

LED LINE SMD W2

PRIME GEN. 6

L07/14/28/56/112



LED LINE SMD W2

PRIME GEN. 6

L07/14/28/56/112

MLP SC W2 G6

Typical Applications

Built-in luminaires/general illumination

- Office lighting
- Retail, corridor and shelf lighting
- T5/T8 replacement as built-in module
- Furniture lighting



LED Line SMD W2 Prime Gen. 6 - L07/14/28/56/112

- **LONG SERVICE LIFE TIME: 93.000 H (L80, B10)**
- **HIGHLY EFFICIENT: UP TO 226 LM/W
AT T_p = 50 °C**
- **5 LENGTHS AVAILABLE: 70 / 140 / 280 / 560 /
1120 MM**
- **3 DIFFERENT LUMEN PACKAGES**

LED Line SMD W2

Prime Gen. 6

L07/14/28/56/112

Technical Notes

- LED built-in module for integration into luminaires



- Dimensions

MLP SC W2/70: 70x20 mm

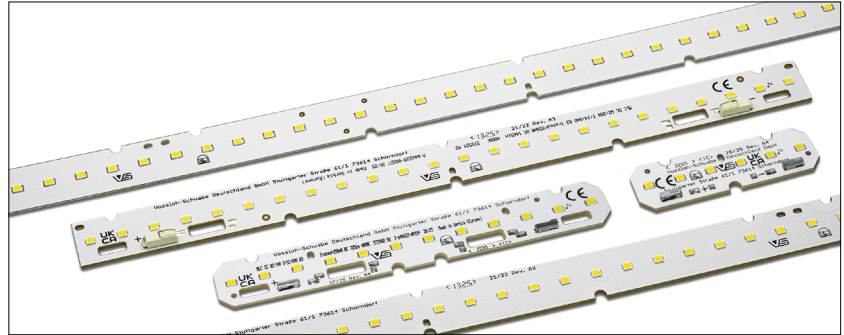
MLP SC W2/140: 140x20 mm

MLP SC W2/280: 280x20 mm

MLP SC W2/560: 560x20 mm

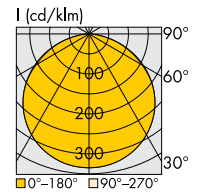
MLP SC W2/1120: 1120x20 mm

- Driving current: 150 mA / 250 mA / 300 mA / 350 mA / 500 mA / 600 mA HE versions only
- On-board push-in terminals, optional on top or bottom
- Beam angle: 120°



Typical Light Distribution Curve

Data are available in .Idt format for download under <https://www.vossloh-schwabe.com/en>



Covers and W2 optics

Please visit our homepage for details for suitable covers and W2 optics:

- <https://www.vossloh-schwabe.com/en/products/optics-reflectors/linear-covers/linear-covers-1r-for-smd-w2>
- <https://www.vossloh-schwabe.com/en/products/optics-reflectors/linear-optics/linear-optics-1r-for-smd-w2>

Electrical Characteristics – CRI > 80

at $T_p = 50^\circ\text{C}$

Type	No. of SMDs	Typ. voltage DC						Temperature coefficient	Typ. power consumption					
		150 mA	250 mA	300 mA	350 mA	500 mA	600 mA		150 mA	250 mA	300 mA	350 mA	500 mA	600 mA
		V	V	V	V	V	V	mV/K	W	W	W	W	W	W
LED Line SMD W2 Prime Gen. 6 – L07														
MLP SC W2/70 x/3R/yz G6	3	2.7	2.7	2.7	2.8	2.8	–	-1.31	0.4	0.7	0.8	1.0	1.4	–
MLP SC W2/70 x/6/yz G6	6	5.3	5.4	5.5	5.5	5.7	–	-2.63	0.8	1.4	1.6	1.9	2.8	–
LED Line SMD W2 Prime Gen. 6 – L14														
MLP SC W2/140 x/6R/yz G6	6	5.3	5.4	5.5	5.5	5.7	–	-2.63	0.8	1.4	1.6	1.9	2.8	–
MLP SC W2/140 x/12/yz G6	12	10.7	10.9	11.0	11.1	11.3	–	-5.26	1.6	2.7	3.3	3.9	5.7	–
LED Line SMD W2 Prime Gen. 6 – L28														
MLP SC W2/280 x/12R/yz G6	12	10.7	10.9	11.0	11.1	11.3	–	-5.26	1.6	2.7	3.3	3.9	5.7	–
MLP SC W2/280 x/24/yz G6	24	21.4	21.8	22.0	22.2	22.7	–	-10.51	3.2	5.4	6.6	7.8	11.3	–
MLP SC W2/280 x/36/yz HE G6	36	23.8	24.3	24.4	24.6	25.0	25.3	-11.83	3.6	6.1	7.3	8.6	12.5	15.2
LED Line SMD W2 Prime Gen. 6 – L56														
MLP SC W2/560 x/24R/yz G6	24	21.4	21.8	22.0	22.2	22.7	–	-10.51	3.2	5.4	6.6	7.8	11.3	–
MLP SC W2/560 x/48/yz G6	48	42.8	43.6	44.0	44.3	45.4	–	-21.03	6.4	10.9	13.2	15.5	22.7	–
MLP SC W2/560 x/72/yz HE G6	72	47.7	48.5	48.8	49.1	50.1	50.7	-23.66	7.2	12.1	14.7	17.2	25.0	30.4
LED Line SMD W2 Prime Gen. 6 – L112														
MLP SC W2/1120 x/48R/yz G6	48	42.8	43.6	44.0	44.3	45.4	–	-21.03	6.4	10.9	13.2	15.5	22.7	–
MLP SC W2/1120 x/96/yz G6	96	85.6	87.2	87.9	88.6	90.8	–	-42.05	12.8	21.8	26.4	31.0	45.4	–
MLP SC W2/1120 x/144/yz HE G6	144	95.3	97.0	97.7	98.3	100.1	101.4	-47.31	14.3	24.3	29.3	34.4	50.1	60.8

Voltage and power consumption tolerance: $\pm 10\%$ | **Use of external LED constant current driver required.**

Maximum Ratings – CRI > 80

Exceeding the maximum ratings can lead to reduction of service life or destruction of the module.

Type	Operating current (mA)	Operation temperature range at T_c point		Storage temperature range		Max. allowed repetitive peak current for frequencies ≥ 100 Hz (mA)
		$^\circ\text{C min.}$	$^\circ\text{C max.}$	$^\circ\text{C min.}$	$^\circ\text{C max.}$	
MLP SC W2 G6	500	-20	+80	-20	+70	600
MLP SC W2 HE G6	600	-20	+80	-20	+70	800

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

LED Line SMD W2 Prime Gen. 6 – L07/14/28/56/112

Operating Life – CRI > 80

L80/B10 in hours at measured temperature at I_p point

	150 mA			250 mA			300 mA		
	40 °C	50 °C	80 °C	40 °C	50 °C	80 °C	40 °C	50 °C	80 °C
MLP SC W2 G6	83.000	83.000	78.000	83.000	83.000	78.000	83.000	83.000	78.000
MLP SC W2 HE G6	83.000	83.000	78.000	83.000	83.000	78.000	83.000	83.000	78.000

	350 mA			500 mA			600 mA		
	40 °C	50 °C	80 °C	40 °C	50 °C	80 °C	40 °C	50 °C	80 °C
MLP SC W2 G6	83.000	83.000	78.000	83.000	83.000	78.000	—	—	—
MLP SC W2 HE G6	83.000	83.000	78.000	83.000	83.000	78.000	83.000	83.000	78.000

Optical Characteristics – CRI > 80

at $I_p = 50$ °C

CRI: $R_a > 80$

Type	Ref. No. Connection "x"			Colour	Correlated colour temp.* K	Typ. luminous flux** and typ. efficiency** at												Photometric Code
	top (T)	bottom (B)	small top (S)			150 mA		250 mA		300 mA		350 mA		500 mA		600 mA		
						lm	lm/W	lm	lm/W	lm	lm/W	lm	lm/W	lm	lm/W	lm	lm/W	

LED Line SMD W2 Prime Gen. 6 – L07

MLP SC W2/70 x/3R/830 G6	574702	—	574710	WW	3000	85	214	140	204	165	200	190	197	265	188	—	—	830/359
MLP SC W2/70 x/3R/840 G6	574703	—	574711	NW	4000	90	223	145	212	170	208	200	205	275	196	—	—	840/359
MLP SC W2/70 x/3R/850 G6	574704	—	on req.	CW	5000	90	223	145	212	170	208	200	205	275	196	—	—	850/369
MLP SC W2/70 x/3R/865 G6	574705	—	on req.	CW	6500	85	214	140	204	165	200	190	197	265	188	—	—	865/369
MLP SC W2/70 x/6/830 G6	574706	—	574712	WW	3000	170	214	280	204	330	200	385	197	535	188	—	—	830/359
MLP SC W2/70 x/6/840 G6	574707	—	574713	NW	4000	180	223	290	212	345	208	395	205	555	196	—	—	840/359
MLP SC W2/70 x/6/850 G6	574708	—	on req.	CW	5000	180	223	290	212	345	208	395	205	555	196	—	—	850/369
MLP SC W2/70 x/6/865 G6	574709	—	on req.	CW	6500	170	214	280	204	330	200	385	197	535	188	—	—	865/369

LED Line SMD W2 Prime Gen. 6 – L14

MLP SC W2/140 x/6R/830 G6	574714	574722	574726	WW	3000	170	214	280	204	330	200	385	197	535	188	—	—	830/359
MLP SC W2/140 x/6R/840 G6	574715	574723	574727	NW	4000	180	223	290	212	345	208	395	205	555	196	—	—	840/359
MLP SC W2/140 x/6R/850 G6	574716	on req.	on req.	CW	5000	180	223	290	212	345	208	395	205	555	196	—	—	850/369
MLP SC W2/140 x/6R/865 G6	574717	on req.	on req.	CW	6500	170	214	280	204	330	200	385	197	535	188	—	—	865/369
MLP SC W2/140 x/12/830 G6	574718	574724	574728	WW	3000	345	214	555	204	660	200	765	197	1070	188	—	—	830/359
MLP SC W2/140 x/12/840 G6	574719	574725	574729	NW	4000	355	223	580	212	685	208	795	205	1110	196	—	—	840/359
MLP SC W2/140 x/12/850 G6	574720	on req.	on req.	CW	5000	355	223	580	212	685	208	795	205	1110	196	—	—	850/369
MLP SC W2/140 x/12/865 G6	574721	on req.	on req.	CW	6500	345	214	555	204	660	200	765	197	1070	188	—	—	865/369

LED Line SMD W2 Prime Gen. 6 – L28

MLP SC W2/280 x/12R/830 G6	574730	574742	574748	WW	3000	345	214	555	204	660	200	765	197	1070	188	—	—	830/359
MLP SC W2/280 x/12R/840 G6	574731	574743	574749	NW	4000	355	223	580	212	685	208	795	205	1110	196	—	—	840/359
MLP SC W2/280 x/12R/850 G6	574732	on req.	on req.	CW	5000	355	223	580	212	685	208	795	205	1110	196	—	—	850/369
MLP SC W2/280 x/12R/865 G6	574733	on req.	574908	CW	6500	345	214	555	204	660	200	765	197	1070	188	—	—	865/369
MLP SC W2/280 x/24/830 G6	574734	574744	574750	WW	3000	690	214	1115	204	1320	200	1530	197	2135	188	—	—	830/359
MLP SC W2/280 x/24/840 G6	574735	574745	574751	NW	4000	715	223	1155	212	1370	208	1590	205	2220	196	—	—	840/359
MLP SC W2/280 x/24/850 G6	574736	on req.	on req.	CW	5000	715	223	1155	212	1370	208	1590	205	2220	196	—	—	850/369
MLP SC W2/280 x/24/865 G6	574737	on req.	on req.	CW	6500	690	214	1115	204	1320	200	1530	197	2135	188	—	—	865/369
MLP SC W2/280 x/36/830 HE G6	574738	574746	574752	WW	3000	780	218	1275	210	1515	206	1745	203	2450	196	2915	192	830/359
MLP SC W2/280 x/36/840 HE G6	574739	574747	574753	NW	4000	810	226	1325	218	1570	214	1815	211	2545	203	3025	199	840/359
MLP SC W2/280 x/36/850 HE G6	574740	on req.	on req.	CW	5000	810	226	1325	218	1570	214	1815	211	2545	203	3025	199	850/369
MLP SC W2/280 x/36/865 HE G6	574741	on req.	on req.	CW	6500	780	218	1275	210	1515	206	1745	203	2450	196	2915	192	865/369

3000 K = warm white (WW), 4000 K = neutral white (NW), 5000 K and 6500 K = cool white (CW)

* Colour tolerance: 3 MacAdam | ** Production tolerance of luminous flux and efficiency: $\pm 10\%$

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

LED Line SMD W2 Prime Gen. 6 – L07/14/28/56/112

Optical Characteristics – CRI > 80

at $T_p = 50^\circ\text{C}$

CRI: $R_a > 80$

Type	Ref. No.			Colour	Correlated colour	Typ. luminous flux** and typ. efficiency** at												Photometric Code
	Connection "x"																	
	top	bottom	small top			150 mA		250 mA		300 mA		350 mA		500 mA		600 mA		
	(T)	(B)	(S)			temp. *	lm	lm/W	lm	lm/W	lm	lm/W	lm	lm/W	lm	lm/W	lm	

LED Line SMD W2 Prime Gen. 6 – L56

MLP SC W2/560 x/24R/830 G6	574755	574767	574773	WW	3000	690	214	1115	204	1320	200	1530	197	2135	188	—	—	830/359
MLP SC W2/560 x/24R/840 G6	574756	574768	574774	NW	4000	715	223	1155	212	1370	208	1590	205	2220	196	—	—	840/359
MLP SC W2/560 x/24R/850 G6	574757	on req.	on req.	CW	5000	715	223	1155	212	1370	208	1590	205	2220	196	—	—	850/369
MLP SC W2/560 x/24R/865 G6	574758	on req.	on req.	CW	6500	690	214	1115	204	1320	200	1530	197	2135	188	—	—	865/369
MLP SC W2/560 x/48/830 G6	574759	574769	574775	WW	3000	1375	214	2225	204	2640	200	3060	197	4275	188	—	—	830/359
MLP SC W2/560 x/48/840 G6	574760	574770	574776	NW	4000	1430	223	2310	212	2745	208	3180	205	4440	196	—	—	840/359
MLP SC W2/560 x/48/850 G6	574761	on req.	on req.	CW	5000	1430	223	2310	212	2745	208	3180	205	4440	196	—	—	850/369
MLP SC W2/560 x/48/865 G6	574762	on req.	on req.	CW	6500	1375	214	2225	204	2640	200	3060	197	4275	188	—	—	865/369
MLP SC W2/560 x/72/830 HE G6	574763	574771	574777	WW	3000	1560	218	2550	210	3025	206	3495	203	4905	196	5825	192	830/359
MLP SC W2/560 x/72/840 HE G6	574764	574772	574778	NW	4000	1620	226	2650	218	3140	214	3630	211	5095	203	6050	199	840/359
MLP SC W2/560 x/72/850 HE G6	574765	on req.	on req.	CW	5000	1620	226	2650	218	3140	214	3630	211	5095	203	6050	199	850/369
MLP SC W2/560 x/72/865 HE G6	574766	574910	on req.	CW	6500	1560	218	2550	210	3025	206	3495	203	4905	196	5825	192	865/369

LED Line SMD W2 Prime Gen. 6 – L112

MLP SC W2/1120 x/48R/830 G6	574779	574791	574797	WW	3000	1375	214	2225	204	2640	200	3060	197	4275	188	—	—	830/359
MLP SC W2/1120 x/48R/840 G6	574780	574792	574798	NW	4000	1430	223	2310	212	2745	208	3180	205	4440	196	—	—	840/359
MLP SC W2/1120 x/48R/850 G6	574781	on req.	on req.	CW	5000	1430	223	2310	212	2745	208	3180	205	4440	196	—	—	850/369
MLP SC W2/1120 x/48R/865 G6	574782	on req.	on req.	CW	6500	1375	214	2225	204	2640	200	3060	197	4275	188	—	—	865/369
MLP SC W2/1120 x/96/830 G6	574783	574793	574799	WW	3000	2750	214	4450	204	5285	200	6120	197	8545	188	—	—	830/359
MLP SC W2/1120 x/96/840 G6	574784	574794	574800	NW	4000	2855	223	4620	212	5485	208	6355	205	8875	196	—	—	840/359
MLP SC W2/1120 x/96/850 G6	574785	on req.	on req.	CW	5000	2855	223	4620	212	5485	208	6355	205	8875	196	—	—	850/369
MLP SC W2/1120 x/96/865 G6	574786	on req.	on req.	CW	6500	2750	214	4450	204	5285	200	6120	197	8545	188	—	—	865/369
MLP SC W2/1120 x/144/830 HE G6	574787	574795	574801	WW	3000	3120	218	5100	210	6050	206	6990	203	9810	196	11655	192	830/359
MLP SC W2/1120 x/144/840 HE G6	574788	574796	574802	NW	4000	3240	226	5295	218	6285	214	7255	211	10185	203	12100	199	840/359
MLP SC W2/1120 x/144/850 HE G6	574789	on req.	on req.	CW	5000	3240	226	5295	218	6285	214	7255	211	10185	203	12100	199	850/369
MLP SC W2/1120 x/144/865 HE G6	574790	on req.	on req.	CW	6500	3120	218	5100	210	6050	206	6990	203	9810	196	11655	192	865/369

3000 K = warm white (WW), 4000 K = neutral white (NW), 5000 and 6500 K = cool white (CW)

* Colour tolerance: 3 MacAdam | ** Production tolerance of luminous flux and efficiency: $\pm 10\%$

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

LED Line SMD W2 Prime Gen. 6 – L07/14/28/56/112

Electrical Characteristics – CRI > 90

at $t_p = 50^\circ\text{C}$

Type	No. of SMDs	Typ. voltage DC						Temperature coefficient mV/K	Typ. power consumption					
		150 mA	250 mA	300 mA	350 mA	500 mA	600 mA		150 mA	250 mA	300 mA	350 mA	500 mA	600 mA
		V	V	V	V	V	V		W	W	W	W	W	W
LED Line SMD W2 Prime Gen. 6 – L07														
MLP SC W2/70 x/3R/yz G6	3	2.6	2.7	2.7	2.7	2.8	–	-0.90	0.4	0.7	0.8	1.0	1.4	–
MLP SC W2/70 x/6/yz G6	6	5.3	5.4	5.4	5.5	5.6	–	-1.80	0.8	1.3	1.6	1.9	2.8	–
LED Line SMD W2 Prime Gen. 6 – L14														
MLP SC W2/140 x/6R/yz G6	6	5.3	5.4	5.4	5.5	5.6	–	-1.80	0.8	1.3	1.6	1.9	2.8	–
MLP SC W2/140 x/12/yz G6	12	10.5	10.7	10.8	10.9	11.1	–	-3.60	1.6	2.7	3.2	3.8	5.6	–
LED Line SMD W2 Prime Gen. 6 – L28														
MLP SC W2/280 x/12R/yz G6	12	10.5	10.7	10.8	10.9	11.1	–	-3.60	1.6	2.7	3.2	3.8	5.6	–
MLP SC W2/280 x/24/yz G6	24	21.1	21.5	21.6	21.8	22.2	–	-7.20	3.2	5.4	6.5	7.6	11.1	–
MLP SC W2/280 x/36/yz HE G6	36	23.5	23.9	24.1	24.2	24.6	24.9	-8.10	3.5	6.0	7.2	8.5	12.3	14.9
LED Line SMD W2 Prime Gen. 6 – L56														
MLP SC W2/560 x/24R/yz G6	24	21.1	21.5	21.6	21.8	22.2	–	-7.20	3.2	5.4	6.5	7.6	11.1	–
MLP SC W2/560 x/48/yz G6	48	42.2	43.0	43.3	43.6	44.5	–	-14.40	6.3	10.7	13.0	15.3	22.2	–
MLP SC W2/560 x/72/yz HE G6	72	47.1	47.8	48.1	48.4	49.2	49.7	-16.20	7.1	12.0	14.4	16.9	24.6	29.8
LED Line SMD W2 Prime Gen. 6 – L112														
MLP SC W2/1120 x/48R/yz G6	48	42.2	43.0	43.3	43.6	44.5	–	-14.40	6.3	10.7	13.0	15.3	22.2	–
MLP SC W2/1120 x/96/yz G6	96	84.4	85.9	86.6	87.2	89.0	–	-28.80	12.7	21.5	26.0	30.5	44.5	–
MLP SC W2/1120 x/144/yz HE G6	144	94.1	95.6	96.3	96.9	98.4	99.4	-32.40	14.1	23.9	28.9	33.9	49.2	59.7

Voltage and power consumption tolerance: $\pm 10\%$ | **Use of external LED constant current driver required.**

Maximum Ratings – CRI > 90

Exceeding the maximum ratings can lead to reduction of service life or destruction of the module.

Type	Operating current (mA)	Operation temperature range at t_c point		Storage temperature range		Max. allowed repetitive peak current for frequencies ≥ 100 Hz (mA)
		$^\circ\text{C min.}$	$^\circ\text{C max.}$	$^\circ\text{C min.}$	$^\circ\text{C max.}$	
MLP SC W2 G6	500	-20	+80	-20	+70	1440
MLP SC W2 HE G6	600	-20	+80	-20	+70	1920

Operating Life – CRI > 90

L80/B10 in hours at measured temperature at t_p point

	150 mA			250 mA			300 mA		
	40 $^\circ\text{C}$	50 $^\circ\text{C}$	80 $^\circ\text{C}$	40 $^\circ\text{C}$	50 $^\circ\text{C}$	80 $^\circ\text{C}$	40 $^\circ\text{C}$	50 $^\circ\text{C}$	80 $^\circ\text{C}$
MLP SC W2 G6	93.000	93.000	93.000	93.000	93.000	93.000	93.000	93.000	93.000
MLP SC W2 HE G6	93.000	93.000	93.000	93.000	93.000	93.000	93.000	93.000	93.000

	350 mA			500 mA			600 mA		
	40 $^\circ\text{C}$	50 $^\circ\text{C}$	80 $^\circ\text{C}$	40 $^\circ\text{C}$	50 $^\circ\text{C}$	80 $^\circ\text{C}$	40 $^\circ\text{C}$	50 $^\circ\text{C}$	80 $^\circ\text{C}$
MLP SC W2 G6	93.000	93.000	93.000	93.000	93.000	93.000	–	–	–
MLP SC W2 HE G6	93.000	93.000	93.000	93.000	93.000	93.000	93.000	93.000	93.000

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

LED Line SMD W2 Prime Gen. 6 – L07/14/28/56/112

Optical Characteristics – CRI > 90

at $I_p = 50^\circ\text{C}$

CRI: $R_a > 90$

Type	Ref. No.			Colour	Correlated colour temp. *	Typ. luminous flux** and typ. efficiency** at												Photometric Code
	Connection "x"					150 mA		250 mA		300 mA		350 mA		500 mA		600 mA		
	top (T)	bottom (B)	small top (S)			lm	lm/W	lm	lm/W	lm	lm/W	lm	lm/W	lm	lm/W	lm	lm/W	

LED Line SMD W2 Prime Gen. 6 – L07

MLP SC W2/70 x/3R/930 G6	575028	—	575036	WW	3000	75	190	125	186	150	184	175	181	245	175	—	—	930/359
MLP SC W2/70 x/3R/940 G6	575029	—	575037	NW	4000	80	203	135	198	160	196	185	194	260	187	—	—	940/359
MLP SC W2/70 x/3R/950 G6	575030	—	575038	CW	5000	80	203	135	198	160	196	185	194	260	187	—	—	950/359
MLP SC W2/70 x/3R/957 G6	on req.	—	on req.	CW	5700	75	190	125	186	150	184	175	181	245	175	—	—	957/359
MLP SC W2/70 x/3R/965 G6	575031	—	575039	CW	6500	75	190	125	186	150	184	175	181	245	175	—	—	965/359
MLP SC W2/70 x/6/930 G6	575032	—	575040	WW	3000	150	190	250	186	300	184	345	181	485	175	—	—	930/359
MLP SC W2/70 x/6/940 G6	575033	—	575041	NW	4000	160	203	265	198	320	196	370	194	520	187	—	—	940/359
MLP SC W2/70 x/6/950 G6	575034	—	575042	CW	5000	160	203	265	198	320	196	370	194	520	187	—	—	950/359
MLP SC W2/70 x/6/957 G6	on req.	—	on req.	CW	5700	150	190	250	186	300	184	345	181	485	175	—	—	957/359
MLP SC W2/70 x/6/965 G6	575035	—	575043	CW	6500	150	190	250	186	300	184	345	181	485	175	—	—	965/359

LED Line SMD W2 Prime Gen. 6 – L14

MLP SC W2/140 x/6R/930 G6	575044	575052	575056	WW	3000	150	190	250	186	300	184	345	181	485	175	—	—	930/359
MLP SC W2/140 x/6R/940 G6	575045	575053	575057	NW	4000	160	203	265	198	320	196	370	194	520	187	—	—	940/359
MLP SC W2/140 x/6R/950 G6	575046	on req.	on req.	CW	5000	160	203	265	198	320	196	370	194	520	187	—	—	950/359
MLP SC W2/140 x/6R/957 G6	on req.	on req.	on req.	CW	5700	150	190	250	186	300	184	345	181	485	175	—	—	957/359
MLP SC W2/140 x/6R/965 G6	575047	on req.	on req.	CW	6500	150	190	250	186	300	184	345	181	485	175	—	—	965/359
MLP SC W2/140 x/12/930 G6	575048	575054	575058	WW	3000	300	190	500	186	595	184	690	181	970	175	—	—	930/359
MLP SC W2/140 x/12/940 G6	575049	575055	575059	NW	4000	320	203	535	198	635	196	740	194	1040	187	—	—	940/359
MLP SC W2/140 x/12/950 G6	575050	on req.	on req.	CW	5000	320	203	535	198	635	196	740	194	1040	187	—	—	950/359
MLP SC W2/140 x/12/957 G6	on req.	on req.	on req.	CW	5700	300	190	500	186	595	184	690	181	970	175	—	—	957/359
MLP SC W2/140 x/12/965 G6	575051	574907	on req.	CW	6500	300	190	500	186	595	184	690	181	970	175	—	—	965/359

LED Line SMD W2 Prime Gen. 6 – L28

MLP SC W2/280 x/12R/930 G6	575060	575072	575078	WW	3000	300	190	500	186	595	184	690	181	970	175	—	—	930/359
MLP SC W2/280 x/12R/940 G6	575061	575073	575079	NW	4000	320	203	535	198	635	196	740	194	1040	187	—	—	940/359
MLP SC W2/280 x/12R/950 G6	575062	on req.	on req.	CW	5000	320	203	535	198	635	196	740	194	1040	187	—	—	950/359
MLP SC W2/280 x/12R/957 G6	on req.	on req.	on req.	CW	5700	300	190	500	186	595	184	690	181	970	175	—	—	957/359
MLP SC W2/280 x/12R/965 G6	575063	on req.	on req.	CW	6500	300	190	500	186	595	184	690	181	970	175	—	—	965/359
MLP SC W2/280 x/24/930 G6	575064	575074	575080	WW	3000	600	190	995	186	1190	184	1385	181	1945	175	—	—	930/359
MLP SC W2/280 x/24/940 G6	575065	575075	575081	NW	4000	640	203	1065	198	1275	196	1480	194	2080	187	—	—	940/359
MLP SC W2/280 x/24/950 G6	575066	on req.	on req.	CW	5000	640	203	1065	198	1275	196	1480	194	2080	187	—	—	950/359
MLP SC W2/280 x/24/957 G6	on req.	on req.	on req.	CW	5700	600	190	995	186	1190	184	1385	181	1945	175	—	—	957/359
MLP SC W2/280 x/24/965 G6	575067	on req.	on req.	CW	6500	600	191	995	186	1190	184	1385	181	1945	175	—	—	965/359
MLP SC W2/280 x/36/930 HE G6	575068	575076	575082	WW	3000	675	191	1125	188	1350	187	1570	185	2220	180	2640	177	930/359
MLP SC W2/280 x/36/940 HE G6	575069	575077	575083	NW	4000	720	204	1205	201	1440	200	1675	198	2375	193	2825	189	940/359
MLP SC W2/280 x/36/950 HE G6	575070	on req.	on req.	CW	5000	720	204	1205	201	1440	200	1675	198	2375	193	2825	189	950/359
MLP SC W2/280 x/36/957 HE G6	on req.	on req.	on req.	CW	5700	675	191	1125	188	1350	187	1570	185	2220	180	2640	177	957/359
MLP SC W2/280 x/36/965 HE G6	575071	on req.	on req.	CW	6500	675	191	1125	188	1350	187	1570	185	2220	180	2640	177	965/359

3000 K = warm white (WW), 4000 K = neutral white (NW), 5000 K, 5700 K and 6500 K = cool white (CW)

* Colour tolerance: 3 MacAdam | ** Production tolerance of luminous flux and efficiency: $\pm 10\%$

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

LED Line SMD W2 Prime Gen. 6 – L07/14/28/56/112

Optical Characteristics – CRI > 90

at $I_p = 50^\circ\text{C}$

CRI: $R_a > 90$

Type	Ref. No.			Colour	Correlated colour	Typ. luminous flux** and typ. efficiency** at												Photometric Code
	Connection "x"																	
	top	bottom	small top			150 mA		250 mA		300 mA		350 mA		500 mA		600 mA		
	(T)	(B)	(S)			temp. *	lm	lm/W	lm	lm/W	lm	lm/W	lm	lm/W	lm	lm/W	lm	

LED Line SMD W2 Prime Gen. 6 – L56

MLP SC W2/560 x/24R/930 G6	575084	575095	575101	WW	3000	600	190	995	186	1190	184	1385	181	1945	175	—	—	930/359
MLP SC W2/560 x/24R/940 G6	575085	575096	575102	NW	4000	640	203	1065	198	1275	196	1480	194	2080	187	—	—	940/359
MLP SC W2/560 x/24R/950 G6	575086	on req.	on req.	CW	5000	640	203	1065	198	1275	196	1480	194	2080	187	—	—	950/359
MLP SC W2/560 x/24R/957 G6	on req.	on req.	on req.	CW	5700	600	190	995	186	1190	184	1385	181	1945	175	—	—	957/359
MLP SC W2/560 x/24R/965 G6	574909	on req.	on req.	CW	6500	600	190	995	186	1190	184	1385	181	1945	175	—	—	965/359
MLP SC W2/560 x/48/930 G6	575087	575097	575103	WW	3000	1200	190	1995	186	2385	184	2770	181	3890	175	—	—	930/359
MLP SC W2/560 x/48/940 G6	575088	575098	575104	NW	4000	1285	203	2130	198	2550	196	2960	194	4155	187	—	—	940/359
MLP SC W2/560 x/48/950 G6	575089	on req.	on req.	CW	5000	1285	203	2130	198	2550	196	2960	194	4155	187	—	—	950/359
MLP SC W2/560 x/48/957 G6	574913	on req.	on req.	CW	5700	1200	190	1995	186	2385	184	2770	181	3890	175	—	—	957/359
MLP SC W2/560 x/48/965 G6	575090	on req.	on req.	CW	6500	1200	190	1995	186	2385	184	2770	181	3890	175	—	—	965/359
MLP SC W2/560 x/72/930 HE G6	575091	575099	575105	WW	3000	1350	191	2250	188	2695	187	3140	185	4440	180	5280	177	930/359
MLP SC W2/560 x/72/940 HE G6	575092	575100	575106	NW	4000	1440	204	2405	201	2880	200	3355	198	4745	193	5645	189	940/359
MLP SC W2/560 x/72/950 HE G6	575093	on req.	on req.	CW	5000	1440	204	2405	201	2880	200	3355	198	4745	193	5645	189	950/359
MLP SC W2/560 x/72/957 HE G6	on req.	on req.	on req.	CW	5700	1350	191	2250	188	2695	187	3140	185	4440	180	5280	177	957/359
MLP SC W2/560 x/72/965 HE G6	575094	on req.	on req.	CW	6500	1350	191	2250	188	2695	187	3140	185	4440	180	5280	177	965/359

LED Line SMD W2 Prime Gen. 6 – L112

MLP SC W2/1120 x/48R/930 G6	575107	575119	575125	WW	3000	1200	190	1995	186	2385	184	2770	181	3890	175	—	—	930/359
MLP SC W2/1120 x/48R/940 G6	575108	575120	575126	NW	4000	1285	203	2130	198	2550	196	2960	194	4155	175	—	—	940/359
MLP SC W2/1120 x/48R/950 G6	575109	on req.	on req.	CW	5000	1285	203	2130	198	2550	196	2960	194	4155	175	—	—	950/359
MLP SC W2/1120 x/48R/957 G6	on req.	on req.	on req.	CW	5700	1200	190	1995	186	2385	184	2770	181	3890	175	—	—	957/359
MLP SC W2/1120 x/48R/965 G6	575110	on req.	574911	CW	6500	1200	190	1995	186	2385	184	2770	181	3890	175	—	—	965/359
MLP SC W2/1120 x/96/930 G6	575111	575121	575127	WW	3000	2400	190	3990	186	4770	184	5540	181	7780	175	—	—	930/359
MLP SC W2/1120 x/96/940 G6	575112	575122	575128	NW	4000	2565	203	4265	198	5100	196	5920	194	8315	187	—	—	940/359
MLP SC W2/1120 x/96/950 G6	575113	on req.	on req.	CW	5000	2565	203	4265	198	5100	196	5920	194	8315	187	—	—	950/359
MLP SC W2/1120 x/96/957 G6	on req.	on req.	on req.	CW	5700	2400	190	3990	186	4770	184	5540	181	7780	175	—	—	957/359
MLP SC W2/1120 x/96/965 G6	575114	on req.	on req.	CW	6500	2400	190	3990	186	4770	184	5540	181	7780	175	—	—	965/359
MLP SC W2/1120 x/144/930 HE G6	575115	575123	575129	WW	3000	2700	191	4500	188	5390	187	6275	185	8880	180	10565	177	930/359
MLP SC W2/1120 x/144/940 HE G6	575116	575124	575130	NW	4000	2885	204	4810	201	5765	200	6710	198	9490	193	11295	189	940/359
MLP SC W2/1120 x/144/950 HE G6	575117	on req.	on req.	CW	5000	2885	204	4810	201	5765	200	6710	198	9490	193	11295	189	950/359
MLP SC W2/1120 x/144/957 HE G6	on req.	on req.	on req.	CW	5700	2700	191	4500	188	5390	187	6275	185	8880	180	10565	177	957/359
MLP SC W2/1120 x/144/965 HE G6	575118	on req.	on req.	CW	6500	2700	191	4500	188	5390	187	6275	185	8880	180	10565	177	965/359

3000 K = warm white (WW), 4000 K = neutral white (NW), 5000 K, 5700 K and 6500 K = cool white (CW)

* Colour tolerance: 3 MacAdam | ** Production tolerance of luminous flux and efficiency: $\pm 10\%$

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

LED Line SMD W2 Prime Gen. 6 – L07/14/28/56/112

Logistics Data

Product Dimension mm	Product description	Packaging unit	Dimension of box mm	Pieces per box	Gross weight of box g	Weight per piece g	Box pieces per pallet	Pieces per pallet	Gross weight of pallet kg	Dimension of pallet mm
LED Line SMD W2 Prime Gen. 6 – L07										
70x20	MLP SC W2/70 x/A/yz G6	Carton box	213x185x67	120	571.2	3.8	50	6000	52.6	1200x800x480
LED Line SMD W2 Prime Gen. 6 – L14										
140x20	MLP SC W2/140 x/A/yz G6	Carton box	290x190x57	96	813	7	56	5376	69.6	1200x800x375
140x20	MLP SC W2/140 B/A/yz G6	Carton box	290x190x57	48	477	7	182	8736	110.8	1200x800x890
LED Line SMD W2 Prime Gen. 6 – L28										
280x20	MLP SC W2/280 x/A/yz G6	Carton box	290x190x57	48	832.8	15	112	5376	117.3	1200x800x605
280x20	MLP SC W2/280 x/A/yz HE G6	Carton box	290x190x57	48	832.8	15	112	5376	117.3	1200x800x605
280x20	MLP SC W2/280 B/A/yz G6	Carton box	290x190x57	24	472.8	15	182	4368	110	1200x800x890
280x20	MLP SC W2/280 B/A/yz HE G6	Carton box	290x190x57	24	472.8	15	182	4368	110	1200x800x890
LED Line SMD W2 Prime Gen. 6 – L56										
560x20	MLP SC W2/560 x/A/yz G6	Carton box	570x190x57	48	1619.2	30	104	4992	192.4	1200x800x890
560x20	MLP SC W2/560 x/A/yz HE G6	Carton box	570x190x57	48	1619.2	30	104	4992	192.4	1200x800x890
560x20	MLP SC W2/560 B/A/yz G6	Carton box	570x190x57	24	899.2	30	104	2496	117.5	1200x800x890
560x20	MLP SC W2/560 B/A/yz HE G6	Carton box	570x190x57	24	899.2	30	104	2496	117.5	1200x800x890
LED Line SMD W2 Prime Gen. 6 – L112										
1120x20	MLP SC W2/1120 x/A/yz G6	Carton box	1130x190x57	48	2612	50	52	2496	159.8	1200x800x890
1120x20	MLP SC W2/1120 x/A/yz HE G6	Carton box	1130x190x57	48	2612	50	52	2496	159.8	1200x800x890
1120x20	MLP SC W2/1120 B/A/yz G6	Carton box	1130x190x57	24	1412	50	52	1248	97.5	1200x800x890
1120x20	MLP SC W2/1120 B/A/yz HE G6	Carton box	1130x190x57	24	1412	50	52	1248	97.5	1200x800x890

X - Connection option (Top connector or Small top connector)

B - Bottom connector

A - Number of components (3R, 6, 12R...)

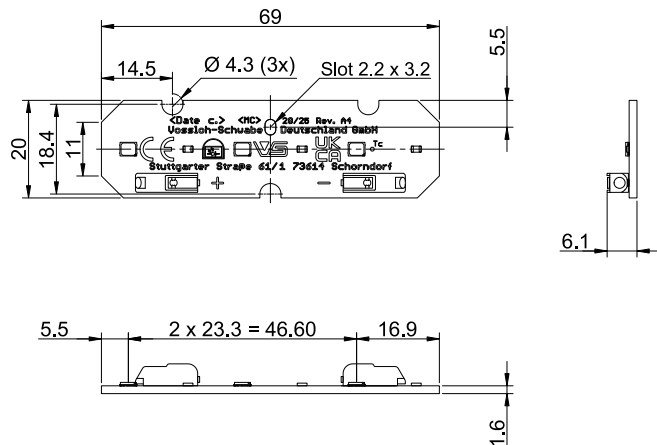
yz - CCT&CRI combination (830, 840...)

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

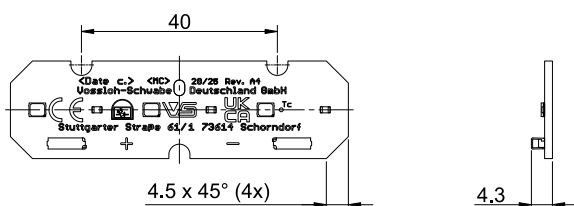
Mechanical Dimensions

T = Top Connection
B = Bottom Connection
S = Small Top Connection

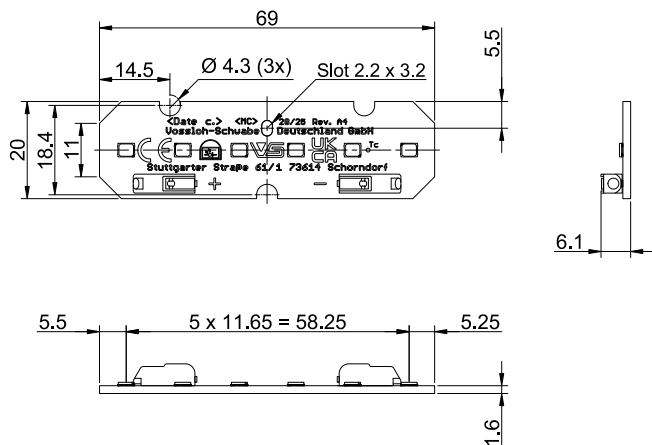
MLP SC W2/70 T/3R/yz G6



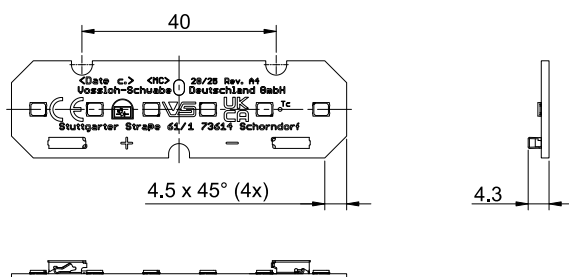
MLP SC W2/70 S/3R/yz G6



MLP SC W2/70 T/6/yz G6



MLP SC W2/70 S/6/yz G6

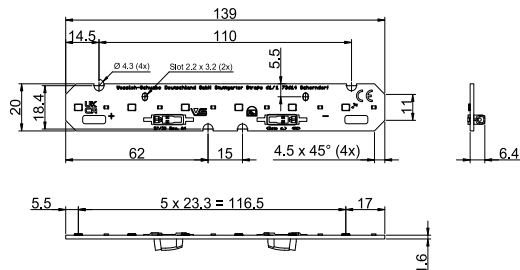


The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

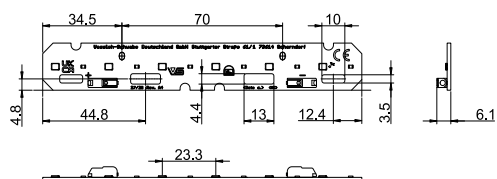
Mechanical Dimensions

T = Top Connection
B = Bottom Connection
S = Small Top Connection

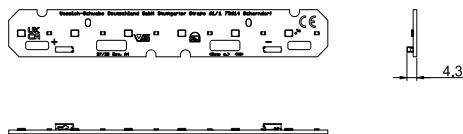
MLP SC W2/140 B/6R/yz G6



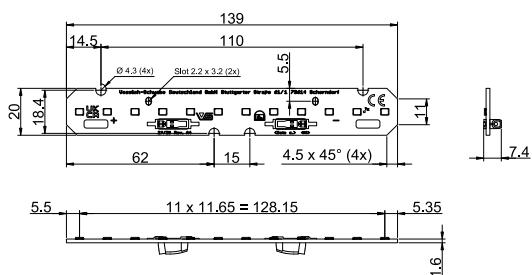
MLP SC W2/140 T/6R/yz G6



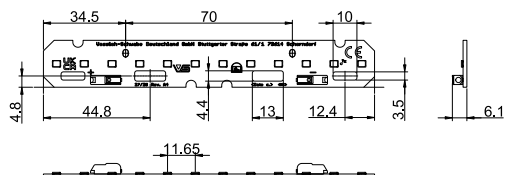
MLP SC W2/140 S/6R/yz G6



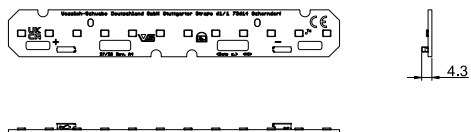
MLP SC W2/140 B/12/yz G6



MLP SC W2/140 T/12/yz G6



MLP SC W2/140 S/12/yz G6

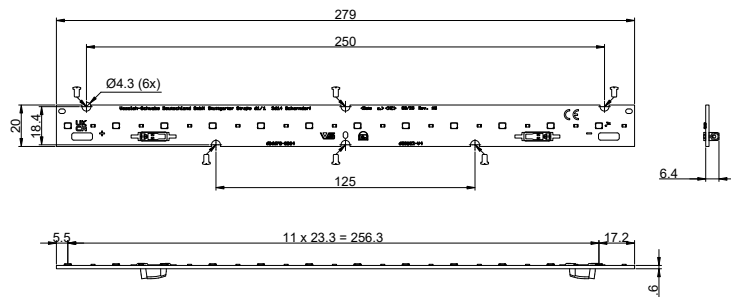


The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

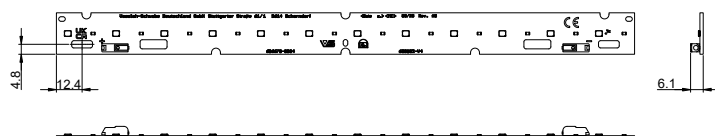
Mechanical Dimensions

T = Top Connection
B = Bottom Connection
S = Small Top Connection

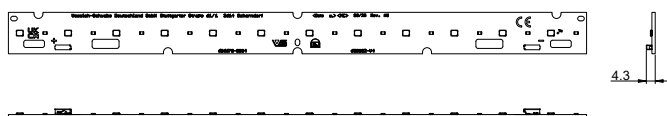
MLP SC W2/280 B/12R/yz G6



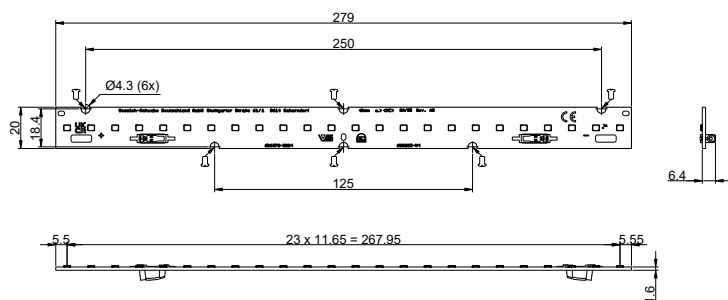
MLP SC W2/280 T/12R/yz G6



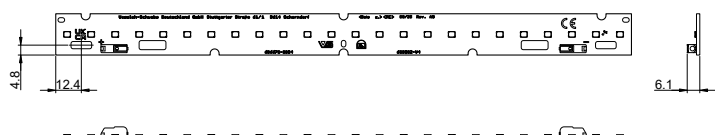
MLP SC W2/280 S/12R/yz G6



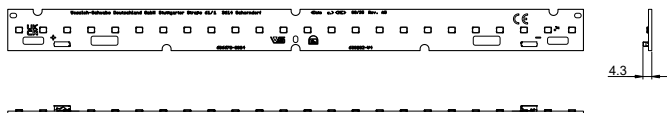
MLP SC W2/280 B/24/yz G6



MLP SC W2/280 T/24/yz G6



MLP SC W2/280 S/24/yz G6

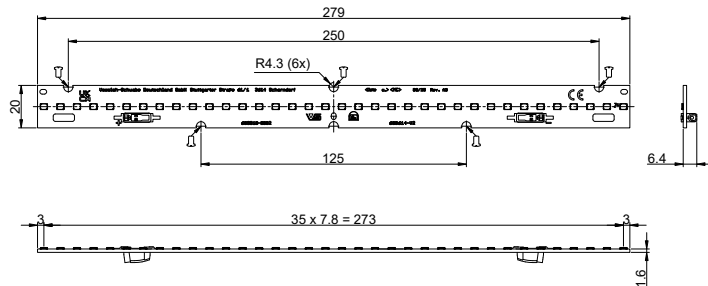


The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

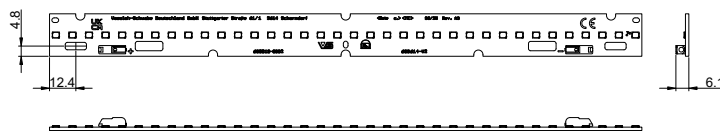
Mechanical Dimensions

T = Top Connection
B = Bottom Connection
S = Small Top Connection

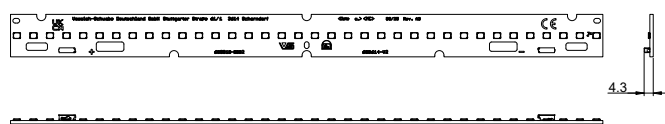
MLP SC W2/280 B/36/yz HE G6



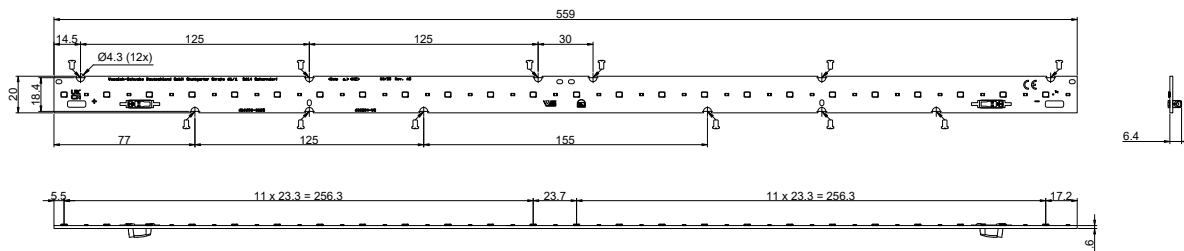
MLP SC W2/280 T/36/yz HE G6



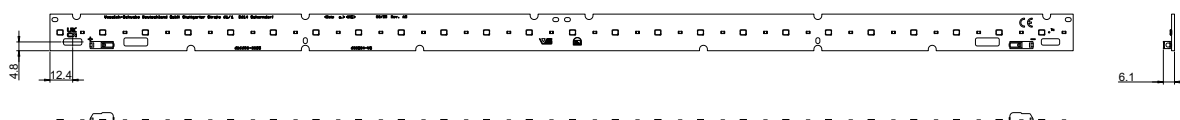
MLP SC W2/280 S/36/yz HE G6



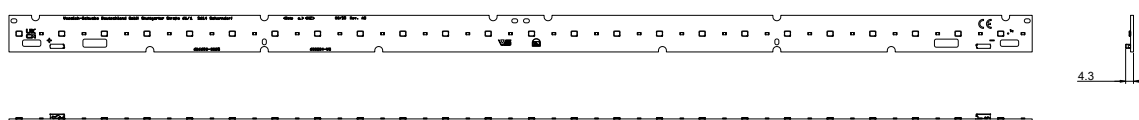
MLP SC W2/560 B/24R/yz G6



MLP SC W2/560 T/24R/yz G6



MLP SC W2/560 S/24R/yz G6

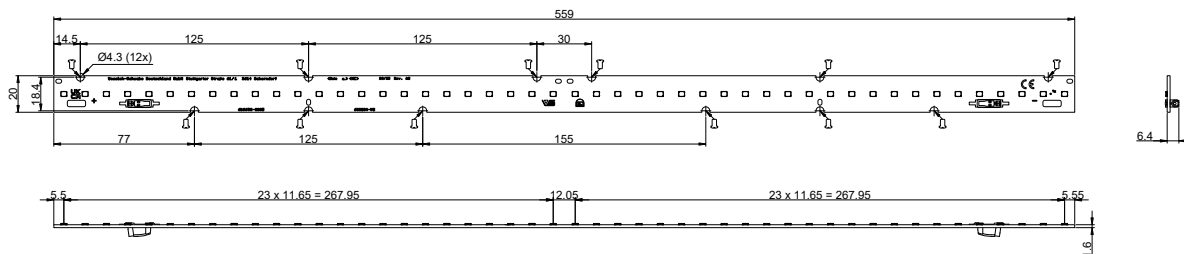


The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

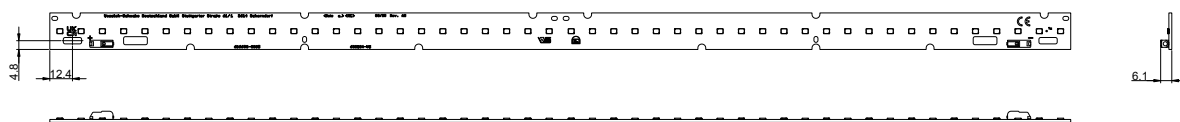
Mechanical Dimensions

T = Top Connection
B = Bottom Connection
S = Small Top Connection

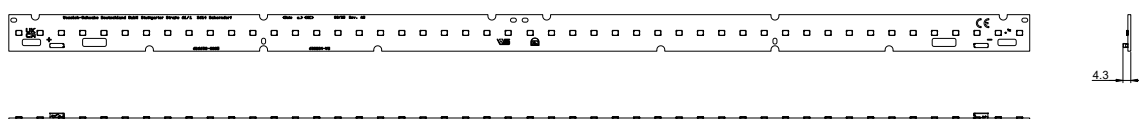
MLP SC W2/560 B/48/yz G6



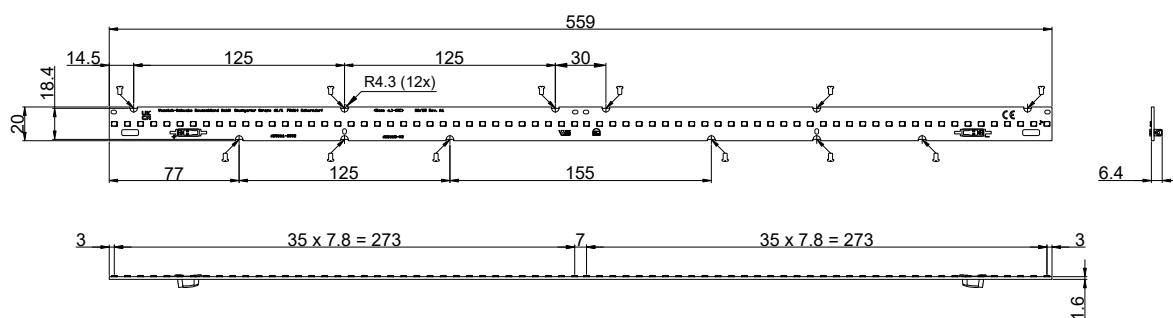
MLP SC W2/560 T/48/yz G6



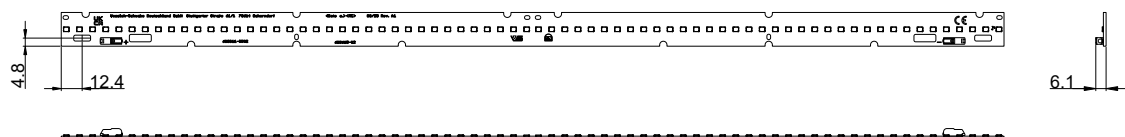
MLP SC W2/560 S/48/yz G6



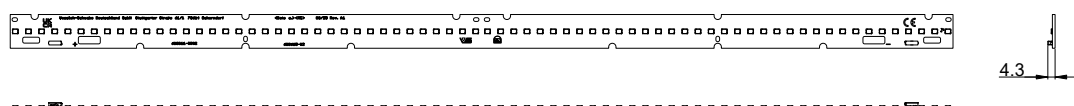
MLP SC W2/560 B/72/yz HE G6



MLP SC W2/560 T/72/yz HE G6



MLP SC W2/560 S/72/yz HE G6



The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

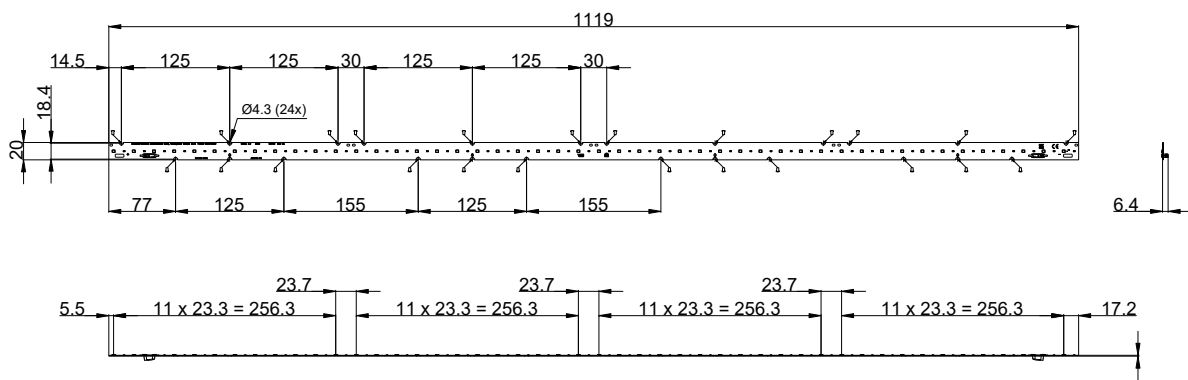
Mechanical Dimensions

T = Top Connection

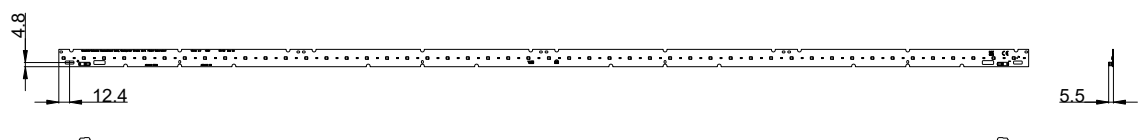
B = Bottom Connection

S = Small Top Connection

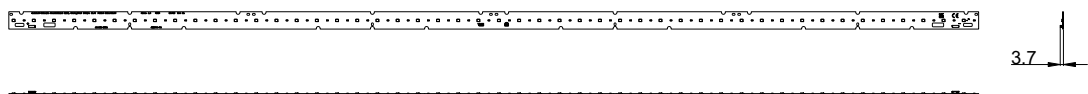
MLP SC W2/1120 B/48R/yz G6



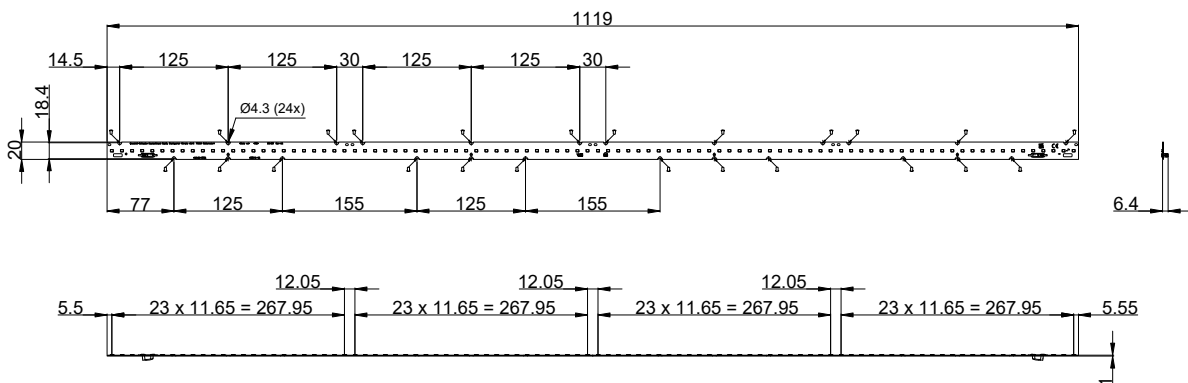
MLP SC W2/1120 T/48R/yz G6



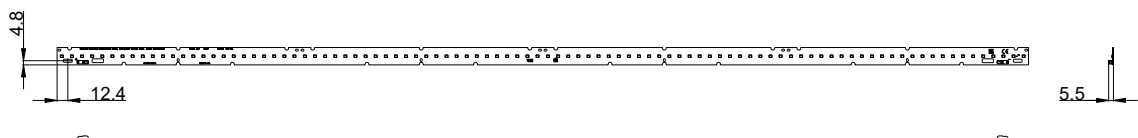
MLP SC W2/1120 S/48R/yz G6



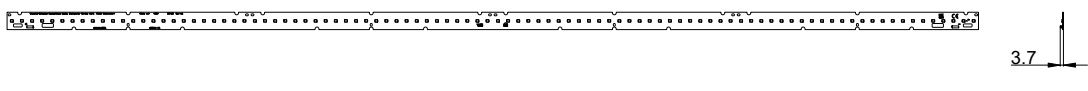
MLP SC W2/1120 B/96/yz G6



MLP SC W2/1120 T/96/yz G6



MLP SC W2/1120 S/96/yz G6

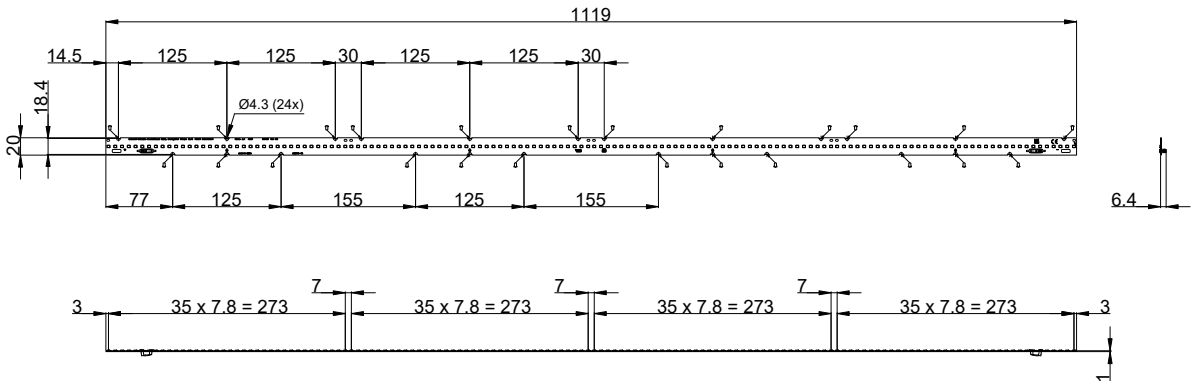


The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

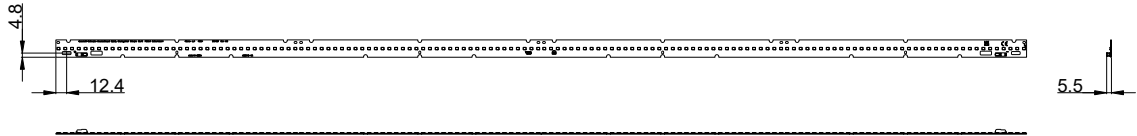
Mechanical Dimensions

MLP SC W2/1120 B/144/yz HE G6

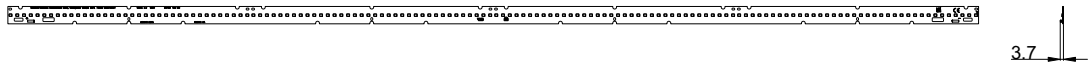
T = Top Connection
B = Bottom Connection
S = Small Top Connection



MLP SC W2/1120 T/144/yz HE G6

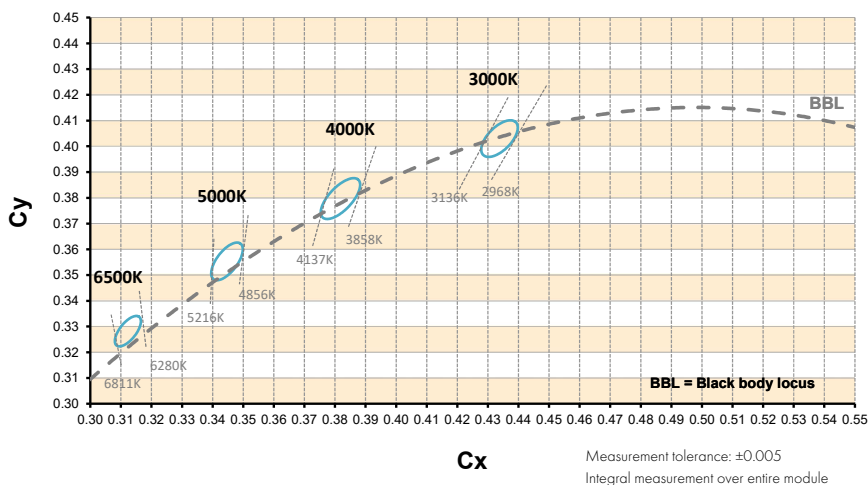


MLP SC W2/1120 S/144/yz HE G6



The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

Bins



Connection Example

- The number of modules that can be connected in series depends on the available output voltage of the LED driver.
- The clearance and creepage distances are designed for working voltages up to:
- In case of assembly of the LED modules in profiles (e.g. aluminium) where the profile touches the top edge of the PCB the clearance and creepage distances are reduced to 175 V DC (basic insulation) and 40 V DC (reinforced insulation).
- Max. diameter of screw head (M4): $\varnothing 8$ mm
- Only the marked holes are fixing holes for screws M4. Please do not use other holes for fixation!

350V DC basic (185V DC reinforced)

MLP SC W2/70: 70x20 mm

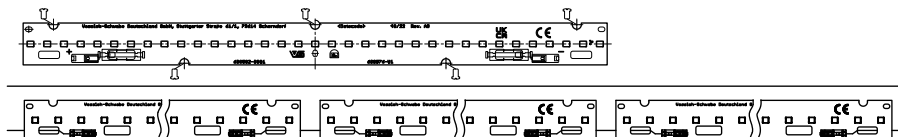
MLP SC W2/140: 140x20 mm

MLP SC W2/280: 280x20 mm

MLP SC W2/560: 560x20 mm

300V DC basic (150V DC reinforced)

MLP SC W2/1120: 1120x20 mm



Fixing Clip

For fastening LED PCBs to luminaire sheets without needing screws

PCB hole dia.: 4.3–4.5 mm

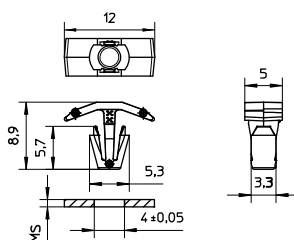
Vibration resistant version

Material: PC, white (UL-94 V2)

Weight: 0.2 g, Packaging unit: 1000 pcs. (.11 = 10,000 pcs.)

Type	Ref. No.	For luminaire sheet thickness (MS) mm
98050	562870	0.5–1.0*

* PCB thickness: 1.6 mm



Linear LED Constant Current Drivers

Please visit our homepage for details for suitable

LED constant current drivers: www.vossloh-schwabe.com

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

Nomenclature Example

MLP SC W2/280 T/36/840 HE G6

Generation

High Efficacy

CCT

30 = 3000 K

40 = 4000 K

50 = 5000 K

65 = 6500 K

CRI

8 = 80 CRI minimum

9 = 90 CRI minimum

Number of LEDs

Connection

T = Top

B = Bottom

S = Small Top

Length

70 = 70 mm

140 = 140 mm

280 = 280 mm

560 = 560 mm

1120 = 1120 mm

Width

W2 = 20 mm

Technology

SC = SMD Constant Current

Product Line

P = Prime

Product Area & Shape

ML = Module Linear

Assembly and Safety Information

Installation must be carried out under observation of the relevant regulations and standards. The LED modules are designed for operation within a casing or luminaire. Installation must be carried out in a voltage-free state (i.e. disconnection from the mains). The following advice must be observed; non-observance can result in the destruction of the LED assembly modules, fire and/or other hazards.

- Consider safety regulations acc. EN 60598 in the luminaire design, especially when the operating LED driver is not galvanic isolated.
 - In mode of operation regard to sufficient isolation.
 - Live parts must not be touched in operation mode.
- ESD (electrostatic discharge) protection measures must be observed when handling and installing the LED modules. See VS's application notes on ESD protection.
- Adequate anti-static electricity measures, including the use of conductive shoes, ionizers, work bench grounding, wrist straps, flooring and stools should be used.
- LED assembly modules must not be subjected to any undue mechanical stress, e. g.:
 - do not treat as bulk cargo
 - avoid shear and compressive forces during handling and installation
 - do not damage circuit paths
 - avoid any pressure on the light emitting surface
- Safe operation only possible by the use of external constant current sources (I_{max} . see table "Electrical Characteristics").
- Operation only with power supply units that feature the following protection:
 - Short-circuit protection
 - Overload protection
 - Overheating protection
- The module can be fixed with M4 screws. Fixation only with flat or cylinder head screws (M4) (no countersank screws)
Max. torque: 1.2 Nm (M4)
- Please ensure the correct polarity of the leads prior to commissioning. Reversed polarity can destroy the modules.
- For interconnection the LED modules is equipped with push-in terminals. WAGO 2060 for top variant; BJB 46.111.1001.50 for bottom variant; WAGO 2065 for small top variant.
- Safety regulations acc. to EN 60598 (or further standards) has to be observed if the maximum output voltage exceed the permitted touchable value.
- Measurement tolerances:
 - luminous flux: $\pm 7\%$
 - voltage: $\pm 3\%$
 - CRI: ± 1
- The following points must be observed when connecting LED modules in parallel:
 - All LED strings that are wired in parallel must contain the same number of LEDs (symmetrical loading).
 - Owing to differing forward biases, there can be a difference of up to 10% in brightness between modules connected in parallel.



- To ensure problem-free operation, the specified maximum temperature at the t_p point (see "Operating Life") must be observed (and measured in accordance with EN 60598-1). To satisfy this point, it may be necessary to put measures in place to ensure any heat is dissipated from the PCB to the environment.
- In the event of outdoor applications or applications in damp locations, care must be taken to protect LED assembly modules against humidity, splashes and jets of water. Any corrosion damage resulting from humidity or contact with condensation will not be recognised as a defect or manufacturing fault. LED assembly modules are not specially protected against foreign bodies or dust. Depending on the type of application, further protection must be ensured to prevent dust and foreign bodies from entering.
- Due to the manufacturing process, the PCBs of the LED assembly modules can have sharp edges and corners. Care must therefore be taken during handling and installation to avoid injury.
- For optimal load of used constant current driver the modules can only be connected in series. The quantity of LED modules is limited by the sum of forward voltage and the capacity of used constant current driver. Safety regulations acc. to EN 60598 has to be observed if the sum of forward voltage exceed the permitted touchable value.
- Operating LED modules in the presence of certain chemical substances or in chemically enriched (aggressive) environments can impair module functionality or even cause total module failure. Detailed information can be found in our "Chemical Incompatibility" PDF on our website www.vossloh-schwabe.com
- The photobiological safety of the LED modules must be classified into risk groups in accordance with EN 62471: 2008.
Rating in accordance with IEC / TR 62778: **t.b.d.**

Applied Standards

EN 62031

LED modules for general lighting – Safety specifications



pending

EN 62471

Photobiological safety of lamps and lamp systems

Product Guarantee

- 5 years
- The conditions for the Product Guarantee of the Vossloh-Schwabe Group shall apply as published on our homepage (www.vossloh-schwabe.com). We will be happy to send you these conditions upon request.

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.