



TALEXchain P503-2 TALEXchain STANDARD

Product description

- LED chain for highlighting lines and edges and for backlighting complex contours, letters and symbols in signage applications
- Edge injection of transparent or diffuse materials
- High-power LED in chip-on-board technology (COB)
- Integrated current source to stabilise luminous flux
- Flexible chain, can be split between any module
- Beam characteristic: 140°
- Attached with double-sided adhesive tape
- Connection: Cable 200 mm, both sides
- For uniform backlighting: minimum distance to cover 20 – 30 mm

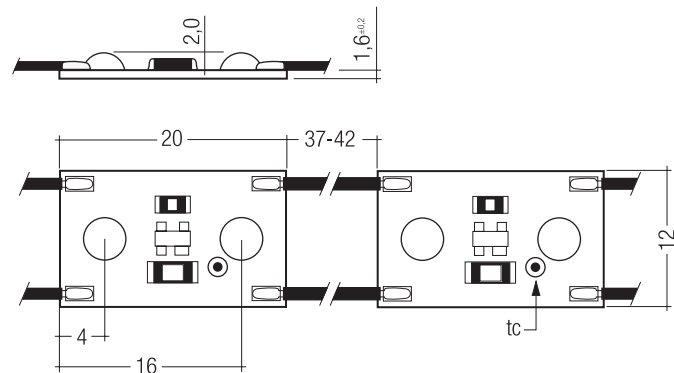
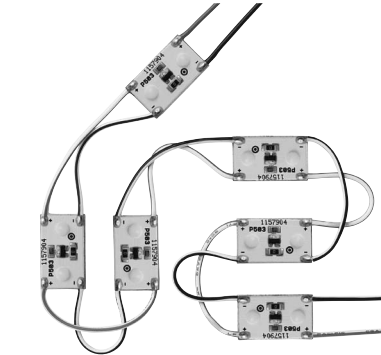
Technical data

Ambient temperature t_a	-25 ... +50 °C
t_c point ^③	75 °C
Risk group (EN 62471:2008)	0



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Colour temperatures and tolerances, page 3



Ordering data

Colour	Wavelength range	Colour temperature	Type	Article number
2 light points per module				
Daylight white	–	6,500 K	LED P503-2 DL 12V	89600595
Neutral white	–	4,200 K	LED P503-2 NW 12V	89600594
Red	619 – 629 nm	–	LED P503-2 R 12V	89600585
Green	520 – 535 nm	–	LED P503-2 G 12V	89600556
Blue	455 – 460 nm	–	LED P503-2 B 12V	89601062
Amber	584 – 594 nm	–	LED P503-2 A 12V	89600586

Packaging: 5 pieces/packaging, 90 pieces/carton, 1,260 pieces/pallet

Specific technical data

Type	Numbers of modules	Typ. luminous flux per module ^②	Supply voltage DC ^①	Typ. current per module ^②	Typ. power per module	Luminous efficacy	Total length
2 light points per module							
LED P503-2 DL 12V	10	8 lm	12 V	20 mA	0.24 W	100 lm/W	960 mm
LED P503-2 NW 12V	10	6 lm	12 V	20 mA	0.24 W	25 lm/W	960 mm
LED P503-2 R 12V	10	10 lm	12 V	40 mA	0.48 W	21 lm/W	960 mm
LED P503-2 G 12V	10	6 lm	12 V	20 mA	0.24 W	25 lm/W	960 mm
LED P503-2 B 12V	10	1 lm	12 V	16 mA	0.19 W	5 lm/W	960 mm
LED P503-2 A 12V	10	9 lm	12 V	40 mA	0.48 W	19 lm/W	960 mm

^① If the max. temperature limits are exceeded, the life of the module will be greatly reduced or the module may be damaged. For the precise position of the t_c point see the above diagram.

^② Tolerance range for optical and electrical data: $\pm 15\%$.

^③ Exceeding the max. operating voltage leads to an overload on the TALEXchain. This may in turn result in a reduction in lifetime or even in destruction. Tolerance range for the supply voltage: 8 V: +2 V / -0 V; 12 V: +2 V / -0 V.

All values for $t_a = 25\text{ °C}$.

Converter matrix – TALEXchain P503-2

Type	IN-BUILT LCU					REMOTE LCU			
	LCU 015/12 D010	LCU 035/12 D010	LCU 060/12 D010	LCU 100/12 D010	LCU 150/12 D010	LCU 035/12 E020	LCU 060/12 E020	LCU 100/12 E020	LCU 150/12 E020
Article number	24166316	24166318	24166322	24166326	24166331	24166319	24166323	24166327	24166332

Type	Article number	Assignable converter										Assignable converter								Max. chaining
		Number of modules										Number of modules								
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
LED P503-2 DL 12V	89600595	6	54	19	126	27	217	54	362	108	543	19	126	27	217	54	362	108	543	10
LED P503-2 NW 12V	89600594	6	54	19	126	27	217	54	362	108	543	19	126	27	217	54	362	108	543	10
LED P503-2 R 12V	89600585	3	27	10	63	14	108	27	181	54	271	10	63	14	108	27	181	54	271	10
LED P503-2 G 12V	89600556	6	54	19	126	27	217	54	362	108	543	19	126	27	217	54	362	108	543	10
LED P503-2 B 12V	89601062	7	68	24	160	35	274	69	457	137	686	24	160	35	274	69	457	137	686	10
LED P503-2 A 12V	89600586	3	27	10	63	14	108	27	181	54	271	10	63	14	108	27	181	54	271	10

Standards

- EN 62031
- EN 62471

The product meets the “inbuilt LED module” classification according to EN 62031.

Certificates

- UL file: e313318

tc temperature in °C	Luminous flux in %	Life time in h
45	80	22,000
	70	35,000
	50	65,000
75	80	19,000
	70	30,000
	50	55,000

TALEX chains in conjunction with water

- Admissible Environmental Conditions:
The LED modules are provided with a protective coating to guard against superficial dewing (according to JEDEC JESD22 A100C) and high relative air humidity. If the protective coating is damaged (for example during soldering) it must be rebuilt to sustain the same level of protection.
- Harmful Environmental Conditions:
The product is not designed to be operated in contact with water.

Coordinates and tolerances according to CIE 1964

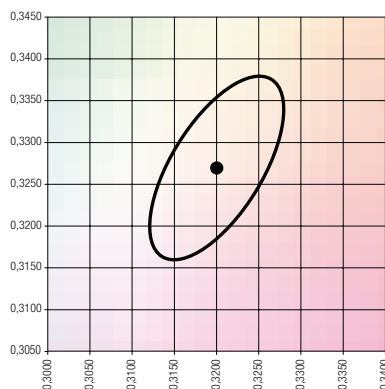
CIE coordinates:

6,500 K

	x0	y0
Centre	0.3200	0.3270

MacAdam ellipse: 5SDCM

Daylight white



CIE coordinates:

4,200 K

	x0	y0
Centre	0.3770	0.3660

MacAdam ellipse: 5SDCM

Neutral white

