

Linear LED modules 550lm 18V per 1ft 2C

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
- Other CCT and CRI on request



LinLED CRI 80 Optimum 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
LinLED 140x20mm 275lm 830 2C 9V Opt G4	1010 137 34046	3000	175	270	277	8.0	1.4	193	30	900	C
LinLED 280x20mm 550lm 830 2C 18V Opt G4	1010 137 34146		175	540	554	16	2.8	193	30	900	C
LinLED 560x20mm 1100lm 830 2C 36V Opt G4	1010 137 34246		175	1080	1107	32	5.6	193	30	900	C
LinLED 140x20mm 275lm 840 2C 9V Opt G4	1010 137 34346	4000	175	281	288	8.0	1.4	201	30	900	B
LinLED 280x20mm 550lm 840 2C 18V Opt G4	1010 137 34446		175	561	576	16	2.8	201	30	900	B
LinLED 560x20mm 1100lm 840 2C 36V Opt G4	1010 137 34546		175	1123	1151	32	5.6	201	30	900	B

LinLED CRI 80 Optimum G3.1

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 140x20mm 275lm 840 2C 9V Opt G3.1	1010 127 76746	4000	175	278	289	8.2	1.4	193	30	450	B
LinLED 280x20mm 550lm 840 2C 18V Opt G3.1	1010 127 76846		175	557	577	16	2.9	193	30	450	C
LinLED 560x20mm 1100lm 840 2C 36V Opt G3.1	1010 127 76946		175	1114	1154	33	5.8	193	30	450	C

LinLED CRI 80 Optimum 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
LinLED 140x20mm 275lm 830 2C 9V Opt G2	1010 117 31046	3000	185	263	272	8.4	1.6	169	30	450	D
LinLED 280x20mm 550lm 830 2C 18V Opt G2	1010 117 31446		185	526	545	17	3.1	169	30	450	C
LinLED 560x20mm 1100lm 830 2C 36V Opt G2	1010 117 32046		185	1053	1089	34	6.2	169	30	450	C
LinLED 140x20mm 275lm 840 2C 9V Opt G2	1010 117 31146	4000	185	277	286	8.4	1.6	177	30	450	C
LinLED 280x20mm 550lm 840 2C 18V Opt G2	1010 117 31546		185	553	572	17	3.1	177	30	450	C
LinLED 560x20mm 1100lm 840 2C 36V Opt G2	1010 117 32146		185	1106	1144	34	6.2	177	30	450	C

LinLED CRI 90 Optimum 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
LinLED 140x20mm 275lm 927 2C 9V Opt G2	1010 117 33846	2700	210	252	262	8.5	1.8	141	30	450	E
LinLED 280x20mm 550lm 927 2C 18V Opt G2	1010 117 34746		210	482	499	17	3.6	135	30	450	E
LinLED 560x20mm 1100lm 927 2C 36V Opt G2	1010 117 35046		210	1010	1047	34	7.1	141	30	450	E
LinLED 140x20mm 275lm 930 2C 9V Opt G2	1010 117 33946	3000	210	271	280	8.5	1.8	151	30	450	D
LinLED 280x20mm 550lm 930 2C 18V Opt G2	1010 117 34846		210	541	561	17	3.6	151	30	450	D
LinLED 560x20mm 1100lm 930 2C 36V Opt G2	1010 117 35146		210	1082	1121	34	7.1	151	30	450	D
LinLED 140x20mm 275lm 940 2C 9V Opt G2	1010 117 34046	4000	210	280	290	8.5	1.8	156	30	450	D
LinLED 280x20mm 550lm 940 2C 18V Opt G2	1010 117 34946		210	559	579	17	3.6	156	30	450	D
LinLED 560x20mm 1100lm 940 2C 36V Opt G2	1010 117 35246		210	1118	1159	34	7.1	156	30	450	D

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LinLED CRI 80 Basic 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 140x20mm 275lm 830 2C 9V Bsc G1	1010 117 36446		210	275	284	8.5	1.8	154	30	450	D
LinLED 280x20mm 550lm 830 2C 18V Bsc G1	1010 117 36846	3000	210	549	568	17	3.6	154	30	450	D
LinLED 560x20mm 1100lm 830 2C 36V Bsc G1	1010 117 37446		210	1099	1137	34	7.1	154	30	450	D

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

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

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Lumen maintenance

LinLED CRI 80

for LinLED CRI 80 Optimum G2&LinLED CRI80 Bsc G1

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	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	49 000	38 000	25 000
	55°C	>100 000	>100 000	>100 000	49 000	38 000	25 000
	65°C	>100 000	>100 000	>100 000	67 000	58 000	32 000
	75°C	>100 000	>100 000	>100 000	61 000	49 000	29 000
	85°C	>100 000	>100 000	>100 000	60 000	40 000	29 000

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

LinLED CRI 90

for LinLED CRI 90 Optimum G2

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	65 000	>60 000
	55°C	>100 000	>100 000	>100 000	>100 000	52 000	51 000
	65°C	>100 000	>100 000	85 000	79 000	41 000	36 000
If max	45°C	82 000	69 000	52 000	49 000	29 000	28 000
	55°C	73 000	63 000	47 000	44 000	25 000	24 000
	65°C	64 000	58 000	41 000	38 000	22 000	19 000

calculated data based on LM80 LED data 10 000h

LinLED CRI 80

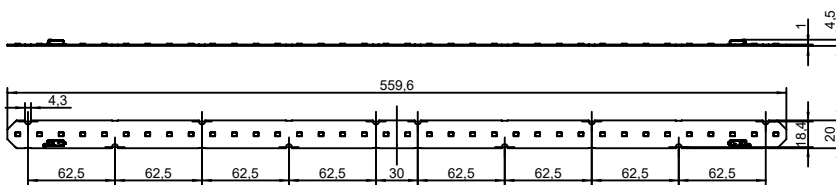
for LinLED CRI 80 Optimum G4 & G5

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	75 000
	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	90 000	89 000
	65°C	>102 000	>102 000	>102 000	>102 000	77 000	76 000
	75°C	>102 000	>102 000	>102 000	>102 000	65 000	64 000
	85°C	>102 000	>102 000	>102 000	>102 000	55 000	54 000

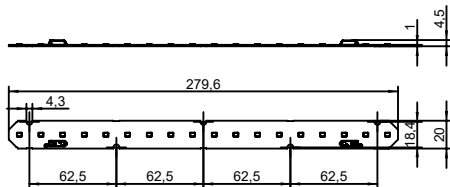
calculated data based on LM80 LED data 12000h

Dimensions

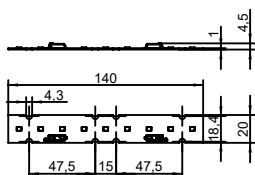
LinLED 560x20mm



LinLED 280x20mm



LinLED 140x20mm



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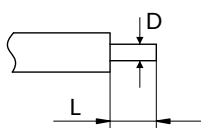
Mounting

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:

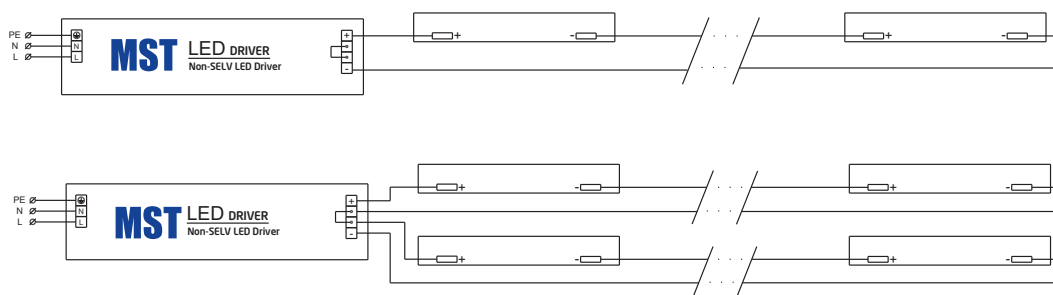


Connections

Max number of modules	Unit	Series	Parallel
LinLED 140x20mm	[pcs]	36	-
LinLED 280x20mm	[pcs]	18	-
LinLED 560x20mm	[pcs]	9	-

You can combine different lengths of LED modules so that the maximum length does not exceed 5040mm

Wiring for series connection system (2C)



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 140x20mm 275lm 830 2C 9V Opt G4	1010 137 34046	154	29260	248 x 175 x 66
LinLED 280x20mm 550lm 830 2C 18V Opt G4	1010 137 34146	204	24480	300 x 266 x 83
LinLED 560x20mm 1100lm 830 2C 36V Opt G4	1010 137 34246	204	12240	603 x 266 x 83
LinLED 140x20mm 275lm 840 2C 9V Opt G4	1010 137 34346	154	29260	248 x 175 x 66
LinLED 280x20mm 550lm 840 2C 18V Opt G4	1010 137 34446	204	24480	300 x 266 x 83
LinLED 560x20mm 1100lm 840 2C 36V Opt G4	1010 137 34546	204	12240	603 x 266 x 83
LinLED 140x20mm 275lm 840 2C 9V Opt G3.1	1010 127 76746	154	29260	248 x 175 x 66
LinLED 280x20mm 550lm 840 2C 18V Opt G3.1	1010 127 76846	204	24480	300 x 266 x 83
LinLED 560x20mm 1100lm 840 2C 36V Opt G3.1	1010 127 76946	204	12240	603 x 266 x 83
LinLED 140x20mm 275lm 830 2C 9V Opt G2	1010 117 31046	154	29260	248 x 175 x 66
LinLED 280x20mm 550lm 830 2C 18V Opt G2	1010 117 31446	204	24480	300 x 266 x 83
LinLED 560x20mm 1100lm 830 2C 36V Opt G2	1010 117 32046	204	12240	603 x 266 x 83
LinLED 140x20mm 275lm 840 2C 9V Opt G2	1010 117 31146	154	29260	248 x 175 x 66
LinLED 280x20mm 550lm 840 2C 18V Opt G2	1010 117 31546	204	24480	300 x 266 x 83
LinLED 560x20mm 1100lm 840 2C 36V Opt G2	1010 117 32146	204	12240	603 x 266 x 83
LinLED 140x20mm 275lm 927 2C 9V Opt G2	1010 117 33846	154	29260	248 x 175 x 66
LinLED 280x20mm 550lm 927 2C 18V Opt G2	1010 117 34746	204	24480	300 x 266 x 83
LinLED 560x20mm 1100lm 927 2C 36V Opt G2	1010 117 35046	204	12240	603 x 266 x 83
LinLED 140x20mm 275lm 930 2C 9V Opt G2	1010 117 33946	154	29260	248 x 175 x 66
LinLED 280x20mm 550lm 930 2C 18V Opt G2	1010 117 34846	204	24480	300 x 266 x 83
LinLED 560x20mm 1100lm 930 2C 36V Opt G2	1010 117 35146	204	12240	603 x 266 x 83
LinLED 140x20mm 275lm 940 2C 9V Opt G2	1010 117 34046	154	29260	248 x 175 x 66
LinLED 280x20mm 550lm 940 2C 18V Opt G2	1010 117 34946	204	24480	300 x 266 x 83
LinLED 560x20mm 1100lm 940 2C 36V Opt G2	1010 117 35246	204	12240	603 x 266 x 83
LinLED 140x20mm 275lm 830 2C 9V Bsc G1	1010 117 36446	154	29260	248 x 175 x 66
LinLED 280x20mm 550lm 830 2C 18V Bsc G1	1010 117 36846	204	24480	300 x 266 x 83
LinLED 560x20mm 1100lm 830 2C 36V Bsc G1	1010 117 37446	204	12240	603 x 266 x 83