

Linear LED modules 1100lm 12V per 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
- 2C+R - two connectors for series system, with integrated return path (two additional connectors) also recognized as a high voltage system - non-SELV
- Available CCT from 2200K to 6500K and CRI 80, 90
- Perfect solution for long linear lighting systems (trunking or long profiles) with easy wiring
- Low voltage of modules provides great flexibility in selection of LED Drivers



LinLED CRI 80 Opt 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
LinLED 70x24mm 275lm 830 2C+R 3V Opt G1	1010 127 71146	3000	560	283	294	2.8	1.5	183	80	1200	C
LinLED 140x24mm 550lm 830 2C+R 6V Opt G1	1010 127 71246		560	567	588	5.5	3.1	183	80	1200	C
LinLED 280x24mm 1100lm 830 2C+R 12V Opt G1	1010 127 71346		560	1134	1175	11	6.2	183	80	1200	C
LinLED 560x24mm 2200lm 830 2C+R 24V Opt G1	1010 127 71446		560	2268	2350	22	12	183	80	1200	C
LinLED 1120x24mm 4400lm 830 2C+R 48V Opt G1	1010 127 71546		560	4536	4700	44	25	183	80	1200	C
LinLED 1400x24mm 5500lm 830 2C+R 60V Opt G1	1010 127 71646		560	5670	5876	55	31	183	80	1200	C
LinLED 70x24mm 275lm 840 2C+R 3V Opt G1	1010 127 71746	4000	560	296	307	2.8	1.5	191	80	1200	C
LinLED 140x24mm 550lm 840 2C+R 6V Opt G1	1010 127 71846		560	592	613	5.5	3.1	191	80	1200	C
LinLED 280x24mm 1100lm 840 2C+R 12V Opt G1	1010 127 71946		560	1183	1226	11	6.2	191	80	1200	C
LinLED 560x24mm 2200lm 840 2C+R 24V Opt G1	1010 127 72046		560	2366	2452	22	12	191	80	1200	C
LinLED 1120x24mm 4400lm 840 2C+R 48V Opt G1	1010 127 72146		560	4733	4905	44	25	191	80	1200	C
LinLED 1400x24mm 5500lm 840 2C+R 60V Opt G1	1010 127 72246		560	5916	6131	55	31	191	80	1200	C

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	No
CE	Yes
RoHS	Yes
REACH	Yes
Zhaga	Comply with Book 7
IP rating	No IP rating

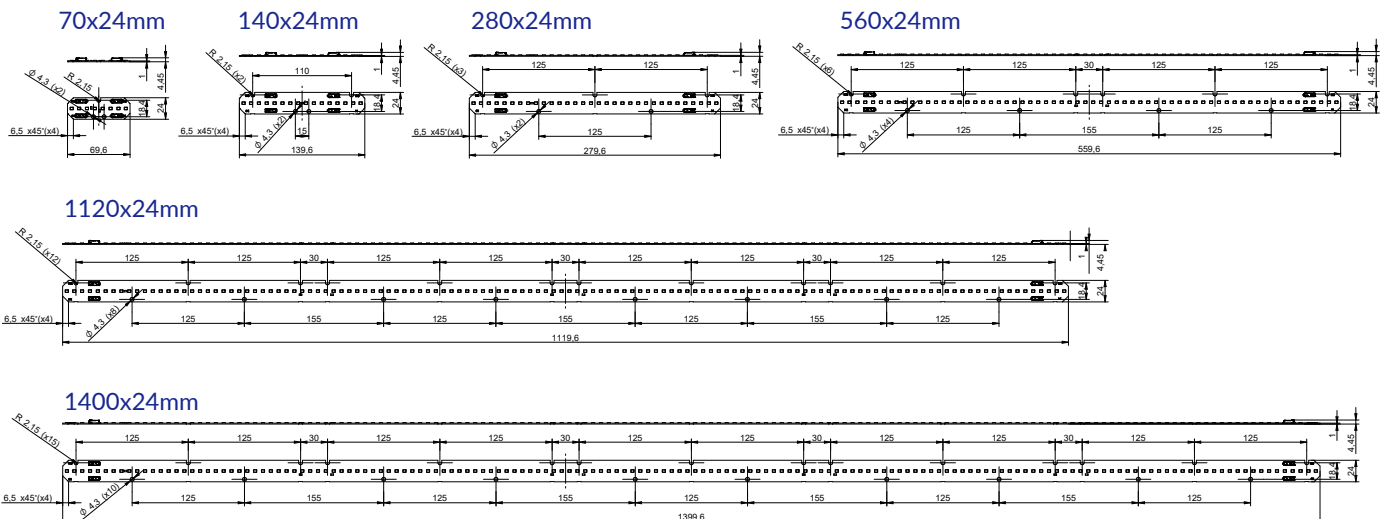
Lumen maintenance

LinLED CRI 80

Forward current	T _p 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	71 000	61 000
	55°C	>100 000	>100 000	>100 000	>100 000	71 000	61 000
	65°C	>100 000	>100 000	>100 000	>100 000	69 000	60 000
	75°C	>100 000	>100 000	>100 000	>100 000	68 000	59 000
	85°C	>100 000	>100 000	>100 000	>100 000	67 000	58 000
If max	45°C	>100 000	>100 000	>100 000	>100 000	51 000	39 000
	55°C	>100 000	>100 000	>100 000	>100 000	51 000	39 000
	65°C	>100 000	>100 000	>100 000	>100 000	48 000	37 000
	75°C	>100 000	>100 000	>100 000	>100 000	45 000	35 000
	85°C	>100 000	>100 000	>100 000	69 000	43 000	34 000

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

Dimensions



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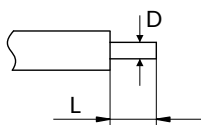
Mounting

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:

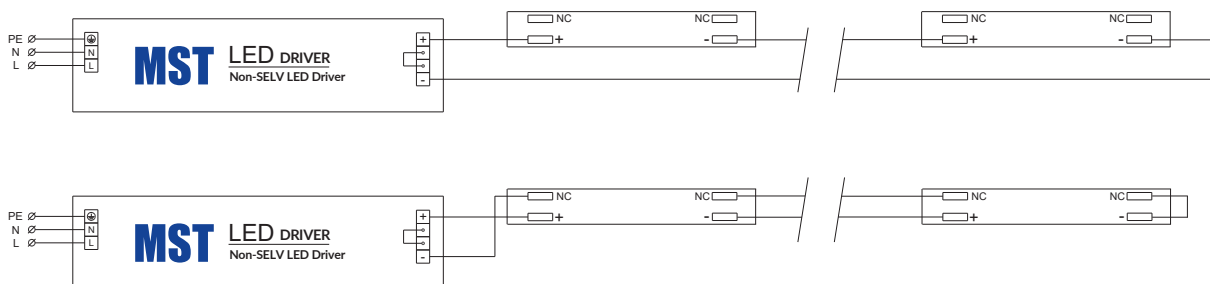


Connections

Max number of modules	Unit	Series	Parallel
LinLED 70x24mm	[pcs]	112	-
LinLED 140x24mm	[pcs]	56	-
LinLED 280x24mm	[pcs]	28	-
LinLED 560x24mm	[pcs]	14	-
LinLED 1120x24mm	[pcs]	7	-
LinLED 1400x24mm	[pcs]	5	-

You can combine different lengths of LED modules so that the maximum length does not exceed 7840mm

Wiring for series connection system with return path



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]
LinLED 70x24mm 275lm 830 2C+R 3V Opt G1	1010 127 71146	320	76800	150 x 266 x 83
LinLED 140x24mm 550lm 830 2C+R 6V Opt G1	1010 127 71246	108	24624	248 x 175 x 66
LinLED 280x24mm 1100lm 830 2C+R 12V Opt G1	1010 127 71346	150	18000	298 x 266 x 83
LinLED 560x24mm 2200lm 830 2C+R 24V Opt G1	1010 127 71446	160	9600	600 x 261 x 83
LinLED 1120x24mm 4400lm 830 2C+R 48V Opt G1	1010 127 71546	132	3960	1138 x 236 x 70
LinLED 1400x24mm 5500lm 830 2C+R 60V Opt G1	1010 127 71646	132	3960	1418 x 236 x 70
LinLED 70x24mm 275lm 840 2C+R 3V Opt G1	1010 127 71746	320	76800	150 x 266 x 83
LinLED 140x24mm 550lm 840 2C+R 6V Opt G1	1010 127 71846	108	24624	248 x 175 x 66
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LinLED 1120x24mm 4400lm 840 2C+R 48V Opt G1	1010 127 72146	132	3960	1138 x 236 x 70
LinLED 1400x24mm 5500lm 840 2C+R 60V Opt G1	1010 127 72246	132	3960	1418 x 236 x 70