

Round LED modules 530mm & 1/2 530mm

Product description

- Long life-time
- Built-in, constant current LED module
- Re-workable push-in terminals enabling easy connection
- Compliance and approval: CE, ENEC
- Available CCT from 2700K to 6500K and CRI 80, 90



RdLED CRI 80 Optimum G2

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux ¹ φ [lm]	Useful luminous flux ² [lm]	Voltage ¹ Vf [V]	Power ¹ P [W]	Efficacy ¹ [lm/W]	Current minimum If min ³ [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 530mm 4000lm 830 126V Opt G2	1010 117 55246	3000	185	3840	3958	115	21	181	60	960	C
RdLED 530mm 4000lm 830 42V Opt G2	1010 117 55046		560	3874	3993	38	22	180	180	2880	C
RdLED 530mm 4000lm 840 126V Opt G2	1010 117 55346	4000	185	4036	4161	115	21	190	60	960	C
RdLED 530mm 4000lm 840 42V Opt G2	1010 117 55146		560	4071	4197	38	22	189	180	2880	C

RdLED CRI 80 Optimum G1

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux ¹ φ [lm]	Useful luminous flux ² [lm]	Voltage ¹ Vf [V]	Power ¹ P [W]	Efficacy ¹ [lm/W]	Current minimum If min ³ [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 1/2 530mm 3000lm 827-865 39V Opt G1	1010 117 41846	2700	470	2848	2936	36	17	168	80	1200	D
		6500	470	3083	3179	36	17	182	80	1200	

¹At nominal current and T_p

²At nominal current and 25°C

³It is recommended not to operate below minimum current in order to avoid un-even brightness
Tolerance range for optical and electrical ±10%

Temperature & humidity

Specification item	Unit	Value
T _p	[°C]	45
T _{p rated}	[°C]	65
T _c	[°C]	85
Relative humidity (non-condensing)	[%]	5 ... 85
Storage ambient temperature	[°C]	-25 ... +85
Storage relative humidity (non-condensing)	[%]	5 ... 85

T_p - Temperature related to the performance parameters of the LED modules

T_{p rated} - Maximum operating temperature to which the rated performance characteristics are declared

T_c - Highest permissible value for safe operation

Technical data

Specification item	Unit	Value
Classification acc. to IEC 62031		built-in
Working voltage	[Vdc]	350
Beam angle	[deg]	120
Initial color consistency	[SDCM]	3
Photobiological safety		RG1 unlimited

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Color coordinates

According to CIE 1931

Specification item	CIE _x	CIE _y
2700K	0.4578	0.4101
3000K	0.4338	0.4030
4000K	0.3818	0.3797
6500K	0.3123	0.3282

Certificates & standards

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

Lumen maintenance

RdLED CRI 80

Forward current	T _p temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C	>102 000	>102 000	>102 000	>102 000	74 000	64 000
	55°C	>102 000	>102 000	>102 000	>102 000	74 000	64 000
	65°C	>102 000	>102 000	>102 000	>102 000	72 000	63 000
	75°C	>102 000	>102 000	>102 000	>102 000	71 000	62 000
	85°C	>102 000	>102 000	>102 000	>102 000	70 000	62 000
If max	45°C	>72 000	>72 000	>72 000	>72 000	48 000	36 000
	55°C	>72 000	>72 000	>72 000	>72 000	48 000	36 000
	65°C	>72 000	>72 000	>72 000	>72 000	48 000	36 000
	75°C	>72 000	>72 000	>72 000	69 000	45 000	33 000
	85°C	>72 000	>72 000	>72 000	67 000	42 000	33 000

reported data based on LM80 LED data (@65mA 17000h / @160mA & 200mA 12000h)

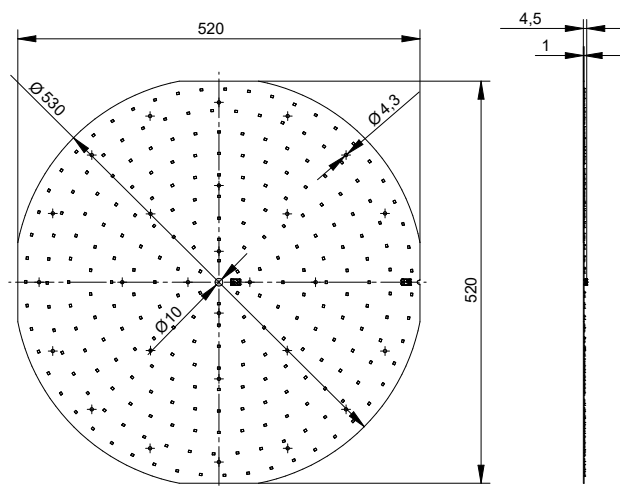
RdLED CRI 90

Forward current	T _p temp.	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
	65°C	>60 000	>60 000	>60 000	>60 000	51 000	50 000
	85°C	>60 000	>60 000	>60 000	>60 000	41 000	36 000
If max	45°C	>60 000	>60 000	52 000	49 000	29 000	28 000
	85°C	>60 000	>60 000	47 000	44 000	25 000	24 000
	85°C	>60 000	58 000	41 000	38 000	22 000	19 000

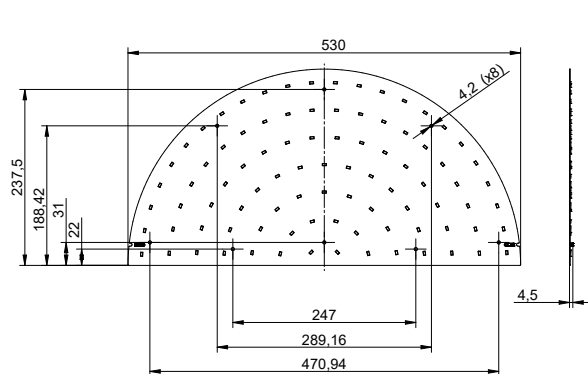
reported data based on LM80 LED data 10 000h

Dimensions

RdLED 530mm



RdLED 1/2 530mm



Mounting

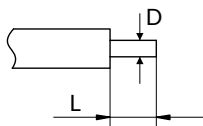
LED Modules cannot be exposed to tensile or compressive stresses. For this purpose it is necessary that the modules are assembled to a flat surface by only rounded head screws. Additionally plastic flat washer should be used to ensure creepage distance between screw's head and surface of the pcb. Max.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

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

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Wiring

Wire cross section and strip length:



D - wire cross section (solid and flexible wires)	Min	Max
	0.2mm ²	0.75mm ²
	AWG 24	AWG 18

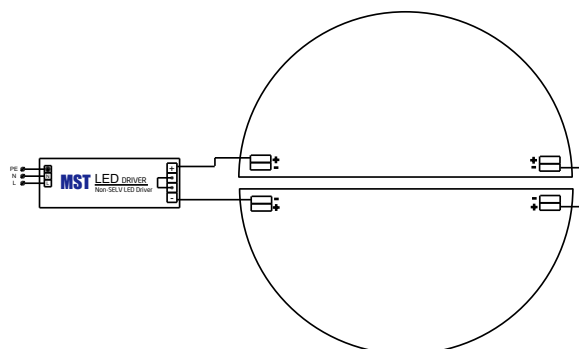
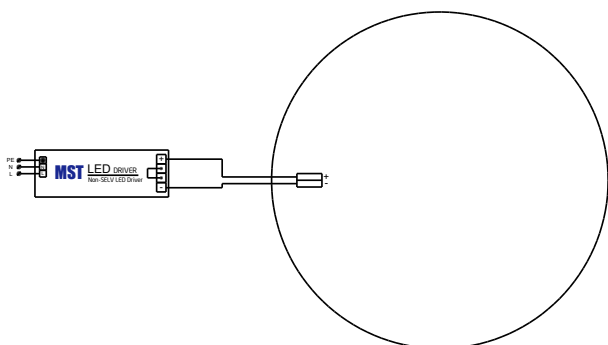
L - strip length	Min	Max
	8mm	9mm

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

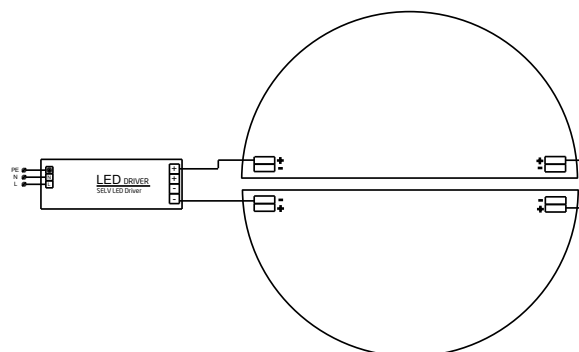
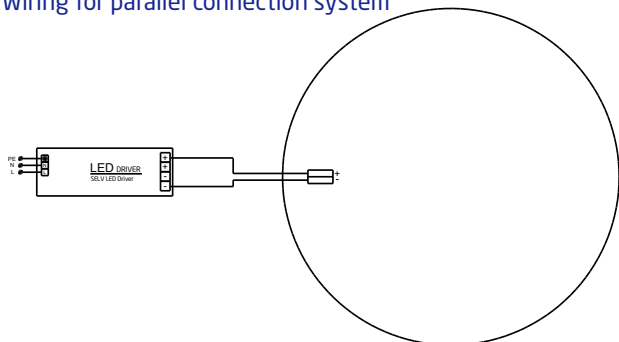


Connections

Wiring for series connection system



Wiring for parallel connection system



To prevent irregular luminous intensity in parallel connection use only LED modules from the same V-code group. V-code (e.g. "A", "B", "AB") is printed on the LED module and box label. Naming is not adequate to efficacy or luminous flux.

Energy Label / EPREL database

To obtain Energy Label for this product visit <https://eprel.ec.europa.eu/> and enter model identifier

Model identifier consists of 10 digits XXXX XXX XXX. It is printed directly on the LED module or on product label. This is the number you can see in EPREL database.

Ordering code consist of 12 digits XXXX XXX XXX46. Additional last two digits means packaging of the product.

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Ordering codes

Product name	Ordering code	Pieces per box	Pieces per pallet	Box dimensions [mm]
RdLED 530mm 4000lm 830 126V Opt G2	1010 117 55246	12	240	538 x 538 x 58
RdLED 530mm 4000lm 830 42V Opt G2	1010 117 55046	12	240	538 x 538 x 58
RdLED 530mm 4000lm 840 126V Opt G2	1010 117 55346	12	240	538 x 538 x 58
RdLED 530mm 4000lm 840 42V Opt G2	1010 117 55146	12	240	538 x 538 x 58
RdLED 1/2 530mm 3000lm 827-865 39V Opt G1	1010 117 41846	12	672	548 x 283 x 58