

Linear LED modules 1100lm/1ft 2C+R

Product description

- Long life-time
- Built-in, constant current LED module
- Re-workable push-in terminals enabling easy connection
- Compliance and approval: CE, ENEC
- 2C - two connectors for series system, also recognized as a high voltage system - non-SELV
- Available CCT from 2200K to 6500K and CRI 80, 90 and 95



Zhaga

LinLED CRI 80 Optimum G3

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]
LinLED 1120x20mm 4400lm 830 2C+R 144V Opt G3	1010 117 84346	3000	175	4132	128	22	185	600
LinLED 1400x20mm 5500lm 830 2C+R 180V Opt G3	1010 117 86446		175	5165	160	28	185	600
LinLED 1120x20mm 4400lm 840 2C+R 144V Opt G3	1010 117 84446	4000	175	4477	128	22	200	600
LinLED 1400x20mm 5500lm 840 2C+R 180V Opt G3	1010 117 86546		175	5596	160	28	200	600

LinLED CRI 80 Optimum G2

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]
LinLED 1120x20mm 4400lm 830 2C+R 144V Opt G2	1010 117 54046	3000	185	4275	135	25	171	450
LinLED 1400x20mm 5500lm 830 2C+R 180V Opt G2	1010 117 54246		185	5343	169	31	171	450
LinLED 1120x20mm 4400lm 840 2C+R 144V Opt G2	1010 117 54146	4000	185	4493	135	25	180	450
LinLED 1400x20mm 5500lm 840 2C+R 180V Opt G2	1010 117 54346		185	5617	169	31	180	450

LinLED CRI 80 Basic G1

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]
LinLED 1120x20mm 4400lm 830 2C+R 144V Bsc G1	1010 117 54446	3000	210	4258	136	29	149	450
LinLED 1400x20mm 5500lm 830 2C+R 180V Bsc G1	1010 117 54646		210	5322	170	36	149	450
LinLED 1120x20mm 4400lm 840 2C+R 144V Bsc G1	1010 117 54546	4000	210	4475	136	29	157	450
LinLED 1400x20mm 5500lm 840 2C+R 180V Bsc G1	1010 117 54746		210	5594	170	36	157	450

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

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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	[V]	built-in
Energy Efficiency Class		A++
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	Yes
CE	Yes
RoHS	Yes
REACH	Yes
Zhaga	Comply with Book 7
IP rating	No IP rating

Lumen maintenance

LinLED 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	55 000
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	57 000
	65°C	>60 000	>60 000	>60 000	>60 000	>60 000	51 000

reported data based on LM80 LED data (10 000h)

LinLED CRI 80

only for LinLED CRI 80 Optimum G3

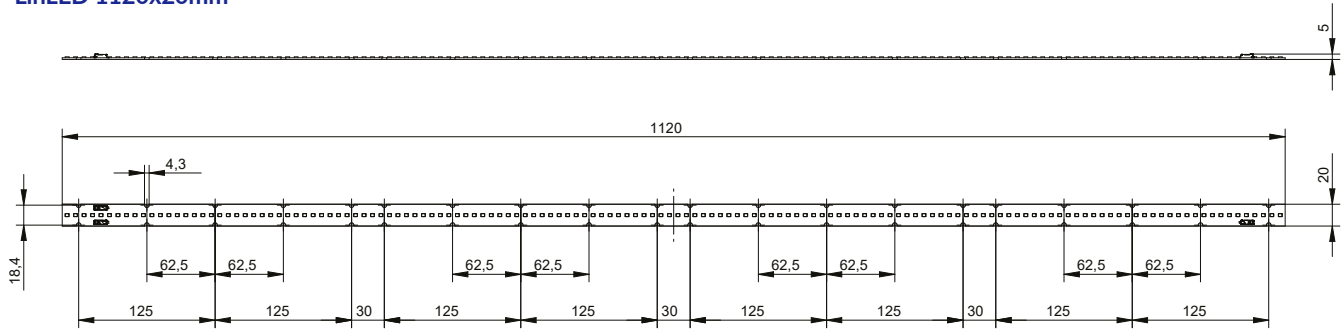
Forward current	Tp temperature	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C	>60 000	>60 000	>60 000	>60 000	45 000	41 000
	65°C	>60 000	>60 000	>60 000	>60 000	35 000	30 000
	85°C	>60 000	>60 000	>60 000	>60 000	30 000	25 000
If max	45°C	>60 000	>60 000	>60 000	>60 000	40 000	32 000
	65°C	>60 000	>60 000	>60 000	>60 000	30 000	27 000
	85°C	>60 000	>60 000	>60 000	>55 000	25 000	25 000

reported data based on LM80 LED data (10 000h)

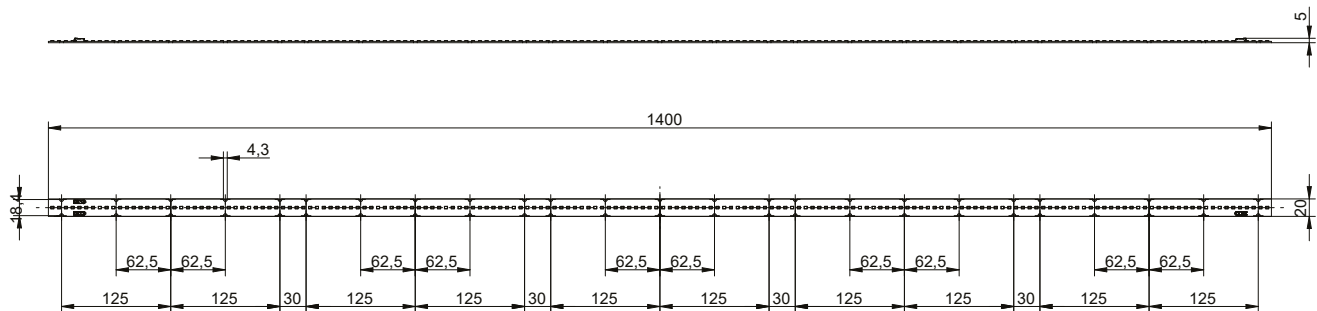
Linear LED modules 1100lm/1ft 2C+R

Dimensions

LinLED 1120x20mm



LinLED 1400x20mm



Mounting

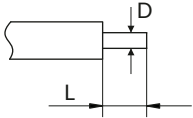
LED Modules cannot be exposed to tensile or compressive stresses. For this purpose it is necessary that the modules are assembled to a flat surface by only rounded head screws. Additionally plastic flat washer should be used to ensure creepage distance between screw's head and surface of the pcb. Max. 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 <i>solid and flexible wires</i>	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:

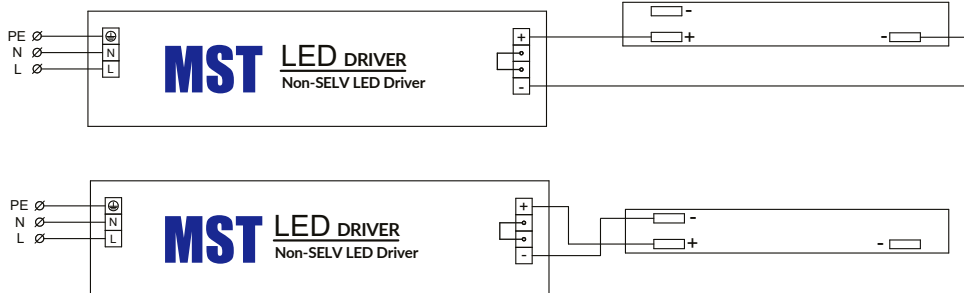


Connections

Wiring for serial connection system with return path (2C+R)

$$I_{\text{driver}} = I_{\text{LED module}}$$

$$U_{\text{driver}} = U_{\text{LED module}}$$



Ordering codes

Specification item	Ordering code	Pieces per box	Pieces per pallet	Box dimensions [mm]
LinLED 1120x20mm 4400lm 830 2C+R 144V Opt G2	1010 117 54046	132	3960	1138 x 236 x 70
LinLED 1400x20mm 5500lm 830 2C+R 180V Opt G2	1010 117 54246	132	3960	1418 x 236 x 70
LinLED 1120x20mm 4400lm 840 2C+R 144V Opt G2	1010 117 54146	132	3960	1138 x 236 x 70
LinLED 1400x20mm 5500lm 840 2C+R 180V Opt G2	1010 117 54346	132	3960	1418 x 236 x 70
LinLED 1120x20mm 4400lm 830 2C+R 144V Bsc G1	1010 117 54446	132	3960	1138 x 236 x 70
LinLED 1400x20mm 5500lm 830 2C+R 180V Bsc G1	1010 117 54646	132	3960	1418 x 236 x 70
LinLED 1120x20mm 4400lm 840 2C+R 144V Bsc G1	1010 117 54546	132	3960	1138 x 236 x 70
LinLED 1400x20mm 5500lm 840 2C+R 180V Bsc G1	1010 117 54746	132	3960	1418 x 236 x 70
LinLED 1120x20mm 4400lm 830 2C+R 144V Opt G3	1010 117 84346	132	3960	1138 x 236 x 70
LinLED 1400x20mm 5500lm 830 2C+R 180V Opt G3	1010 117 86446	132	3960	1418 x 236 x 70
LinLED 1120x20mm 4400lm 840 2C+R 144V Opt G3	1010 117 84446	132	3960	1138 x 236 x 70
LinLED 1400x20mm 5500lm 840 2C+R 180V Opt G3	1010 117 86546	132	3960	1418 x 236 x 70