Max. lamp number on MCB B16 A                            | 19            |
| Max. lamp number on MCB B16 A - CCG without compensation | 66            |
| Max. lamp number on MCB B16 A - CCG with compensation    | 14            |
| Total harmonic distortion                                | < 20 %        |
| Power factor $\lambda$                                   | > 0.90        |

### Photometrical data

|   |                           |
|---|---------------------------|
| Luminous flux                           | 2900 lm                   |
| Luminous efficacy                       | 120 lm/W                  |
| Lumen main.fact.at end of nom.life time | 0.96                      |
| Light color (designation)               | Cool White                |
| Color temperature                       | 4000 K                    |
| Color rendering index Ra                | 80                        |
| Light color                             | 840                       |
| Standard deviation of color matching    | $\leq 6$ sdc <sub>m</sub> |
| Rated LLMF at 6,000 h                   | 0.80                      |
| Flickering metric (Pst LM)              | 1                         |
| Stroboscope effect metric (SVM)         | 0.4                       |



EPREL data spectral diagram PROF  
LEDr 6500K

### Light technical data

|                     |         |
|---------------------|---------|
| Beam angle          | 110 °   |
| Warm-up time (60 %) | 0.00 s  |
| Starting time       | < 0.5 s |

### Dimensions & Weight



|                  |           |
|------------------|-----------|
| Overall length   | 400.00 mm |
| Diameter         | 400.00 mm |
| Tube diameter    | 30 mm     |
| Maximum diameter | 400 mm    |
| Product weight   | 290.00 g  |

### Temperatures & operating conditions

|                                      |                            |
|--------------------------------------|----------------------------|
| Ambient temperature range            | -20...+45 °C <sup>1)</sup> |
| Maximum temperature at tc test point | 75 °C                      |

<sup>1)</sup> Temperature surrounding the lamp - for enclosed luminaires: temperature inside of the luminaire

### Lifespan

|  |         |
|--|---------|
| Lifespan L70/B50 at 25 °C                    | 30000 h |
| Number of switching cycles                   | 200000  |
| Lumen maintenance at end of service lifetime | 0.96    |
| Rated lamp survival factor at 6,000 h        | ≥ 0.90  |

## Additional product data

|                             |        |
|-----------------------------|--------|
| Base (standard designation) | G10q   |
| Mercury content             | 0.0 mg |
| Mercury-free                | Yes    |

## Capabilities

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

## Certificates &amp; Standards

|  |                 |
|--|-----------------|
| Energy efficiency class                      | E <sup>1)</sup> |
| Energy consumption                           | 24.00 kWh/1000h |
| Type of protection                           | IP20            |
| Standards                                    | CE / EAC / UKCA |
| Photobiological safety group acc. to EN62778 | RG0             |

<sup>1)</sup> Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowest efficiency)

## Country-specific categorizations

|                 |                |
|-----------------|----------------|
| Order reference | LEDTUBE T9C EM |
|-----------------|----------------|

## LOGISTICAL DATA

|                              |              |
|------------------------------|--------------|
| Temperature range at storage | -20...+80 °C |
|------------------------------|--------------|

## Energy labelling regulation data acc EU 2019/2015










|   |              |
|---|--------------|
| Lighting technology used                            | LED          |
| Non-directional or directional                      | NDLS         |
| Mains or non-mains                                  | MLS          |
| Light source cap-type (or other electric interface) | G10q         |
| Connected light source (CLS)                        | No           |
| Color-tuneable light source                         | No           |
| Envelope  | No           |
| High luminance light source                         | No           |
| Anti-glare shield                                   | No           |
| Correlated colour temperature type                  | SINGLE_VALUE |
| Claim of equivalent power                           | Yes          |
| Length  | 400.00 mm    |
| Height  | 400.00 mm    |
| Width   | 400.00 mm    |


|  |                 |
|--|-----------------|
| Chromaticity coordinate x                            | 0.3818          |
| Chromaticity coordinate y                            | 0.3797          |
| R9 Colour rendering index                            | 0.00            |
| Beam angle correspondence                            | SPHERE_360      |
| Survival factor                                      | 0.9             |
| Displacement factor                                  | 0.9             |
| LED light source replaces a fluorescent light source | No              |
| EPREL ID   | 1340170         |
| Model number   | AC45076,AC45076 |

### 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.
- All electrical connections must be made by a qualified person.
- Disconnect mains before installation.
- Lamp not suitable for emergency operation.

### DOWNLOAD DATA

| Documents and certificates   |  | Document name                         |
|--|--|---------------------------------------|
|  | User instruction / safety instructions | LED TUBE T9C EM                       |
|  | Legal information                      | Informationstext 18 Abs 4 ElektroG    |
|  | Declarations of conformity             | LEDTUBE T9C EM                        |
|  | Declarations of conformity UKCA        | UKCA declaration_LEDTUBE T9C EM       |
| Photometric and lighting design files  |  | Document name                         |
|  | IES file (IES)                         | LEDTUBE T9C EM V 40 24W 840 G10Q      |
|  | LDT file (Eulumdat)                    | LEDTUBE T9C EM V 40 24W 840 G10Q LEDV |
|  | UGR file (UGR table)                   | LEDTUBE T9C EM V 40 24W 840 G10Q      |
|  | Light distribution curve type cone     | LEDTUBE T9C EM V 40 24W 840 G10Q      |
|  | Light distribution curve type polar    | LEDTUBE T9C EM V 40 24W 840 G10Q      |

| Photometric and lighting design files   |                             | Document name                               |
|---|-----------------------------|---|
|  | Spectral power distribution | EPREL data spectral diagram PROF LEDr 6500K |

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| Tender texts   |                  | Document name                    |
|--|------------------|----------------------------------|
|  | Tender documents | LED TUBE T9 EM V 24W 840 G10Q-EN |

**LOGISTICAL DATA**

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume                |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4099854042560 | Folding box<br>1             | 38 mm x 408 mm x 413 mm              | 425.00 g     | 6.40 dm <sup>3</sup>  |
| 4099854042577 | Shipping box<br>10           | 425 mm x 390 mm x 435 mm             | 5242.00 g    | 72.10 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.

**References / Links**

– For current information see [www.ledvance.com/ledtube](http://www.ledvance.com/ledtube)

**Legal advice**

– When used to replace a T9 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.