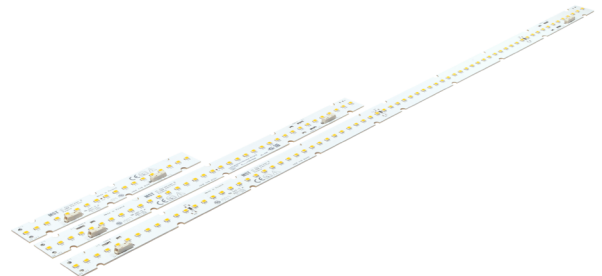


Linear LED modules 1100lm/1ft 2C

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
- Available CCT from 2200K to 6500K and CRI 80, 90



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 140x20mm 550lm 830 2C 18V Opt G3	1010 117 76146	3000	175	511	16	2.8	182	600
LinLED 280x20mm 1100lm 830 2C 36V Opt G3	1010 117 76246		175	1022	32	5.6	182	600
LinLED 560x20mm 2200lm 830 2C 72V Opt G3	1010 117 76346		175	2044	64	11	182	600
LinLED 140x20mm 550lm 840 2C 18V Opt G3	1010 117 76446	4000	175	562	16	2.8	200	600
LinLED 280x20mm 1100lm 840 2C 36V Opt G3	1010 117 75046		175	1124	32	5.6	200	600
LinLED 560x20mm 2200lm 840 2C 72V Opt G3	1010 117 75146		175	2247	64	11	200	600

LinLED 24V/1ft 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 140x20mm 550lm 830 2C 12V Opt G3	1010 127 09246	3000	280	536	11	3.1	175	800
LinLED 280x20mm 1100lm 830 2C 24V Opt G3	1010 127 09346		280	107	22	6.1	175	800
LinLED 560x20mm 2200lm 830 2C 48V Opt G3	1010 127 09446		280	2146	44	12	175	800
LinLED 140x20mm 550lm 840 2C 12V Opt G3	1010 127 09546	4000	280	581	11	3.1	190	800
LinLED 280x20mm 1100lm 840 2C 24V Opt G3	1010 127 09646		280	1162	22	6.1	190	800
LinLED 560x20mm 2200lm 840 2C 48V Opt G3	1010 127 09746		280	2324	44	12	190	800

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 140x20mm 550lm 830 2C 18V Opt G2	1010 117 31246	3000	185	526	17	3.1	169	450
LinLED 280x20mm 1100lm 830 2C 36V Opt G2	1010 117 31646		185	1053	34	6.2	169	450
LinLED 560x20mm 2200lm 830 2C 72V Opt G2	1010 117 32246		185	2105	67	12	170	450
LinLED 140x20mm 550lm 840 2C 18V Opt G2	1010 117 31346	4000	185	553	17	3.1	177	450
LinLED 280x20mm 1100lm 840 2C 36V Opt G2	1010 117 31746		185	1106	34	6.2	177	450
LinLED 560x20mm 2200lm 840 2C 72V Opt G2	1010 117 32346		185	2213	67	12	178	450

LinLED 24V/1ft 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 140x20mm 550lm 830 2C 12V Opt G2	1010 117 94046	3000	280	543	11	3.2	172	600
LinLED 280x20mm 1100lm 830 2C 24V Opt G2	1010 117 44046		280	1086	23	6.3	172	600
LinLED 560x20mm 2200lm 830 2C 48V Opt G2	1010 117 44246		280	2172	45	13	172	600
LinLED 140x20mm 550lm 840 2C 12V Opt G2	1010 117 94146	4000	280	570	11	3.2	180	600
LinLED 280x20mm 1100lm 840 2C 24V Opt G2	1010 117 44146		280	1141	23	6.3	180	600
LinLED 560x20mm 2200lm 840 2C 48V Opt G2	1010 117 44346		280	2281	45	13	180	600

Linear LED modules 1100lm/1ft 2C

LinLED CRI 90 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 140x20mm 550lm 927 2C 18V Opt G2	1010 117 34146	2700	210	487	17	3.6	136	450
LinLED 280x20mm 1100lm 927 2C 36V Opt G2	1010 117 34446		210	974	34	7.1	136	450
LinLED 560x20mm 2200lm 927 2C 72V Opt G2	1010 117 35346		210	1948	68	14	136	450
LinLED 140x20mm 550lm 930 2C 18V Opt G2	1010 117 34246	3000	210	523	17	3.6	146	450
LinLED 280x20mm 1100lm 930 2C 36V Opt G2	1010 117 34546		210	1046	34	7.1	146	450
LinLED 560x20mm 2200lm 930 2C 72V Opt G2	1010 117 35446		210	2092	68	14	146	450
LinLED 140x20mm 550lm 940 2C 18V Opt G2	1010 117 34346	4000	210	559	17	3.6	156	450
LinLED 280x20mm 1100lm 940 2C 36V Opt G2	1010 117 34646		210	1118	34	7.1	156	450
LinLED 560x20mm 2200lm 940 2C 72V Opt G2	1010 117 35546		210	2236	68	14	156	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 140x20mm 550lm 830 2C 18V Bsc G1	1010 117 36646	3000	210	523	17	3.6	146	450
LinLED 280x20mm 1100lm 830 2C 36V Bsc G1	1010 117 37046		210	1046	34	7.1	146	450
LinLED 560x20mm 2200lm 830 2C 72V Bsc G1	1010 117 37646		210	2092	68	14	146	450
LinLED 140x20mm 550lm 840 2C 18V Bsc G1	1010 117 36746	4000	210	559	17	3.6	156	450
LinLED 280x20mm 1100lm 840 2C 36V Bsc G1	1010 117 37146		210	1118	34	7.1	156	450
LinLED 560x20mm 2200lm 840 2C 72V Bsc G1	1010 117 37746		210	2236	68	14	156	450

*At nominal current and T_p

Tolerance range for optical and electrical $\pm 10\%$

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
Energy Efficiency Class		A++
Working voltage	[Vdc]	300
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

Linear LED modules 1100lm/1ft 2C

Lumen maintenance

LinLED CRI 80

for LinLED CRI 80 Optimum G3 & LinLED 24V/1ft CRI 80 Optimum G3

Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C	>60 000	>60 000	>60 000	>60 000	44 000	39 000
	65°C	>60 000	>60 000	>60 000	>60 000	34 000	29 000
	85°C	>60 000	>60 000	>60 000	59 000	29 000	25 000

reported data based on LM80 LED data 10 000h)

LinLED CRI 80

for LinLED CRI 80 Optimum G2

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	73 000	63 000
	55°C	>102 000	>102 000	>102 000	>102 000	73 000	63 000
	65°C	>102 000	>102 000	>102 000	>102 000	71 000	62 000
	75°C	>102 000	>102 000	>102 000	>102 000	70 000	61 000
If max	45°C	>72 000	>72 000	>72 000	>72 000	51 000	39 000
	55°C	>72 000	>72 000	>72 000	>72 000	51 000	39 000
	65°C	>72 000	>72 000	>72 000	>72 000	48 000	37 000
	75°C	>72 000	>72 000	>72 000	>72 000	45 000	35 000
85°C	>72 000	>72 000	>72 000	>72 000	69 000	43 000	34 000

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

LinLED CRI 80

for LinLED CRI 80 Basic G1

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	71 000	61 000
	55°C	>72 000	>72 000	>72 000	>72 000	71 000	61 000
	65°C	>72 000	>72 000	>72 000	>72 000	69 000	60 000
	75°C	>72 000	>72 000	>72 000	>72 000	68 000	59 000
	85°C	>72 000	>72 000	>72 000	>72 000	67 000	58 000
If max	45°C	>72 000	>72 000	>72 000	>72 000	51 000	39 000
	55°C	>72 000	>72 000	>72 000	>72 000	51 000	39 000
	65°C	>72 000	>72 000	>72 000	>72 000	48 000	37 000
	75°C	>72 000	>72 000	>72 000	>72 000	45 000	35 000
85°C	>72 000	>72 000	>72 000	>72 000	69 000	43 000	34 000

reported 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	>60 000	>60 000	>60 000	>60 000	>60 000	>60 000
	55°C	>60 000	>60 000	>60 000	>60 000	52 000	51 000
	65°C	>60 000	>60 000	>60 000	>60 000	41 000	36 000
If max	45°C	>60 000	>60 000	52 000	49 000	29 000	28 000
	55°C	>60 000	>60 000	47 000	44 000	25 000	24 000
	65°C	>60 000	58 000	41 000	38 000	22 000	19 000

reported data based on LM80 LED data 10 000h

LinLED CRI 80

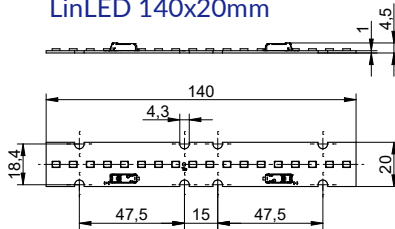
for LinLED 24V/1ft CRI 80 Optimum G2

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	71 000	54 000
	55°C	>72 000	>72 000	>72 000	>72 000	71 000	54 000
	65°C	>72 000	>72 000	>72 000	>72 000	69 000	53 000
	75°C	>72 000	>72 000	>72 000	>72 000	68 000	52 000
	85°C	>72 000	>72 000	>72 000	>72 000	67 000	51 000
If max	45°C	>72 000	>72 000	>72 000	>72 000	49 000	38 000
	55°C	>72 000	>72 000	>72 000	>72 000	49 000	38 000
	65°C	>72 000	>72 000	>72 000	>72 000	67 000	38 000
	75°C	>72 000	>72 000	>72 000	>72 000	61 000	37 000
85°C	>72 000	>72 000	>72 000	>72 000	60 000	37 000	

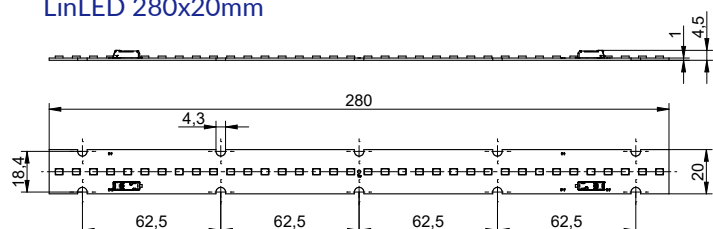
reported data based on LM80 LED data (@65mA 17000h / @160mA & 200mA 12000h)

Dimensions

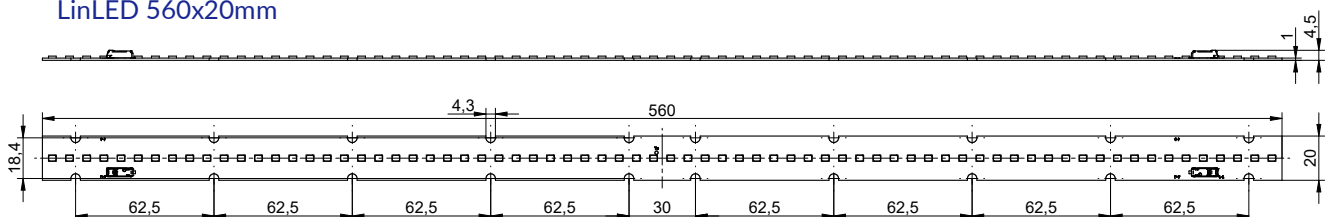
LinLED 140x20mm



LinLED 280x20mm



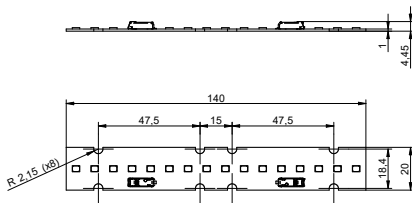
LinLED 560x20mm



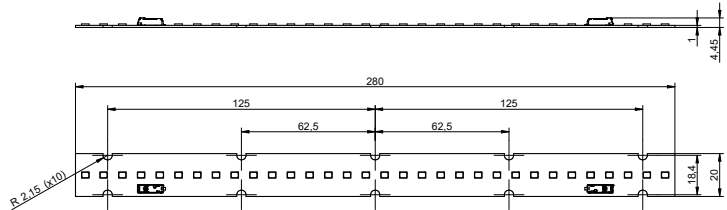
Linear LED modules 1100lm/1ft 2C

only for LinLED 24V/1ft CRI 80 Optimum G3 & LinLED 24V/1ft CRI 80 Optimum G2

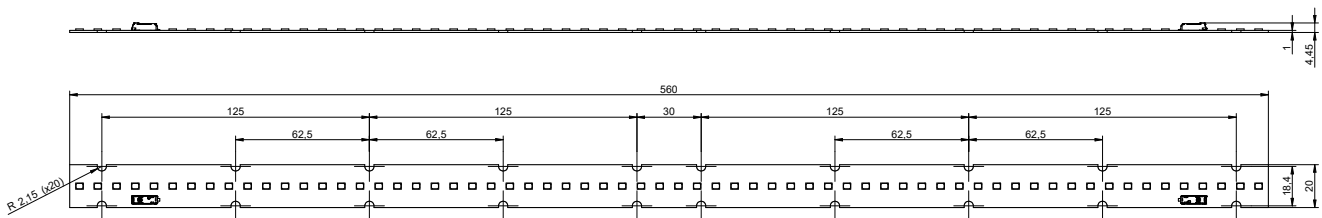
LinLED 140x20mm



LinLED 280x20mm



LinLED 560x20mm



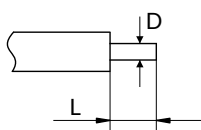
Mounting

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:

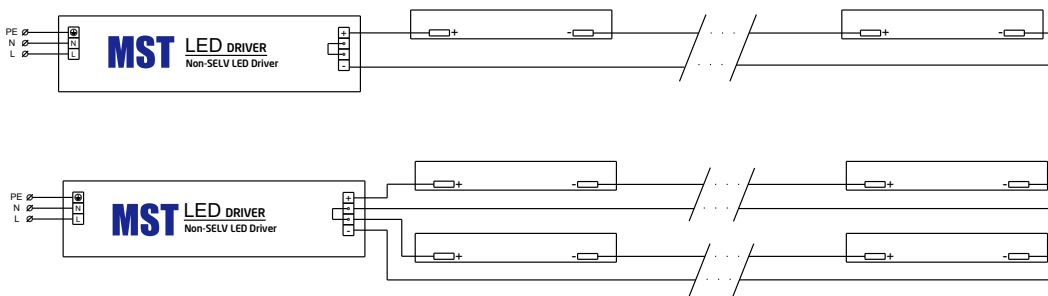


Linear LED modules 1100lm/1ft 2C

Connections

Max number of modules	Unit	Series	Parallel
LinLED 140x20mm	[pcs]	19	-
LinLED 280x20mm	[pcs]	9	-
LinLED 560x20mm	[pcs]	4	-

Wiring for series connection system



Ordering codes

Product name	Ordering code	Pieces per box	Pieces per pallet	Box dimensions [mm]
LinLED 140x20mm 550lm 830 2C 18V Opt G3	1010 117 76146	132	30096	248 x 175 x 58
LinLED 280x20mm 1100lm 830 2C 36V Opt G3	1010 117 76246	187	20196	298 x 238 x 88
LinLED 560x20mm 2200lm 830 2C 72V Opt G3	1010 117 76346	154	8624	594 x 303 x 58
LinLED 140x20mm 550lm 840 2C 18V Opt G3	1010 117 76446	132	30096	248 x 175 x 58
LinLED 280x20mm 1100lm 840 2C 36V Opt G3	1010 117 75046	187	20196	298 x 238 x 88
LinLED 560x20mm 2200lm 840 2C 72V Opt G3	1010 117 75146	154	8624	594 x 303 x 58
LinLED 140x20mm 550lm 830 2C 12V Opt G3	1010 127 09246	132	30096	248 x 175 x 58
LinLED 280x20mm 1100lm 830 2C 24V Opt G3	1010 127 09346	187	20196	298 x 238 x 88
LinLED 560x20mm 2200lm 830 2C 48V Opt G3	1010 127 09446	154	8624	594 x 303 x 58
LinLED 140x20mm 550lm 840 2C 12V Opt G3	1010 127 09546	132	30096	248 x 175 x 58
LinLED 280x20mm 1100lm 840 2C 24V Opt G3	1010 127 09646	187	20196	298 x 238 x 88
LinLED 560x20mm 2200lm 840 2C 48V Opt G3	1010 127 09746	154	8624	594 x 303 x 58
LinLED 140x20mm 550lm 830 2C 18V Opt G2	1010 117 31246	132	30096	248 x 175 x 58
LinLED 280x20mm 1100lm 830 2C 36V Opt G2	1010 117 31646	187	20196	298 x 238 x 88
LinLED 560x20mm 2200lm 830 2C 72V Opt G2	1010 117 32246	154	8624	594 x 303 x 58
LinLED 140x20mm 550lm 840 2C 18V Opt G2	1010 117 31346	132	30096	248 x 175 x 58
LinLED 280x20mm 1100lm 840 2C 36V Opt G2	1010 117 31746	187	20196	298 x 238 x 88
LinLED 560x20mm 2200lm 840 2C 72V Opt G2	1010 117 32346	154	8624	594 x 303 x 58
LinLED 140x20mm 5500lm 830 2C 12V Opt G2	1010 117 94046	132	30096	248 x 175 x 58
LinLED 280x20mm 1100lm 830 2C 24V Opt G2	1010 117 44046	187	20196	298 x 238 x 88
LinLED 560x20mm 2200lm 830 2C 48V Opt G2	1010 117 44246	154	8624	594 x 303 x 58
LinLED 140x20mm 5500lm 840 2C 12V Opt G2	1010 117 94146	132	30096	248 x 175 x 58
LinLED 280x20mm 1100lm 840 2C 24V Opt G2	1010 117 44146	187	20196	298 x 238 x 88
LinLED 560x20mm 2200lm 840 2C 48V Opt G2	1010 117 44346	154	8624	594 x 303 x 58
LinLED 140x20mm 550lm 927 2C 18V Opt G2	1010 117 34146	132	30096	248 x 175 x 58
LinLED 280x20mm 1100lm 927 2C 36V Opt G2	1010 117 34446	187	20196	298 x 238 x 88
LinLED 560x20mm 1100lm 927 2C 72V Opt G2	1010 117 35346	154	8624	594 x 303 x 58
LinLED 140x20mm 550lm 930 2C 18V Opt G2	1010 117 34246	132	30096	248 x 175 x 58
LinLED 280x20mm 1100lm 930 2C 36V Opt G2	1010 117 34546	187	20196	298 x 238 x 88
LinLED 560x20mm 1100lm 930 2C 72V Opt G2	1010 117 35446	154	8624	594 x 303 x 58
LinLED 140x20mm 550lm 940 2C 18V Opt G2	1010 117 34346	132	30096	248 x 175 x 58
LinLED 280x20mm 1100lm 940 2C 36V Opt G2	1010 117 34646	187	20196	298 x 238 x 88
LinLED 560x20mm 1100lm 940 2C 72V Opt G2	1010 117 35546	154	8624	594 x 303 x 58
LinLED 140x20mm 550lm 830 2C 18V Bsc G1	1010 117 36646	132	30096	248 x 175 x 58
LinLED 280x20mm 1100lm 830 2C 36V Bsc G1	1010 117 37046	187	20196	298 x 238 x 88
LinLED 560x20mm 1100lm 830 2C 72V Bsc G1	1010 117 37646	154	8624	594 x 303 x 58
LinLED 140x20mm 550lm 840 2C 18V Bsc G1	1010 117 36746	132	30096	248 x 175 x 58
LinLED 280x20mm 1100lm 840 2C 36V Bsc G1	1010 117 37146	187	20196	298 x 238 x 88
LinLED 560x20mm 1100lm 840 2C 72V Bsc G1	1010 117 37746	154	8624	594 x 303 x 58