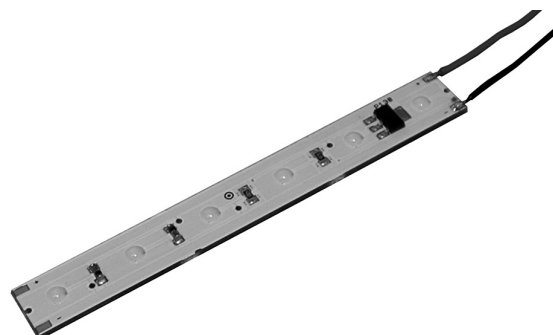
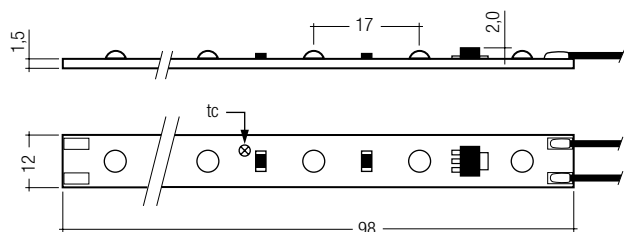


TALEXstrip P130-2

RoHS



Applications:

- safety lighting, general lighting, effect lighting and shelf lighting
- accenting lines and edges and for side injection
- edge lighting of transparent or diffuse materials
- suitable for use with TALEXprofile Z200-2/201-2/ Z22W-2

Highlights:

- maximum possible beam angle for uniform illumination (thanks to COB technology)
- low profile
- special light colours:
Gold for cheese and pastries
Cool meat for fresh meat and sausages

Properties:

- high-power LED in COB technology
- dimmable by pulse width modulation (PWM)
- colour: ④⑤⑥
warm white (WW): 3,000 K
neutral white (NW): 4,200 K
daylight white (DL): 6,500 K
Gold: 2,700 K
Cool meat
- integrated current source to stabilise luminous flux
- broad 140° light distribution for uniform illumination
- pre-mounted thermal conductive adhesive tape
- connection method: cable 200 mm
- identification of polarity: + red / – black

Chaining:

P130-2 → max. 30 pieces

Notes:

- cooling required. For details please refer to page 2
- applying reversed polarity of the supply voltage may damage the TALEXstrip
- none of the components of the TALEXstrip (substrate, LED, electronic components etc.) may be exposed to tensile or compressive stresses
- for further information on installation please refer to the brochure entitled "TALEX installation instructions"

TALEX											
type	article number	colour	colour temp. K ④	LED per module	typ. luminous flux lm ①	CRI / R _{fr}	voltage V DC ②	power W ①	t _a °C	t _c °C ③	packing unit pieces per carton
P130-2 WW 24V	89600747	warm white	3,000	6	81	> 80	24	3.0	-30 → +40	75	20
P130-2 NW 24V	89600746	neutral white	4,200	6	88	> 80	24	3.0	-30 → +40	75	20
P130-2 DL 24V	89600745	daylight white	6,500	6	106	> 75	24	3.0	-30 → +40	75	20
P130-2 GOLD 24V	89600744	Gold ⑤	2,700	6	55	> 90	24	3.0	-30 → +40	75	20
P130-2 CM2 24V	89600786	Cool meat ⑥		6	74	> 80 ⑥	24	3.0	-30 → +40	75	20

all data for t_a = 25 °C and t_c = 45 °C

① Tolerance range for optical and electrical data: ±15 %

② Exceeding the maximum operating voltage leads to an overload on the TALEXstrip. This may in turn result in a significant reduction in lifetime or even destruction of the TALEXstrip. Tolerance range for the supply voltage: 12V: +2V/-0V; 24V: +2V/-0V

③ R_{th, j-hs} = Thermal Resistance (Junction – Heat Sink)
If the maximum temperature limits are exceeded, the life of the module will be greatly reduced or the module may be damaged. The temperature of the TALEXstrip at the t_c point in the thermally stable state by means of a temperature sensor or temperature-sensitive sticker (available for example from www.conrad.com, www.rs-components.com) as per EN60598-1. For the precise position of the t_c point see the above diagram.

④ For colour temperatures and tolerances – see page 4

⑤ Gold: light colour for cheese and pastries
Cool meat: light colour for fresh meat and sausages

⑥ R_r (Cool meat): specific reflection index for illumination of meat and meat products according to standard DIN 10504

TALEXstrip P130-2

Thermal design and heat sink

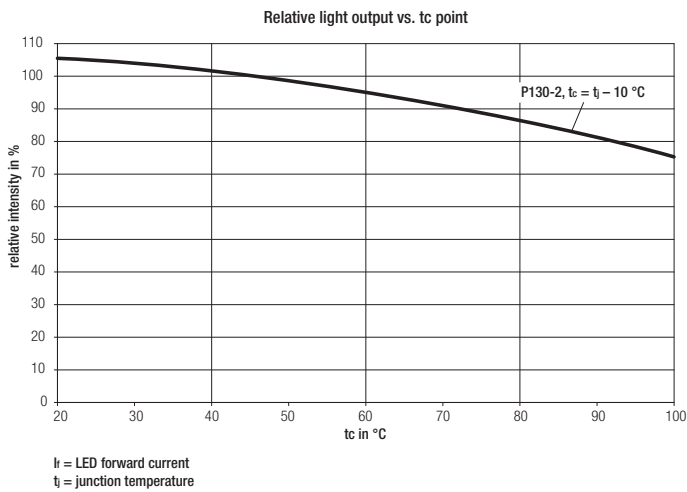
The rated life of TALEX products depends to a large extent on the temperature. If the permissible temperature limits are exceeded, the life of the TALEXstrip will be greatly reduced or the TALEXstrip may be destroyed.

Therefore TALEXstrip P130-2 needs to be mounted onto a heat sink. However, it is allowed to operate TALEXstrip P130-2 without heat sink for a short period of time (30 seconds).

TridonicAtco's excellent thermal design for TALEX products provides the lowest thermal resistance and therefore allowing new compact designs without sacrificing quality, safety and life time.

tc point, ambient temperature ta, temperature and service life

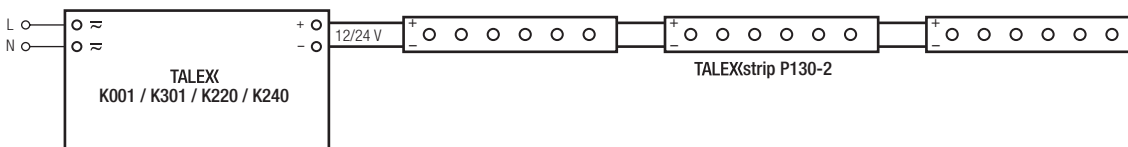
The temperature at tc reference point is crucial for the light output and life time of TALEX products.



For TALEXstrip P130-2 a max. tc temperature of 75 °C is recommended in order to achieve an optimum between heat sink requirements, light output and life time.

Compliance with the maximum permissible reference temperature at the tc point must be checked under operating conditions in a thermally stable state. The maximum value must be determined under worst-case conditions for the relevant application.

Wiring example



Chaining:

P130-2 → max. 30 pieces

Mounting instruction



TALEX strips from TridonicAtco which have to be installed on a heat sink are equipped as standard with thermally conductive adhesive tape on the back of the pc board.

These TALEX products must be installed with this adhesive tape. To ensure permanent adhesion the fixing/cooling surface must be cleaned before installing the TALEX strips to remove all dirt, dust and grease. For further information please refer to TridonicAtco "TALEX installation instructions".

Recommended heat sink surface

TALEXstrip P130-2

ta	tc	Rth, hs-a	heat sink surface
0 °C	70 °C	25.2 K/W	31 cm ²
10 °C	70 °C	21.6 K/W	36 cm ²
20 °C	70 °C	18.0 K/W	43 cm ²
30 °C	70 °C	14.4 K/W	53 cm ²
40 °C	70 °C	10.8 K/W	71 cm ²

Values valid for:

natural convection

heat sink material: aluminium

Rth, hs-a = required thermal resistance of heat sink

Electrical supply/choice of converter

TALEXstrips from TridonicAtco are not protected against overvoltages, overcurrents, overloads or short-circuit currents. Safe and reliable operation can only be guaranteed in conjunction with a converter which complies with the relevant standards. The use of TALEX converters from TridonicAtco in combination with TALEX modules guarantees the necessary protection for safe and reliable operation.

If a converter other than TridonicAtco TALEXconverter is used, it must provide the following protection:

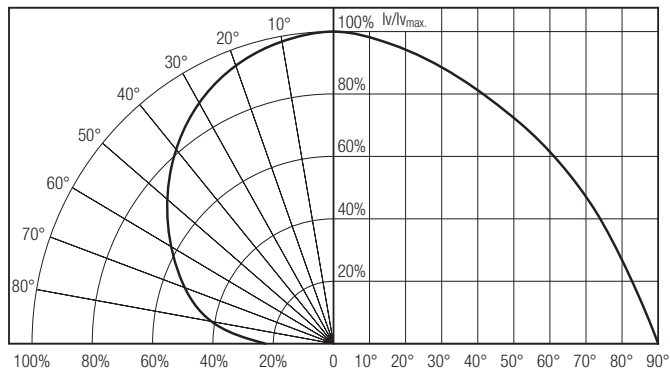
- SELV
- Short-circuit protection
- Overload protection
- Overtemperature protection

TALEXstrip P130-2

Optical characteristics TALEXstrip P130-2

The special design of the TALEXstrip P130-2 ensures an optimum of homogeneity for the light distribution.

TALEXstrip P130-2: Light distribution I_v/I_{vmax} .



Colour	I_{vmax} (cd)
warm white (WW)	21
neutral white (NW)	24
daylight white (DL)	29
Gold	
Cool meat	

TALEXstrip P130-2

Coordinates and tolerances according to CIE 1964

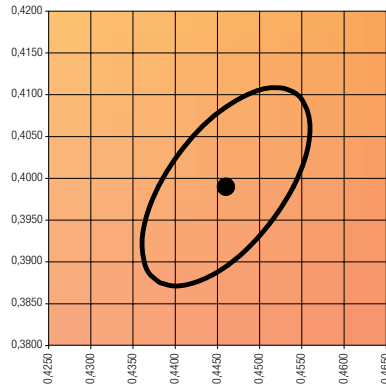
CIE coordinates:

warm white

	x0	y0
centre	0.4460	0.3990

MacAdam ellipse: 5SDCM

warm white



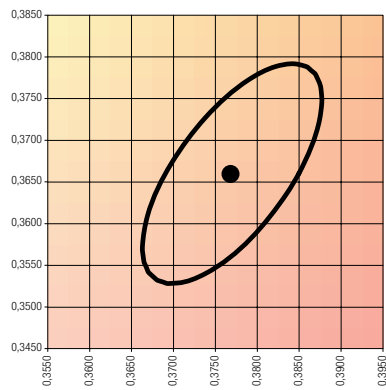
CIE coordinates:

neutral white

	x0	y0
centre	0.3770	0.3660

MacAdam ellipse: 5SDCM

neutral white



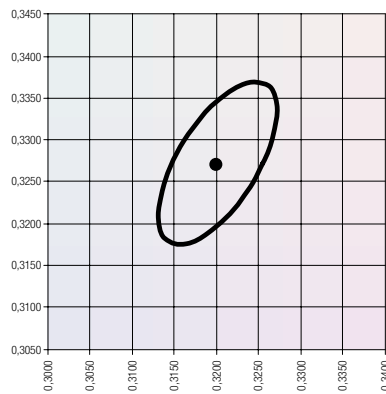
CIE coordinates:

daylight white

	x0	y0
centre	0.3200	0.3270

MacAdam ellipse: 5SD

daylight white



TALEXstrip P130-2

Coordinates and tolerances according to CIE 1964

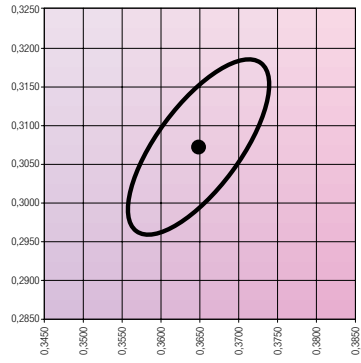
CIE coordinates:

Cool meat

	x0	y0
Centre	0.3630	0.3070

MacAdam Ellipse: 5SDCM

Cool meat



CIE coordinates:

Gold

	x0	y0
Centre	0.4700	0.4160

MacAdam Ellipse: 5SDCM

Gold

