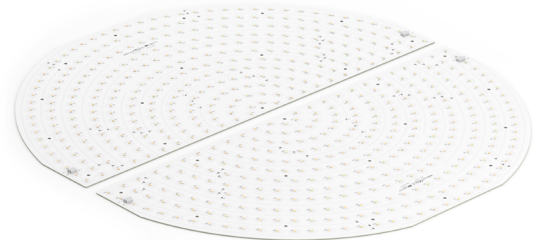


## Round LED modules 1/2 740mm

### 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 <sup>1</sup> φ [lm]	Useful luminous flux <sup>2</sup> [lm]	Voltage <sup>1</sup> Vf [V]	Power <sup>1</sup> P [W]	Efficacy <sup>1</sup> [lm/W]	Current minimum If min <sup>3</sup> [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 1/2 740mm 5000lm 830 45V CJ G4	1010 147 86546	3000	600	5004	5132	42	25	198	200	4000	B
RdLED 1/2 740mm 5000lm 830 90V CJ G4	1010 147 86746		300	5004	5132	84	25	198	100	2000	B
RdLED 1/2 740mm 5000lm 840 45V CJ G4	1010 147 86646	4000	600	5204	5337	42	25	206	200	4000	B
RdLED 1/2 740mm 5000lm 840 90V CJ G4	1010 147 86846		300	5204	5337	84	25	206	100	2000	B

### RdLED CRI 80 CN G3

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux <sup>1</sup> φ [lm]	Useful luminous flux <sup>2</sup> [lm]	Voltage <sup>1</sup> Vf [V]	Power <sup>1</sup> P [W]	Efficacy <sup>1</sup> [lm/W]	Current minimum If min <sup>3</sup> [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 1/2 740mm 5000lm 830 45V CN G3	1010 147 86146	3000	660	4923	5094	40	26	188	200	3000	C
RdLED 1/2 740mm 5000lm 830 90V CN G3	1010 147 86346		330	4923	5094	79	26	188	100	1500	C
RdLED 1/2 740mm 5000lm 840 45V CN G3	1010 147 86246	4000	660	5193	5374	40	26	198	200	3000	B
RdLED 1/2 740mm 5000lm 840 90V CN G3	1010 147 86446		330	5193	5374	79	26	198	100	1500	B

### RdLED CRI 90 EH1.1 G3

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux <sup>1</sup> φ [lm]	Useful luminous flux <sup>2</sup> [lm]	Voltage <sup>1</sup> Vf [V]	Power <sup>1</sup> P [W]	Efficacy <sup>1</sup> [lm/W]	Current minimum If min <sup>3</sup> [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 1/2 740mm 5000lm 930 45V EH1.1 G3	1010 147 86946	3000	680	4883	5032	41	28	175	200	3000	C
RdLED 1/2 740mm 5000lm 930 90V EH1.1 G3	1010 147 87146		340	4883	5032	82	28	175	100	1500	C
RdLED 1/2 740mm 5000lm 940 45V EH1.1 G3	1010 147 87046	4000	680	5188	5346	41	28	186	200	3000	C
RdLED 1/2 740mm 5000lm 940 90V EH1.1 G3	1010 147 87246		340	5188	5346	82	28	186	100	1500	C

<sup>1</sup>At nominal current and T<sub>p</sub>

<sup>2</sup>At nominal current and 25°C

<sup>3</sup>It 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 1/2 740mm

### 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	CIE <sub>x</sub>	CIE <sub>y</sub>
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	>102 000	88 000
	75°C	>102 000	>102 000	>102 000	>102 000	89 000	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 1/2 740mm

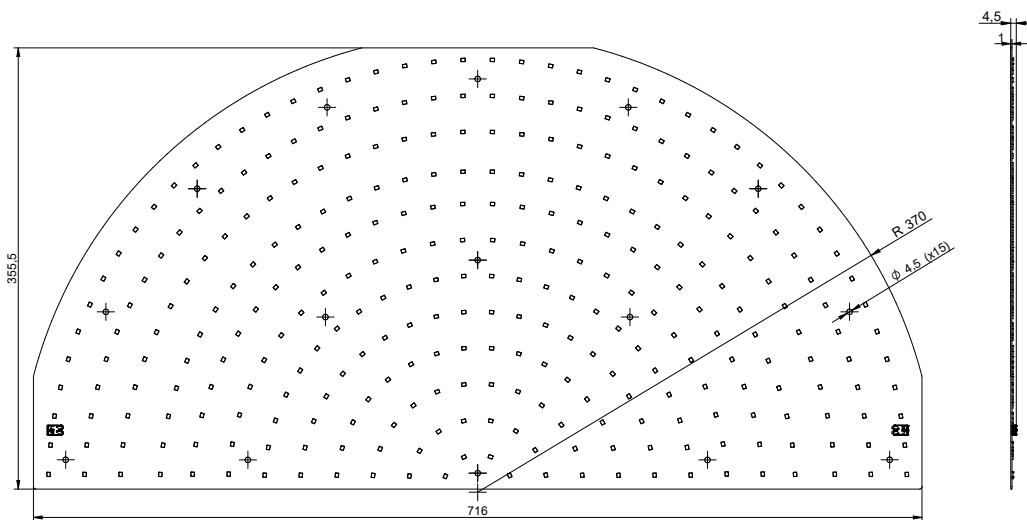
### Lumen maintenance

for EH1.1 G3

Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C	>72 000	>72 000	>72 000	>72 000	>72 000	>72 000
	55°C	>72 000	>72 000	>72 000	>72 000	>72 000	>72 000
	65°C	>72 000	>72 000	>72 000	>72 000	>72 000	>72 000
	75°C	>72 000	>72 000	>72 000	>72 000	>72 000	>72 000
	85°C	>72 000	>72 000	>72 000	>72 000	>72 000	>72 000
If max	45°C	>72 000	>72 000	67 000	62 000	30 000	29 000
	55°C	>72 000	>72 000	66 000	61 000	30 000	28 000
	65°C	>72 000	>72 000	65 000	60 000	29 000	27 000
	75°C	>72 000	>72 000	65 000	59 000	29 000	26 000
	85°C	>72 000	>72 000	64 000	58 000	28 000	26 000

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

### Dimensions



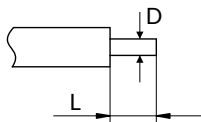
### Mounting

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 <sup>2</sup>	0.75mm <sup>2</sup>
	AWG 24	AWG 18

L - strip length	Min	Max
	8mm	9mm

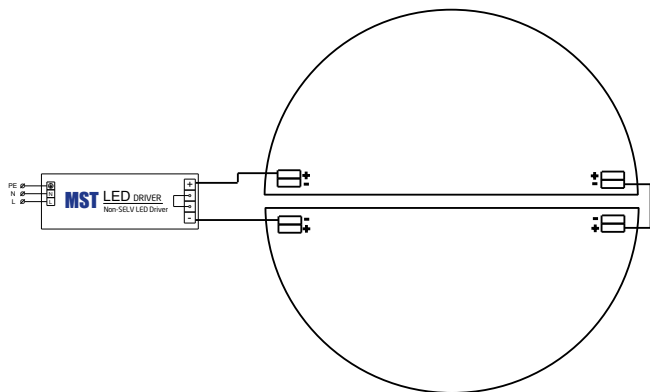
Opening for the release of wires from the top with release pin Electroterminal art. 881 167 884:



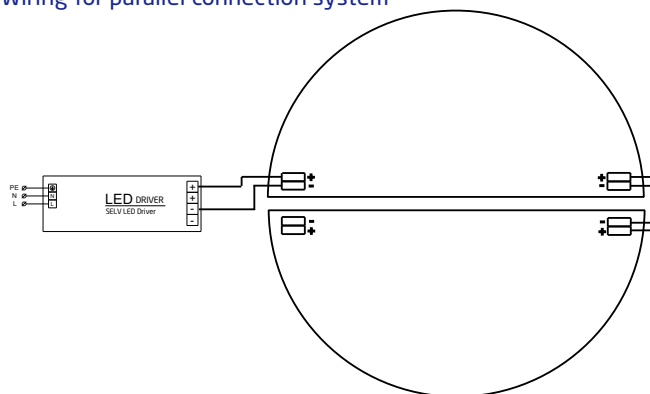
## Round LED modules 1/2 740mm

### 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 740mm 5000lm 830 45V CJ G4	1010 147 86546	10	300	733 x 368 x 58
RdLED 1/2 740mm 5000lm 830 90V CJ G4	1010 147 86746	10	300	733 x 368 x 58
RdLED 1/2 740mm 5000lm 840 45V CJ G4	1010 147 86646	10	300	733 x 368 x 58
RdLED 1/2 740mm 5000lm 840 90V CJ G4	1010 147 86846	10	300	733 x 368 x 58
RdLED 1/2 740mm 5000lm 830 45V CN G3	1010 147 86146	10	300	733 x 368 x 58
RdLED 1/2 740mm 5000lm 830 90V CN G3	1010 147 86346	10	300	733 x 368 x 58
RdLED 1/2 740mm 5000lm 840 45V CN G3	1010 147 86246	10	300	733 x 368 x 58
RdLED 1/2 740mm 5000lm 840 90V CN G3	1010 147 86446	10	300	733 x 368 x 58
RdLED 1/2 740mm 5000lm 930 45V EH1.1 G3	1010 147 86946	10	300	733 x 368 x 58
RdLED 1/2 740mm 5000lm 930 90V EH1.1 G3	1010 147 87146	10	300	733 x 368 x 58
RdLED 1/2 740mm 5000lm 940 45V EH1.1 G3	1010 147 87046	10	300	733 x 368 x 58
RdLED 1/2 740mm 5000lm 940 90V EH1.1 G3	1010 147 87246	10	300	733 x 368 x 58