

Round LED modules 440mm FLAT G1

Product description

- Long life-time
- Built-in, constant current LED module
- Re-workable push-in terminals enabling easy connection
- Compliance and approval: CE
- 2C - two connectors for series system, also recognized as a high voltage system - non-SELV
- Available CCT from 2700K to 6500K and CRI 80, 90 and 95



RdLED CRI 80

| Product name | Ordering code | Colour temperature [K] | Current nominal If nom [mA] | Luminous flux* Φ [lm] | Voltage* Vf [V] | Power* P [W] | Efficacy* [lm/W] | Current maximum If max [mA] |
|---|----------------|------------------------|-----------------------------|-----------------------|-----------------|--------------|------------------|-----------------------------|
| RdLED 440mm 5000lm 830 42V FLAT Opt G1 | 1010 117 85746 | 3000 | 720 | 4936 | 38 | 27 | 180 | 3600 |
| RdLED 440mm 5000lm 840 42V FLAT Opt G1 | 1010 117 85846 | 4000 | 720 | 5260 | 38 | 27 | 192 | 3600 |
| RdLED 440mm 5000lm 830 126V FLAT Opt G1 | 1010 117 85946 | 3000 | 235 | 4835 | 114 | 27 | 180 | 1200 |
| RdLED 440mm 5000lm 840 126V FLAT Opt G1 | 1010 117 86046 | 4000 | 235 | 5152 | 114 | 27 | 192 | 1200 |

*At nominal current and Tp
Tolerance range for optical and electrical ±10%

Temperature & humidity

| Specification item | Unit | Value |
|--|------|-------------|
| Tp | [°C] | 45 |
| Tp rated | [°C] | 65 |
| Tc | [°C] | 85 |
| Relative humidity (non-condensing) | [%] | 5 ... 85 |
| Storage ambient temperature | [°C] | -25 ... +85 |
| Storage relative humidity (non-condensing) | [%] | 5 ... 85 |

Tp - Temperature related to the performance parameters of the LED modules
Tp rated - Maximum operating temperature to which the rated performance characteristics are declared
Tc - Highest permissible value for safe operation

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Technical data

| Specification item | Unit | Value |
|----------------------------------|--------|------------------|
| Classification acc. to IEC 62031 | [V] | built-in |
| Energy Efficiency Class | | A++ |
| Working voltage | [Vdc] | 350 |
| Beam angle | [deg] | 120 |
| Initial color consistency | [SDCM] | 3 |
| Initial color coordinates | | Acc. to CIE 1931 |
| Photobiological safety | | RG1 unlimited |

Certificates & standards

| Specification item | Compliant |
|--------------------|--------------|
| ENEC | No |
| CE | Yes |
| RoHS | Yes |
| REACH | Yes |
| Zhaga | No |
| IP rating | No IP rating |

Lumen maintenance

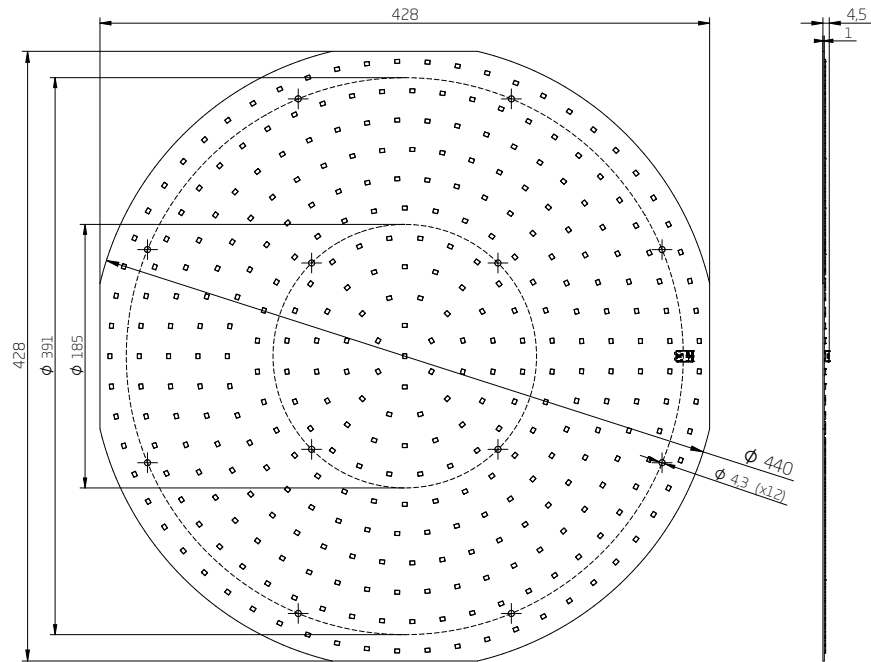
RdLED CRI 80

| Forward current | Tp temperature | L70 [h] | | L80 [h] | | L90 [h] | |
|-----------------|----------------|---------|---------|---------|---------|---------|---------|
| | | B50 | B10 | B50 | B10 | B50 | B10 |
| If nom | 45°C | >60 000 | >60 000 | >60 000 | >60 000 | >60 000 | >60 000 |
| | 55°C | >60 000 | >60 000 | >60 000 | >60 000 | >60 000 | >60 000 |
| | 65°C | >60 000 | >60 000 | >60 000 | >60 000 | >60 000 | 54 000 |
| If max | 45°C | >60 000 | >60 000 | >60 000 | >60 000 | >60 000 | 57 000 |
| | 55°C | >60 000 | >60 000 | >60 000 | >60 000 | >60 000 | 54 000 |
| | 65°C | >60 000 | >60 000 | >60 000 | >60 000 | 57 000 | 48 000 |

simulation based on LM80 LED data (10,000h)

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Dimensions



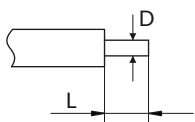
Mounting

LED Modules cannot be exposed to tensile or compressive stresses. For this purpose it is necessary that the modules are assembled to a flat surface by only rounded head screws. Additionally plastic flat washer should be used to ensure creepage distance between screw's head and surface of the pcb. Max. torque for fixing: 0,5Nm.

LED modules are sensitive to electrostatic discharge (ESD). Follow safety regulations according to IEC 61340-5-1.

Wiring

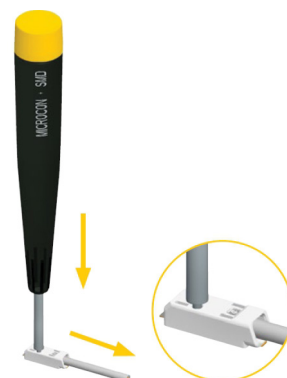
Wire cross section and strip length:



| D - wire cross section <i>solid and flexible wires</i> | Min | Max |
|---|--------------------|---------------------|
| | 0.2mm ² | 0.75mm ² |
| | AWG 18 | AWG 24 |

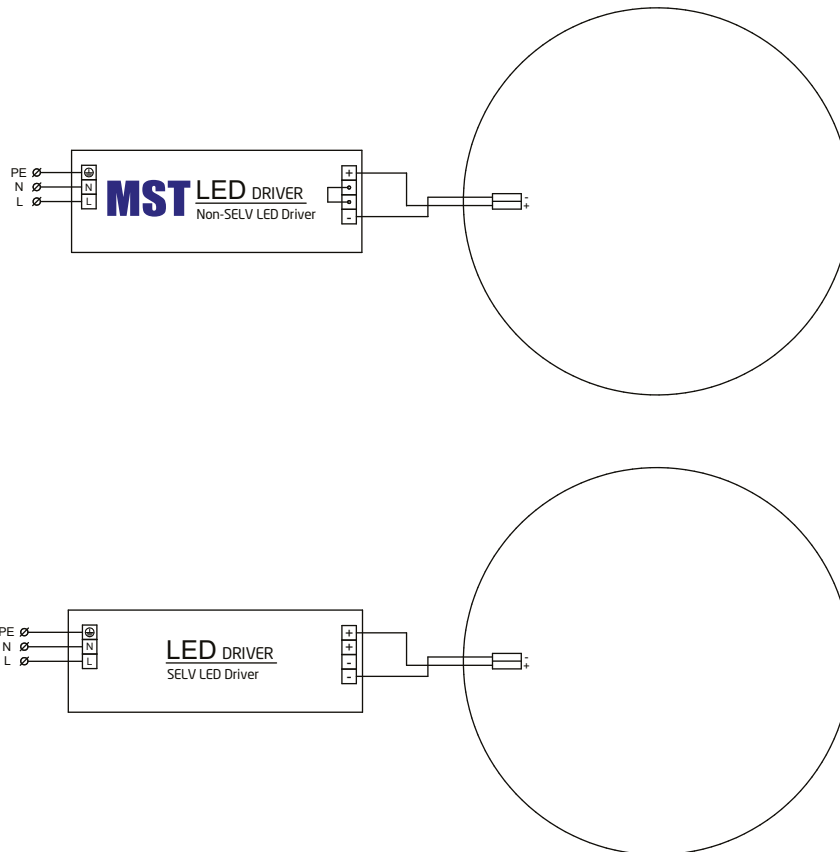
| L - strip length | Min | Max |
|------------------|-----|-----|
| | 8mm | 9mm |

Opening for the release of wires from the top with release pin Electroterminal art. 881 167 884:



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Connections



Ordering codes

| Specification item | Ordering code | Pieces per box | Pieces per pallet | Box dimensions [mm] |
|---|----------------|----------------|-------------------|---------------------|
| RdLED 440mm 5000lm 830 42V FLAT Opt G1 | 1010 117 85746 | 12 | 240 | 433 x 433 x 58 |
| RdLED 440mm 5000lm 840 42V FLAT Opt G1 | 1010 117 85846 | 12 | 240 | 433 x 433 x 58 |
| RdLED 440mm 5000lm 830 126V FLAT Opt G1 | 1010 117 85946 | 12 | 240 | 433 x 433 x 58 |
| RdLED 440mm 5000lm 840 126V FLAT Opt G1 | 1010 117 86046 | 12 | 240 | 433 x 433 x 58 |