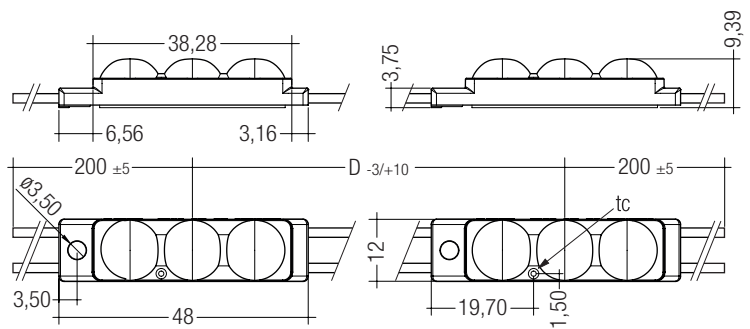
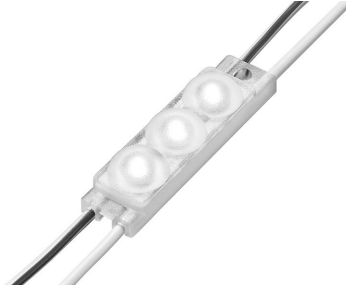


IP68  

**TALEXchain P531 G1 ESSENCE**  
TALEXchain

**Product description**

- LED chain for highlighting lines and edges and for backlighting complex contours, letters and symbols in signage applications
- Optimised for use in signage (lettering, surface backlighting)
- High colour consistency (MacAdam 5)
- Beam characteristic: 155°
- LED module with plastic casing and strain relief with IP68 protection
- Integrated current source to stabilise luminous flux
- Flexible chain, can be split between any module
- Mounting with screw or premounted double-sided adhesive tape possible
- Nominal life-time up to 30,000 h (at ta 50 °C with a failure rate max. 0.2 % per 1,000 h)



**Technical data**

Ambient temperature ta	-25 ... +50 °C
Max. surface temperature on module tc <sup>①</sup>	65 °C
Storage temperature ts	-40 ... +85 °C
Type of protection <sup>④</sup>	IP68
Risk group (EN 62471:2008)	1



Standards, page 3

Colour temperatures and tolerances, page 5, 6

**Ordering data**

Type	Article number	Colour	Wavelength range	Colour temperature <sup>⑤</sup>
<b>3 light points per module</b>				
P531 G1 DL 31lm 150mm 100 68 SNC	87500374	Daylight white	–	6,500 K
P531 G1 DL 70lm 200mm 100 68 SNC	87500375	Daylight white	–	6,500 K

Packaging: 1 piece/roll, 10 pieces/carton, 120 pieces/pallet

**Specific technical data**

Type	Photometric code <sup>⑥</sup>	Wavelength range	Colour temperature <sup>⑤</sup>	Typ. luminous flux per module <sup>②</sup>	Colour rendering index CRI <sup>②</sup>	Supply voltage DC <sup>③</sup>	Typ. current per module <sup>②</sup>	Typ. power per module	Luminous efficacy
<b>3 light points per module</b>									
P531 G1 DL 31lm 150mm 100 68 SNC	765/5xx	–	6,500 K	31 lm	> 80	12 V	28 mA	0.34 W	92 lm/W
P531 G1 DL 70lm 200mm 100 68 SNC	765/5xx	–	6,500 K	70 lm	> 80	12 V	58 mA	0.70 W	100 lm/W

<sup>①</sup> 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 tc point see the above diagram.

<sup>②</sup> Tolerance range for optical and electrical data: ±20 %.

<sup>③</sup> Exceeding the max. operating voltage leads to an overload on the TALEXchain. This may in turn result in a reduction in life-time or even in destruction. Tolerance range for the supply voltage: 12 V: +2 V / -0 V.

<sup>④</sup> Maximum submerge depth 1 m / 60 min.

<sup>⑤</sup> Colour temperature for information only. Valid colour see „Coordinates and tolerances according to CIE 1931“.

<sup>⑥</sup> Photometric code in evaluation.

All values at ta = 25 °C.

**Type code**

Example: P531 G1 DL 31lm 150mm 100 68 SNC

P531	TALEXchain P531
G1	Generation = 1
DL	Colour = Daylight white
31lm	Luminous flux per module = 31 lm
150mm	Module distance D = 150 mm
100	Number of modules = 100
68	Type of protection = IP68
SNC	Layer = ESSENCE

For more information please call or email your Tridonic contact.

**Photometric code**

Key for photometric code, e. g. 861/449

1 <sup>st</sup> digit	2 <sup>nd</sup> + 3 <sup>rd</sup> digit	4 <sup>th</sup> digit	5 <sup>th</sup> digit	6 <sup>th</sup> digit		
Code	Colour temperature in Kelvin x 100	McAdams initial	McAdams after 25% of the life-time (max.6000h)	Lumen maintenance after 25% of the life-time (max.6000h)		
CRI				Code	Remaining lumen	
7				67 – 76	7	≥ 70 %
8				77 – 86	8	≥ 80 %
9	87 – ≥90		9	≥ 90 %		

**LED control gear matrix – TALEXchain CRYSTAL SELECT**

Type	IN-BUILT LCU <sup>①</sup>					REMOTE LCU <sup>②</sup>			
	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

Assignable LED control gear

Assignable LED control gear

Type	Number of modules										Max. chaining
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
P531 G1 DL 31lm	4	36	14	85	20	147	39	245	77	367	100
P531 G1 DL 70lm	2	17	7	41	10	71	19	119	37	178	100

<sup>①</sup> Type of protection IP67.

<sup>②</sup> Type of protection IP20.

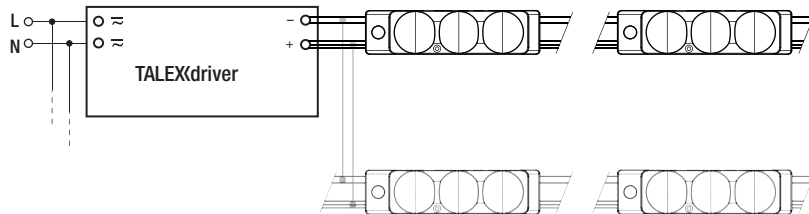


**Wiring**

Cable: AWG 18

Colour	red-white	white
Function	+	-

**Wiring example**

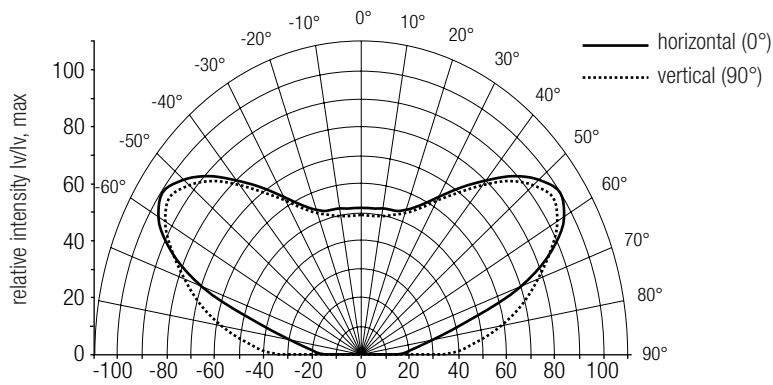


**Empirical values for decrease of luminous flux over the chain**

Type	Colour	Module distance 150 mm	Module distance 200 mm	Number of modules
P531 G1 DL	Daylight white	15 %	35 %	100

## Beam characteristics 155°

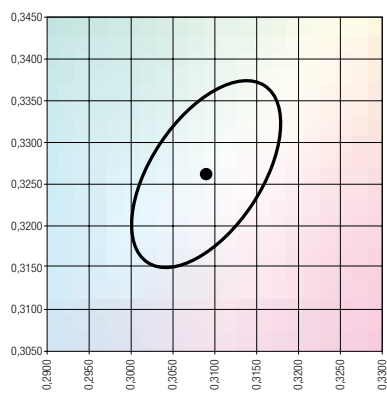
Light distribution  $I_v/I_{vmax}$ .



## Coordinates and tolerances according to CIE 1931

Daylight white (DL)

	x0	y0
Centre	0.3090	0.3260



MacAdam ellipse: 5SDCM

