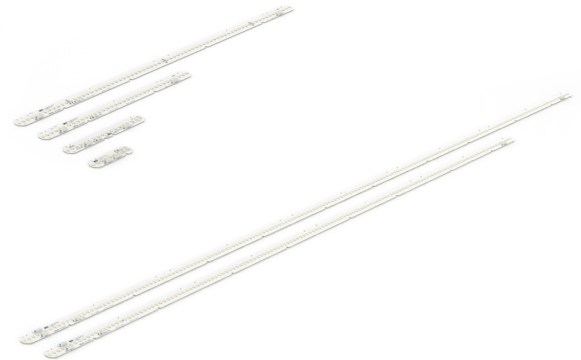


Linear LED modules 1100lm 36V per 1ft 2C

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



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 70x20mm 275lm 840 2C 9V Opt G3.1	1010 127 67246	4000	175	278	289	8	1.4	193	30	450	B
LinLED 140x20mm 550lm 840 2C 18V Opt G3.1	1010 127 67346		175	557	577	16	2.9	193	30	450	C
LinLED 280x20mm 1100lm 840 2C 36V Opt G3.1	1010 127 67446		175	1114	1154	33	5.8	193	30	450	C
LinLED 560x20mm 2200lm 840 2C 72V Opt G3.1	1010 127 67546		175	2228	2309	66	11.5	193	30	450	C
LinLED 1120x20mm 4400lm 840 2C+R 144V Opt G3.1	1010 127 77546		175	4455	4618	132	21	193	30	450	C
LinLED 1400x20mm 5500lm 840 2C+R 180V Opt G3.1	1010 127 78546		175	5569	5772	165	26	193	30	450	C

LinLED CRI 90 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 280x20mm 1100lm 930 2C 36V Opt G3.1	1010 127 61546	3000	210	1091	1130	33	7.0	157	30	450	D
LinLED 560x20mm 2200lm 930 2C 72V Opt G3.1	1010 127 61646		210	2182	2261	66	14	157	30	450	D
LinLED 280x20mm 1100lm 940 2C 36V Opt G3.1	1010 127 61746	4000	210	1165	1207	33	7.0	167	30	450	D
LinLED 560x20mm 2200lm 940 2C 72V Opt G3.1	1010 127 61846		210	2329	2414	66	14	167	30	450	D

LinLED CRI 80 Optimum G3

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 70x20mm 275lm 830 2C 9V Opt G3	1010 127 21346	3000	175	256	264	8	1.4	182	30	600	C
LinLED 140x20mm 550lm 830 2C 18V Opt G3	1010 117 76146		175	511	522	16	2.8	182	30	600	C
LinLED 280x20mm 1100lm 830 2C 36V Opt G3	1010 117 76246		175	1022	1044	32	5.6	182	30	600	C
LinLED 560x20mm 2200lm 830 2C 72V Opt G3	1010 117 76346		175	2044	2088	64	11	182	30	600	C
LinLED 1120x20mm 4400lm 830 2C+R 144V Opt G3	1010 117 84346		175	4132	4262	128	22	185	30	600	C
LinLED 1400x20mm 5500lm 830 2C+R 180V Opt G3	1010 117 86446		175	5165	5327	160	28	185	30	600	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 70x20mm 275lm 830 2C 9V Opt G2	1010 127 20846	3000	185	263	272	8.4	1.6	169	30	450	D
LinLED 140x20mm 550lm 830 2C 18V Opt G2	1010 117 31246		185	526	545	17	3.1	169	30	450	C
LinLED 280x20mm 1100lm 830 2C 36V Opt G2	1010 117 31646		185	1053	1089	34	6.2	169	30	450	C
LinLED 560x20mm 2200lm 830 2C 72V Opt G2	1010 117 32246		185	2105	2178	67	12	170	30	450	C
LinLED 1120x20mm 4400lm 830 2C+R 144V Opt G2	1010 117 54046		185	4275	4482	135	25	171	30	450	C
LinLED 1400x20mm 5500lm 830 2C+R 180V Opt G2	1010 117 54246		185	5415	5603	167	31	176	30	450	C
LinLED 70x20mm 275lm 840 2C 9V Opt G2	1010 127 20946	4000	185	276	286	8.4	1.6	177	30	450	C
LinLED 140x20mm 550lm 840 2C 18V Opt G2	1010 117 31346		185	553	572	17	3.1	177	30	450	C
LinLED 280x20mm 1100lm 840 2C 36V Opt G2	1010 117 31746		185	1106	1144	34	6.2	177	30	450	C
LinLED 560x20mm 2200lm 840 2C 72V Opt G2	1010 117 32346		185	2213	2289	67	12	178	30	450	C
LinLED 1120x20mm 4400lm 840 2C+R 144V Opt G2	1010 117 54146		185	4493	4708	135	25	180	30	450	C
LinLED 1400x20mm 5500lm 840 2C+R 180V Opt G2	1010 117 54346		185	5688	5885	167	31	184	30	450	C

Linear LED modules 1100lm 36V per 1ft 2C

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 70x20mm 275lm 927 2C 9V Opt G2	1010 127 21046	2700	210	243	252	8.5	1.8	136	30	450	E
LinLED 140x20mm 550lm 927 2C 18V Opt G2	1010 117 34146		210	487	505	17	3.6	136	30	450	E
LinLED 280x20mm 1100lm 927 2C 36V Opt G2	1010 117 34446		210	974	1009	34	7.1	136	30	450	E
LinLED 560x20mm 2200lm 927 2C 72V Opt G2	1010 117 35346		210	1948	2019	68	14	136	30	450	E
LinLED 70x20mm 275lm 930 2C 9V Opt G2	1010 127 21146	3000	210	262	271	8.5	1.8	146	30	450	D
LinLED 140x20mm 550lm 930 2C 18V Opt G2	1010 117 34246		210	523	542	17	3.6	146	30	450	D
LinLED 280x20mm 1100lm 930 2C 36V Opt G2	1010 117 34546		210	1046	1084	34	7.1	146	30	450	D
LinLED 560x20mm 2200lm 930 2C 72V Opt G2	1010 117 35446		210	2092	2168	68	14	146	30	450	D
LinLED 70x20mm 275lm 940 2C 9V Opt G2	1010 127 21246	4000	210	280	290	8.5	1.8	156	30	450	D
LinLED 140x20mm 550lm 940 2C 18V Opt G2	1010 117 34346		210	559	579	17	3.6	156	30	450	D
LinLED 280x20mm 1100lm 940 2C 36V Opt G2	1010 117 34646		210	1118	1159	34	7.1	156	30	450	D
LinLED 560x20mm 2200lm 940 2C 72V Opt G2	1010 117 35546		210	2236	2318	68	14	156	30	450	D

LinLED CRI 80 Basic 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 70x20mm 275lm 840 2C 9V Bsc G2	1010 127 83746	4000	190	281	292	8.3	1.6	178	30	450	C
LinLED 140x20mm 550lm 840 2C 18V Bsc G2	1010 127 83846		190	561	585	17	3.2	178	30	450	C
LinLED 280x20mm 1100lm 840 2C 36V Bsc G2	1010 127 83946		190	1122	1170	33	6.3	178	30	450	C
LinLED 560x20mm 2200lm 840 2C 72V Bsc G2	1010 127 84046		190	2245	2339	66	12.6	178	30	450	C
LinLED 1120x20mm 4400lm 840 2C+R 144V Bsc G2	1010 127 83546		190	4489	4678	133	25	178	30	450	C
LinLED 1400x20mm 5500lm 840 2C+R 180V Bsc G2	1010 127 84446		190	5612	5848	166	32	178	30	450	C

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 70x20mm 275lm 830 2C 9V Bsc G1	1010 127 20646	3000	210	262	271	8.5	1.8	146	30	450	D
LinLED 140x20mm 550lm 830 2C 18V Bsc G1	1010 117 36646		210	523	542	17	3.6	146	30	450	D
LinLED 280x20mm 1100lm 830 2C 36V Bsc G1	1010 117 37046		210	1046	1084	34	7.1	146	30	450	D
LinLED 560x20mm 2200lm 830 2C 72V Bsc G1	1010 117 37646		210	2092	2168	68	14	146	30	450	D
LinLED 1120x20mm 4400lm 830 2C+R 144V Bsc G1	1010 117 54446		210	4258	4389	136	29	149	30	450	D
LinLED 1400x20mm 5500lm 830 2C+R 180V Bsc G1	1010 117 54646		210	5322	5487	170	36	149	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 $\pm 10\%$

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
Working voltage	[Vdc]	350
Beam angle	[deg]	120
Initial color consistency	[SDCM]	3
Photobiological safety		RG1 unlimited

Linear LED modules 1100lm 36V per 1ft 2C

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

Lumen maintenance

for LinLED CRI 80 Optimum G3

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	90 000	45 000	41 000
	65°C	>100 000	>100 000	81 000	70 000	35 000	30 000
	85°C	>100 000	>100 000	70 000	60 000	30 000	25 000

calculated data based on LM80 LED data 10 000h

LinLED CRI 80

for LinLED CRI 80 Optimum G3.1 & G2 & 80 Basic 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	>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	>100 000	69 000	43 000	

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

LinLED CRI 90

for LinLED CRI 90 Optimum G2

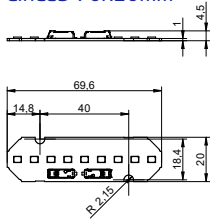
Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C	>100 000	>100 000	>100 000	>100 000	65 000	>60 000
	55°C	>100 000	>100 000	>100 000	>100 000	52 000	51 000
	65°C	>100 000	>100 000	85 000	79 000	41 000	36 000
If max	45°C	82 000	69 000	52 000	49 000	29 000	28 000
	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

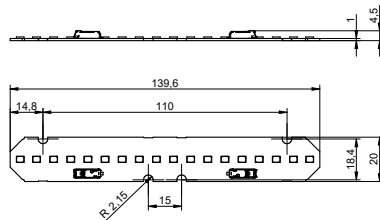
Linear LED modules 1100lm 36V per 1ft 2C

Dimensions

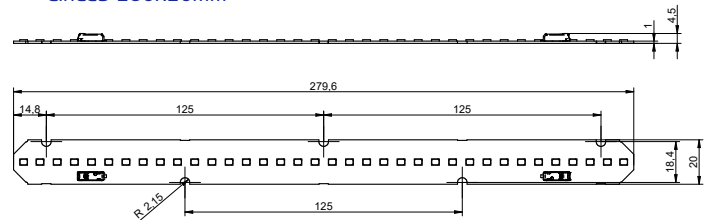
LinLED 70x20mm



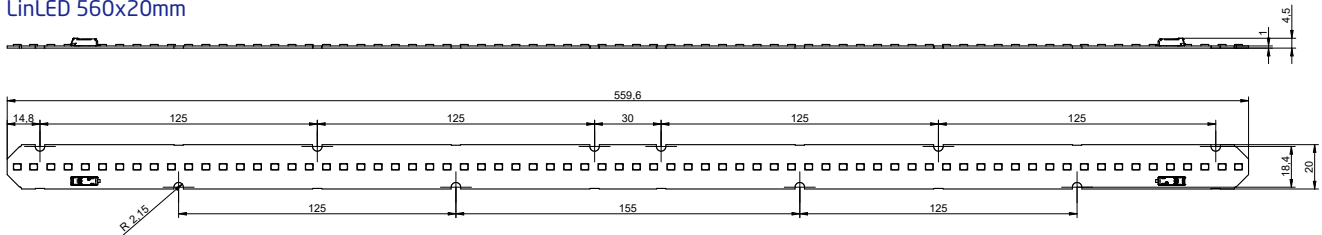
LinLED 140x20mm



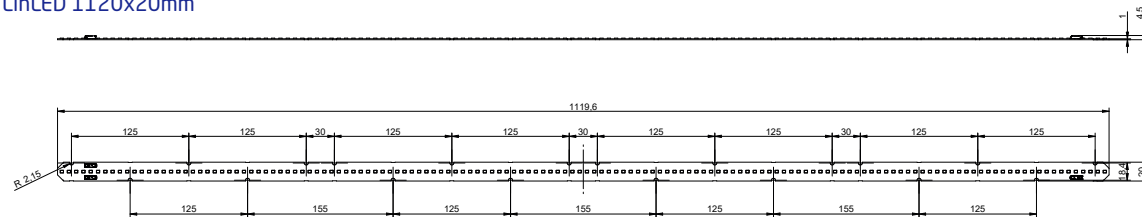
LinLED 280x20mm



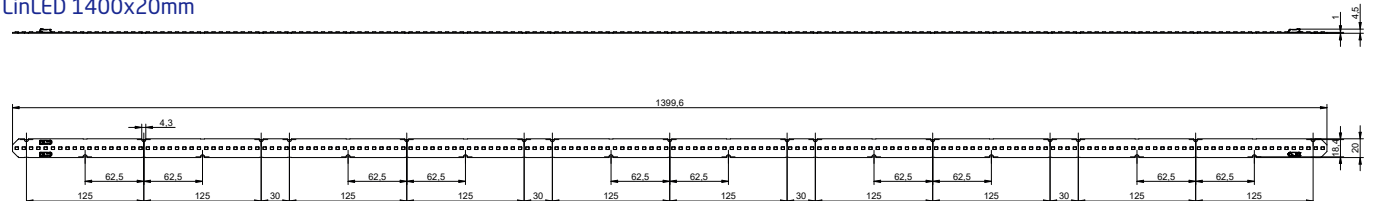
LinLED 560x20mm



LinLED 1120x20mm



LinLED 1400x20mm



Mounting

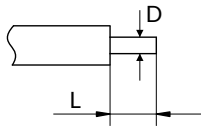
LED Modules cannot be exposed to tensile or compressive stresses. For this purpose it is necessary that the modules are assembled to a flat surface by only rounded head screws. Additionally plastic flat washer should be used to ensure creepage distance between screw's head and surface of the pcb. Max. torque for fixing: 0,5Nm.

LED modules are sensitive to electrostatic discharge (ESD). Follow safety regulations according to IEC 61340-5-1.

Linear LED modules 1100lm 36V per 1ft 2C

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:

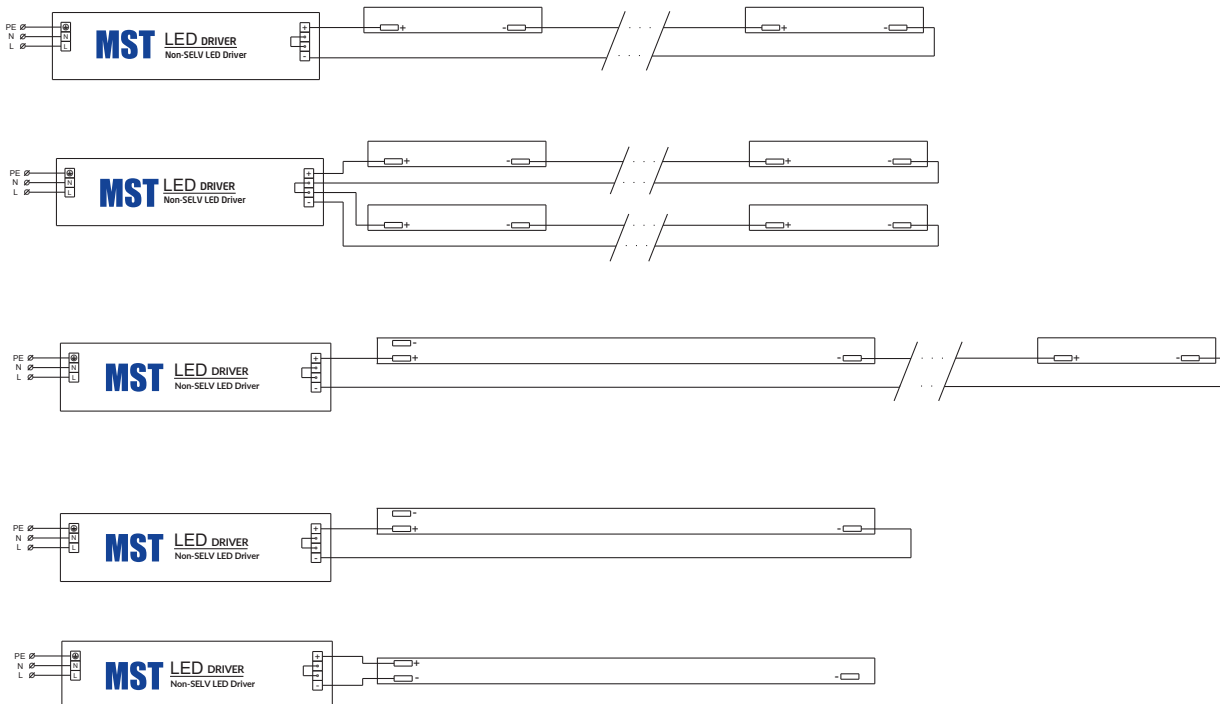


Connections

Max number of modules	Unit	Series	Parallel
LinLED 70x20mm	[pcs]	36	-
LinLED 140x20mm	[pcs]	18	-
LinLED 280x20mm	[pcs]	9	-
LinLED 560x20mm	[pcs]	4	-
LinLED 1120x20mm	[pcs]	2	-
LinLED 1400x20mm	[pcs]	1	-

You can combine different lengths of LED modules so that the maximum length does not exceed 2520mm

Wiring for series connection system (2C)



Linear LED modules 1100lm 36V per 1ft 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.

Ordering codes

Product name	Ordering code	Pieces per box	Pieces per pallet	Box dimensions [mm]
LinLED 70x20mm 275lm 840 2C 9V Opt G3.1	1010 127 67246	198	47250	238 x 140 x 61
LinLED 140x20mm 550lm 840 2C 18V Opt G3.1	1010 127 67346	132	30096	248 x 175 x 66
LinLED 280x20mm 1100lm 840 2C 36V Opt G3.1	1010 127 67446	192	23040	300 x 266 x 83
LinLED 560x20mm 2200lm 840 2C 72V Opt G3.1	1010 127 67546	192	11520	603 x 266 x 83
LinLED 1120x20mm 4400lm 840 2C+R 144V Opt G3.1	1010 127 77546	132	3960	1138 x 236 x 70
LinLED 1400x20mm 5500lm 840 2C+R 180V Opt G3.1	1010 127 78546	132	3960	1418 x 236 x 70
LinLED 280x20mm 1100lm 930 2C 36V Opt G3.1	1010 127 61546	192	23040	300 x 266 x 83
LinLED 560x20mm 2200lm 930 2C 72V Opt G3.1	1010 127 61646	192	11520	603 x 266 x 83
LinLED 280x20mm 1100lm 940 2C 36V Opt G3.1	1010 127 61746	192	23040	300 x 266 x 83
LinLED 560x20mm 2200lm 940 2C 72V Opt G3.1	1010 127 61846	192	11520	603 x 266 x 83
LinLED 70x20mm 275lm 830 2C 9V Opt G3	1010 127 21346	198	47250	238 x 140 x 61
LinLED 140x20mm 550lm 830 2C 18V Opt G3	1010 117 76146	132	30096	248 x 175 x 66
LinLED 280x20mm 1100lm 830 2C 36V Opt G3	1010 117 76246	192	23040	300 x 266 x 83
LinLED 560x20mm 2200lm 830 2C 72V Opt G3	1010 117 76346	192	11520	603 x 266 x 83
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 70x20mm 275lm 830 2C 9V Opt G2	1010 127 20846	198	47250	238 x 140 x 61
LinLED 140x20mm 550lm 830 2C 18V Opt G2	1010 117 31246	132	30096	248 x 175 x 66
LinLED 280x20mm 1100lm 830 2C 36V Opt G2	1010 117 31646	192	23040	300 x 266 x 83
LinLED 560x20mm 2200lm 830 2C 72V Opt G2	1010 117 32246	154	8624	603 x 266 x 83
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 70x20mm 275lm 840 2C 9V Opt G2	1010 127 20946	198	47250	238 x 140 x 61
LinLED 140x20mm 550lm 840 2C 18V Opt G2	1010 117 31346	132	30096	248 x 175 x 66
LinLED 280x20mm 1100lm 840 2C 36V Opt G2	1010 117 31746	192	23040	300 x 266 x 83
LinLED 560x20mm 2200lm 840 2C 72V Opt G2	1010 117 32346	154	8624	603 x 266 x 83
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 70x20mm 275lm 927 2C 9V Opt G2	1010 127 21046	198	47250	238 x 140 x 61
LinLED 140x20mm 550lm 927 2C 18V Opt G2	1010 117 34146	132	30096	248 x 175 x 66
LinLED 280x20mm 1100lm 927 2C 36V Opt G2	1010 117 34446	192	23040	300 x 266 x 83
LinLED 560x20mm 2200lm 927 2C 72V Opt G2	1010 117 35346	154	8624	603 x 266 x 83
LinLED 70x20mm 275lm 930 2C 9V Opt G2	1010 127 21146	198	47250	238 x 140 x 61
LinLED 140x20mm 550lm 930 2C 18V Opt G2	1010 117 34246	132	30096	248 x 175 x 66
LinLED 280x20mm 1100lm 930 2C 36V Opt G2	1010 117 34546	192	23040	300 x 266 x 83
LinLED 560x20mm 2200lm 930 2C 72V Opt G2	1010 117 35446	154	8624	603 x 266 x 83
LinLED 70x20mm 275lm 940 2C 9V Opt G2	1010 127 21246	198	47250	238 x 140 x 61
LinLED 140x20mm 550lm 940 2C 18V Opt G2	1010 117 34346	132	30096	248 x 175 x 66
LinLED 280x20mm 1100lm 940 2C 36V Opt G2	1010 117 34646	192	23040	300 x 266 x 83
LinLED 560x20mm 2200lm 940 2C 72V Opt G2	1010 117 35546	154	8624	603 x 266 x 83
LinLED 70x20mm 275lm 840 2C 9V Bsc G2	1010 127 83746	198	47250	238 x 140 x 61
LinLED 140x20mm 550lm 840 2C 18V Bsc G2	1010 127 83846	132	30096	248 x 175 x 66
LinLED 280x20mm 1100lm 840 2C 36V Bsc G2	1010 127 83946	192	23040	300 x 266 x 83
LinLED 560x20mm 2200lm 840 2C 72V Bsc G2	1010 127 84046	154	8624	603 x 266 x 83
LinLED 1120x20mm 4400lm 840 2C+R 144V Bsc G2	1010 127 83546	132	3960	1138 x 236 x 70
LinLED 1400x20mm 5500lm 840 2C+R 180V Bsc G2	1010 127 84446	132	3960	1418 x 236 x 70
LinLED 70x20mm 275lm 830 2C 9V Bsc G1	1010 127 20646	198	47250	238 x 140 x 61
LinLED 140x20mm 550lm 830 2C 18V Bsc G1	1010 117 36646	132	30096	248 x 175 x 66
LinLED 280x20mm 1100lm 830 2C 36V Bsc G1	1010 117 37046	192	23040	300 x 266 x 83
LinLED 560x20mm 2200lm 830 2C 72V Bsc G1	1010 117 37646	154	8624	603 x 266 x 83
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