

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 CJ G4

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 CJ G4	1010 147 28446	2700	460	2881	2954	35	16	180	80	1200	C
		6500	460	3178	3259	35	16	198	80	1200	C
RdLED 530mm 4000lm 830 42V CJ G4	1010 147 82546	3000	540	3941	4041	37	20	198	180	3600	B
RdLED 530mm 4000lm 830 126V CJ G4	1010 147 82746		180	3941	4041	111	20	198	60	1200	B
RdLED 530mm 4000lm 840 42V CJ G4	1010 147 82646	4000	540	4098	4203	37	20	206	180	3600	B
RdLED 530mm 4000lm 840 126V CJ G4	1010 147 82846		180	4098	4203	111	20	206	60	1200	B

RdLED CRI 80 CN G3

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 CN G3	1010 147 28346	2700	470	2885	2986	35	17	175	80	1200	C
		6500	470	3130	3240	35	17	190	80	1200	C

RdLED CRI 80 LG 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 42V LG G2	1010 147 82146	3000	570	3954	4077	38	21	185	180	3600	C
RdLED 530mm 4000lm 830 126V LG G2	1010 147 82346		190	3954	4077	113	21	185	60	1200	C
RdLED 530mm 4000lm 840 42V LG G2	1010 147 82246	4000	570	4201	4332	38	21	196	180	3600	C
RdLED 530mm 4000lm 840 126V LG G2	1010 147 82446		190	4201	4332	113	21	196	60	1200	C

¹At nominal current and Tj

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%

Round LED modules 530mm & 1/2 530mm

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

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

Color coordinates

According to CIE 1931

Specification item	CIEx	CIEy
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
IP rating	No IP rating

Lumen maintenance

for LE G5, LG G2, LA G3

Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C	>100 000	>100 000	>100 000	>100 000	>100 000	>100 000
	55°C	>100 000	>100 000	>100 000	>100 000	>100 000	>100 000
	65°C	>100 000	>100 000	>100 000	>100 000	>100 000	>100 000
	75°C	>100 000	>100 000	>100 000	>100 000	>100 000	98 000
	85°C	>100 000	>100 000	>100 000	>100 000	81 000	73 000
If max	45°C	>100 000	>100 000	92 000	87 000	45 000	42 000
	55°C	>100 000	>100 000	92 000	87 000	45 000	42 000
	65°C	>100 000	>100 000	92 000	87 000	45 000	42 000
	75°C	>100 000	>100 000	92 000	87 000	45 000	42 000
	85°C	>100 000	>100 000	92 000	87 000	45 000	42 000

Calculated data based on LM80 LED data (12 000h)

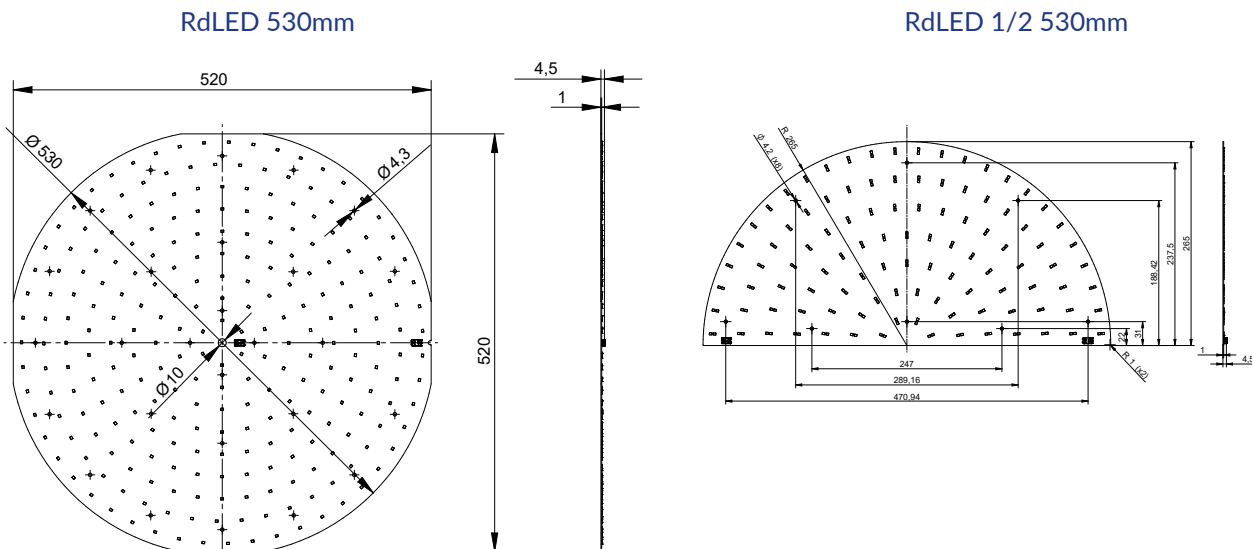
for CJ G4, CN G3

Forward current	Tp 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	>102 000	>102 000
	55°C	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	65°C	>102 000	>102 000	>102 000	>102 000	89 000	88 000
	75°C	>102 000	>102 000	>102 000	>102 000	75 000	74 000
	85°C	>102 000	>102 000	>102 000	>102 000	64 000	63 000
If max	45°C	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	55°C	>102 000	>102 000	>102 000	>102 000	97 000	96 000
	65°C	>102 000	>102 000	>102 000	>102 000	82 000	81 000
	75°C	>102 000	>102 000	>102 000	>102 000	69 000	68 000
	85°C	>102 000	>102 000	>102 000	>102 000	59 000	58 000

Reported data based on LM80 LED data (17 000h)

Round LED modules 530mm & 1/2 530mm

Dimensions



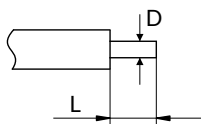
Mounting

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 (solid and flexible wires)	Min	Max
	0.2mm ²	0.75mm ²
	AWG 24	AWG 18

L - strip length	Min	Max
	8mm	9mm

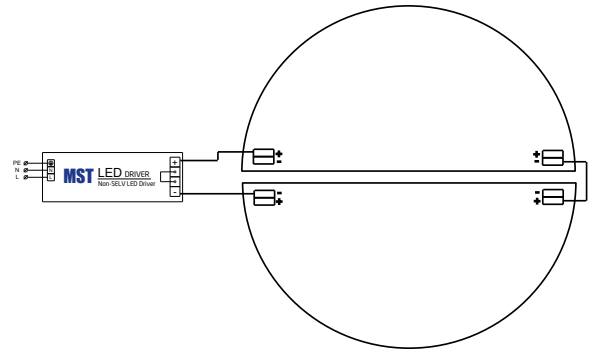
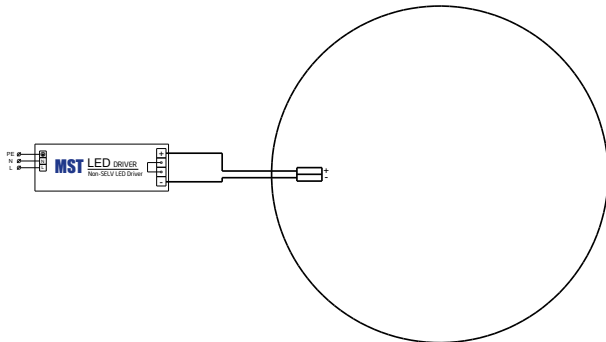
Opening for the release of wires from the top with release pin Electroterminal art. 881 167 884:



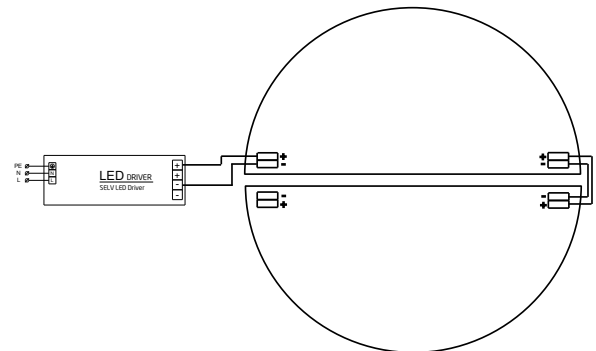
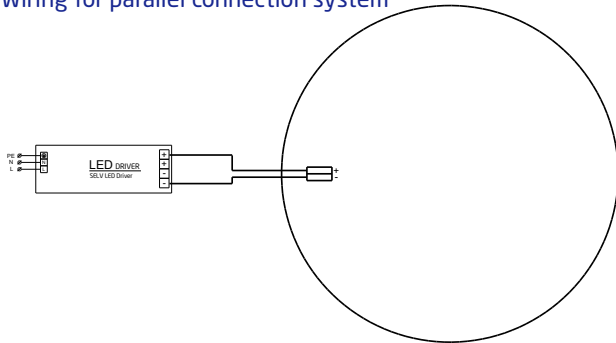
Round LED modules 530mm & 1/2 530mm

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.

Ordering codes

Product name	Ordering code	Pieces per box	Pieces per pallet	Box dimensions [mm]
RdLED 1/2 530mm 3000lm 827-865 39V CJ G4	1010 147 28446	12	672	553 x 283 x 58
RdLED 530mm 4000lm 830 42V CJ G4	1010 147 82546	12	336	548 x 548 x 58
RdLED 530mm 4000lm 830 126V CJ G4	1010 147 82746	12	336	548 x 548 x 58
RdLED 530mm 4000lm 840 42V CJ G4	1010 147 82646	12	336	548 x 548 x 58
RdLED 530mm 4000lm 840 126V CJ G4	1010 147 82846	12	336	548 x 548 x 58
RdLED 1/2 530mm 3000lm 827-865 39V CN G3	1010 147 28346	12	672	553 x 283 x 58
RdLED 530mm 4000lm 830 42V LG G2	1010 147 82146	12	336	548 x 548 x 58
RdLED 530mm 4000lm 830 126V LG G2	1010 147 82346	12	336	548 x 548 x 58
RdLED 530mm 4000lm 840 42V LG G2	1010 147 82246	12	336	548 x 548 x 58
RdLED 530mm 4000lm 840 126V LG G2	1010 147 82446	12	336	548 x 548 x 58