

RoHS

TALEXmodule TAPE FD101
TALEXmodule TAPE

Product description

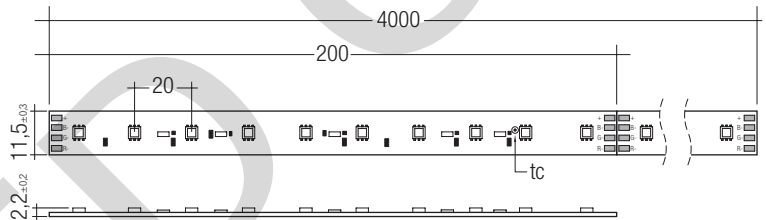
- Accenting lines and edges and for side injection
- Edge lighting of transparent or diffuse materials
- LED on flexible board with adhesive tape
- Low profile
- LED in SMD technology
- Dimmable by pulse width modulation (PWM)
- Constant current source for stabilising the luminous flux
- Attached with premounted adhesive tape
- Smallest unit (10 LEDs) can be trimmed at every 200 mm
- No cooling required²
- Suitable for TALEXaccessory PROFILE Z200-2 / 201-2 / Z22W-2

Technical data

Beam characteristic	120°
Ambient temperature ta	-30 ... +55 °C
tc point	75 °C
Risk group (EN 62471:2008)	0



Standards, page 2



Ordering data

Colour	Type	Article number
200 light points per module		
Red, green, blue	FD101 RGB	89601028
Packaging: 8 pieces/carton		

Specific technical data

Type	Colour red				Colour green				Colour blue				Supply voltage DC	Power ³	Total length
	Wave-length	Typ. luminous flux ¹	Current	Power	Wave-length	Typ. luminous flux ¹	Current	Power	Wave-length	Typ. luminous flux ¹	Current	Power			
200 light points per module															
FD101 RGB	625 nm	385 lm	350 mA	8.5 W	525 nm	770 lm	1,000 mA	24 W	465 nm	90 lm	350 mA	8.5 W	24 V	41 W	4,000 mm

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

² Please note the thermal design on page 3.

³ Please refer to EN 62471:2008.

All values at ta = 25 °C.

Converters/lighting controls matrix – TALEX(module TAPE FD101

Converters REMOTE LCU			Lighting controls REMOTE						Lighting controls IN-BUILT	
Type	0025 K211 24V		C001	C002	C004			C003 DALI RGB		
Article number	86455066		86454974	86454968	24138760			86457912		
Assignable converters			Assignable lighting controls						Assignable lighting controls	
Type	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
TALEX(module TAPE FD101 (1 unit [®]))	1	11	1	70	1	70	1	70	1	17

[®] 1 unit corresponds to 0.2 m.

Standards

EN 62031
EN 62471

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 TALEXtape will be greatly reduced or the TALEXmodule TAPE may be destroyed.

Therefore it is recommended to mount the TALEXmodule TAPE FD101 onto a heat sink.

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

Thermal behaviour

storage temperature	-40–85 °C
operating temperature	-30–55 °C
tc max.	75 °C

tc point, ambient temperature and lifetime

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

For TALEXmodule TAPE FD101 a tc temperature of 75 °C has to be complied 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.

Mounting instruction

The TALEXmodule TAPE is separable at 10 or multiple of 10 LED with the full function of each segment.



The fixing/cooling surface must be cleaned before installing the TALEX modules to remove all dirt, dust and grease.

Prevent shear- or peel forces

For further information please refer to the brochure entitled "TALEX installation instructions and guidelines".

Notes for soldering

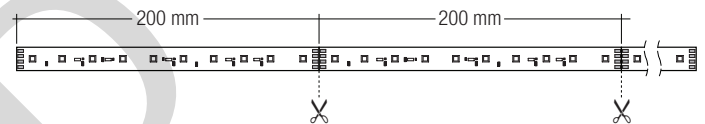
Unmounted module

- pretin only the cable
- soldering at max. 300 °C 4 s

Mounted module

- pretin solder pads and cable
- soldering at max. 350 °C 3 s

Cutting the TALEXmodule TAPE FD101



Electrical supply/choice of converter

TALEXmodule TAPE from Tridonic is 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 Tridonic in combination with TALEXmodule TAPE guarantees the necessary protection for safe and reliable operation.

The TALEXmodule TAPE is only for the operation with SELV < 60 V.

The operation at converters with output voltage > 60 V is with an additional preparations possible. Further information on request.

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

- Short-circuit protection
- Overload protection

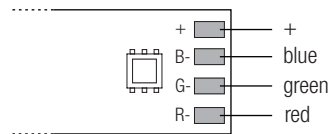


TALEXmodule TAPE FD101 must be supplied by a constant voltage converter.

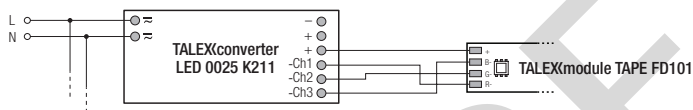
Operation with a constant current converter will lead to an irreversible damage of the module. Reversed polarity can damage the TALEXmodule TAPE FD101.

It is not allowed to chain several complete TALEXmodule TAPE FD101 in series. (max. 4,000 mm)

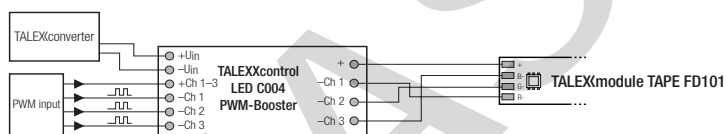
Wiring



Wiring example up to 2,200 mm

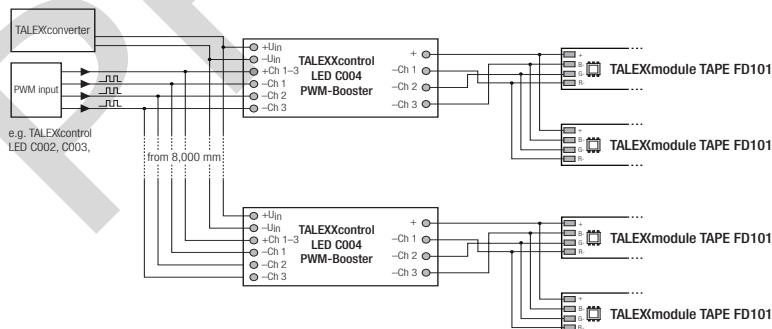


Wiring example up to 4,000 mm



e.g. TALEXcontrol LED C002, C003,

Wiring example up to 8,000 mm / from 8,000 mm

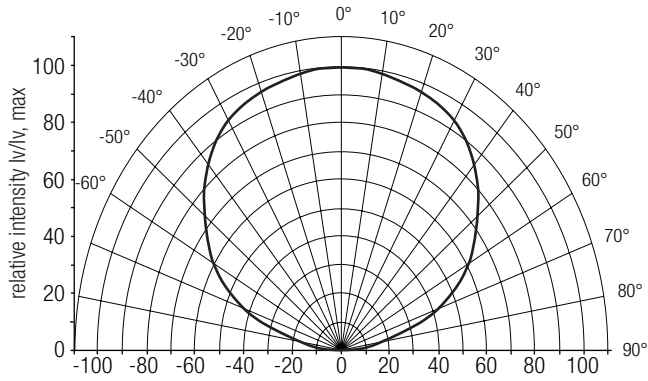


e.g. TALEXcontrol LED C002, C003,

Optical characteristics TALEX(module TAPE FD101

The optical design of the TALEX(module TAPE lens system ensures an optimum of homogeneity for the light distribution.

Light distribution $I_v/I_{v,max}$.



CIE chromaticity diagram

