

## Linear LED modules 280x24mm LINNEA-GC

A linear solution for premium class indoor lighting. Optimized for LEDi's LINNEA-GC optics.

### 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 2700K to 6500K and CRI 80, 90



### LinLED CRI 80 Optimum G1

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
LinLED 280x24mm 1100lm 830 2C 30V Opt G1	1010 117 46546	3000	220	1089	1120	28	6.2	174	30	450	C
LinLED 280x24mm 1100lm 840 2C 30V Opt G1	1010 117 46646	4000	220	1137	1170	28	6.2	182	30	450	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%

### Temperature & humidity

Specification item	Unit	Value
T <sub>p</sub>	[°C]	45
T <sub>p</sub> rated	[°C]	65
T <sub>c</sub>	[°C]	85
Relative humidity (non-condensing)	[%]	5 ... 85
Storage ambient temperature	[°C]	-25 ... +85
Storage relative humidity (non-condensing)	[%]	5 ... 85

T<sub>p</sub> - Temperature related to the performance parameters of the LED modules

T<sub>p</sub> rated - Maximum operating temperature to which the rated performance characteristics are declared

T<sub>c</sub> - Highest permissible value for safe operation

### Technical data

Specification item	Unit	Value
Classification acc. to IEC 62031		built-in
Working voltage	[Vdc]	320
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

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### Certificates & standards

Specification item	Compliant
ENEC	Yes
CE	Yes
RoHS	Yes
REACH	Yes
Zhaga	Comply with Book 7
IP rating	No IP rating

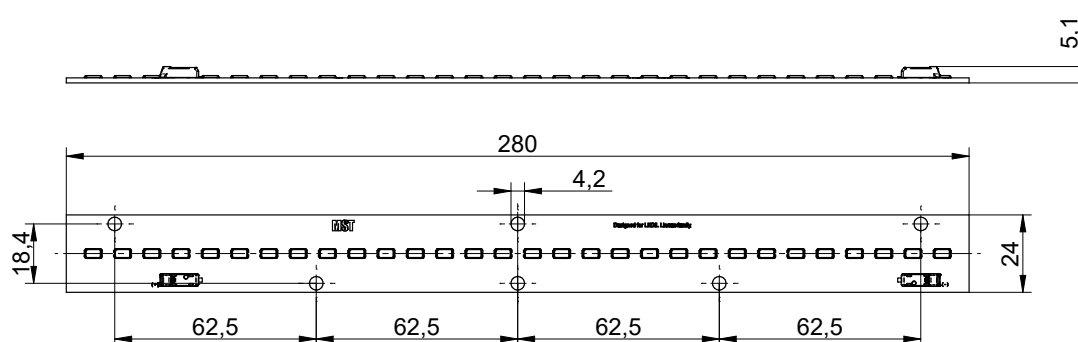
### Lumen maintenance

### LinLED CRI 80

Forward current	Tp 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	44 000	37 000
	55°C	>72 000	>72 000	>72 000	>72 000	44 000	37 000
	65°C	>72 000	>72 000	>72 000	63 000	37 000	30 000
If max	45°C	>72 000	>72 000	>72 000	>72 000	42 000	35 000
	55°C	>72 000	>72 000	>72 000	>72 000	42 000	35 000
	65°C	>72 000	>72 000	>72 000	57 000	35 000	28 000

reported data based on LM80 LED data 12 000h

### Dimensions



### Mounting

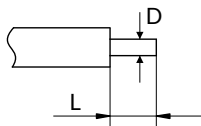
LED Modules cannot be exposed to tensile or compressive stresses. For this purpose it is necessary that the modules are assembled to a flat surface by only rounded head screws. Additionally plastic flat washer should be used to ensure creepeage distance between screw's head and surface of the pcb. Max. 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 <sup>2</sup>	0.75mm <sup>2</sup>
	AWG 24	AWG 18

L - strip length	Min	Max
	8mm	9mm

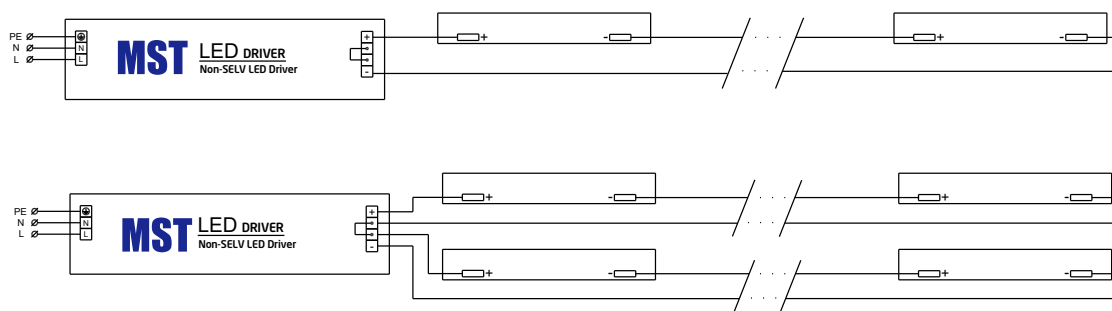
Opening for the release of wires from the top with release pin Electroterminal art. 881 167 884:



### Connections

Max number of modules	Unit	Series	Parallel
LinLED 280x24mm...	[pcs]	11	-

Wiring for series connection system (2C)



### Ordering codes

Product name	Ordering code	Pieces per box	Pieces per pallet	Box dimensions [mm]
LinLED 280x24mm 1100lm 830 2C 30V Opt G1	1010 117 46546	135	14580	298 x 238 x 88
LinLED 280x24mm 1100lm 840 2C 30V Opt G1	1010 117 46646	135	14580	298 x 238 x 88