# LED RIBBONS - CONSTANT VOLTAGE

# **224 PROFI**

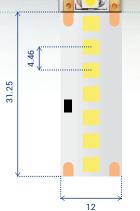
- Premium LED ribbon with 224 LEDs (3528 PROFI) per meter
- Developed with the emphasis on high luminous flux and the best level of homogeneity of light on the market
- CRI>80 guarantees natural light (CRI>90 on request)
- Ideal for applications with the demand on high level of homogeneity of light of ribbon in Al profile
- Double channel 224/TW version enables CCT mixing by an additional controller
- Lifetime L70 (30% lumen depreciation) 50.000 hours of operation at Tc
- Warranty 3 years



# **Technical parameters**

9.00			
	DRIVING	24 VDC	+0
	POWER CONSUMPTION	15.4 W/m	<u>∇</u> # <u>∇</u> # ∇# ∇#
	NO. OF LEDS	224 LEDs/m	Ž* Ž*
	MAX T <sub>c</sub>	40 °C	$\stackrel{\vee}{\nabla}_{\vec{x}}$ $\stackrel{\vee}{\nabla}_{\vec{x}}$ $\bullet$ $\bullet$ $\bullet$
	LED TYPE	3528 PROFI	
	MAX. LENGTH*	4 m	Ď Ď
	PACKING	2,5 m	- 0

 $\star\delta$  20 = 129 sections (1 section = 31,25 mm) is the length of LED ribbon from the connection, at which lumen depreciation reaches 20%.





# **Product variants**

ORDER CODE	PRODUCT NAME	CCT	IP RATING	EFFICACY	FLUX**
00202768	LED RIBBON 224/W Profi	cool white	IP20	130 lm/W	2000 lm/m
00202769	LED RIBBON 224/NW Profi	neutral white	IP20	130 lm/W	2000 lm/m
00202770	LED RIBBON 224/WW Profi	warm white	IP20	124 lm/W	1900 lm/m
00203310	LED RIBBON 224/TW Profi	cool + warm white	IP20	130 lm/W	2000 lm/m
on request	LED RIBBON 224/W IP64 Profi	cool white	IP64	-	-
on request	LED RIBBON 224/NW IP64 Profi	neutral white	IP64	-	-
on request	LED RIBBON 224/WW IP64 Profi	warm white	IP64	-	-

<sup>\*\*</sup> The luminous flux values are based on typical values given by the producer of the LED at Tc=25° C.



# **Recommended power supplies**

ORDER CODE	TYPE	OUTPUT VOLTAGE	OUTPUT	IP RATING	DIMENSIONS [MM]	WARRANTY	MAX. LENGTH OF RIBBON
00203519	RS-15-24	24 VDC	15 W	IP20	62.5 x 51 x 28	2 years	0.78 m
00201560	LPH-18-24	24 VDC	18 W	IP67	140 x 30 x 22	2 years	0.93 m
00203047	RS-25-24	24 VDC	25 W	IP20	78 x 51 x 28	2 years	1.30 m
00202843	LPV-35-24	24 VDC	35 W	IP67	148 x 40 x 30	2 years	1.80 m
00203126	RS-50-24	24 VDC	50 W	IP20	99 x 97 x 36	2 years	2.60 m
00200927	LPV-60-24	24 VDC	60 W	IP67	162.5 x 42.5 x 32	2 years	3.10 m
00202443	RS-100-24	24 VDC	100 W	IP20	159 x 97 x 38	2 years	5.20 m
00202382	LPV-100-24	24 VDC	100 W	IP67	190 x 52 x 37	2 years	5.20 m
00201102	CLG-150-24A	24 VDC	130 W	IP67	222.2 x 68 x 38.8	3 years	6.75 m
00202442	RS-150-24	24 VDC	150 W	IP20	199 x 98 x 38	2 years	7.75 m



### **Installation of LED Ribbons**

LED ribbon should always be installed as a part of LED profile. LED profile is a simple lighting fixture composed of four basic components:

- LED ribbon (light source)
- AL profile (heat conducting body)
- Linear optical diffuser (LED ribbon protection and light behavior)
- Accessories (wiring, profile endcaps, mounting brackets etc.)

Installation of LED ribbons into profiles is recommended for the following reasons:

- LED thermal management (LED ribbons cannot be installed in wood or in other non-heat conducting surface due to the danger of overheating)
- LED ribbon protection
- Protection against electric shock (although only against low voltage 12 V or 24 V)

Our portfolio of LED profiles includes everything from simple kitchen and furniture lights to main lights in industrial buildings, sport centers, and also lights used in advertisement.

Lifetime of LED profile is determined by LED ribbon which is used in LED profiles. Our LED ribbons have guaranteed lifetime L70 (30% Lumen Depreciation) between 25.000 and 70.000 hours of operation.

There are two kinds of protection against weather conditions. First option is to use IP64 LED ribbon in LED profiles. Secondly, LED profile can be filled with silicon based material which will ensure IP64.



#### Important parameters

#### **Colour temperature**

1800 K · 3000 K · 4000 K · 6	000 K - 8000 K - 16000 I
WARM WHITE	2700~3200 k
NEUTRAL WHITE	4000~4500 K
COOL WHITE	4500~6800 K

# **Viewing Angle**

Defines the angle into which majority of light is being emitted. Typical viewing angle of high bay lights and low bay lights is around 60° and 90° respectively. Street lighting applications usually use special asymmetrical optics.

#### CRI

Color Rendering Index - indicates how evenly wavelengths are distributed in the light spectrum. Low CRI value causes distortion of colours in the environment (e.g. greenish touch). CRI (sometimes also Ra) range is 0–100. All environments with human activity should be equipped with light sources with CRI higher than 80 according to the current regulations

#### **Luminous flux**

Indicates how much light the source can emit. Basic unit is lumen [Im].

HALOGEN REFLECTOR	8 - 12 lm/W @ CRI100
METALHALOGEN HIGH BAY LUMINAIRES	30 - 70 lm/W @ CRI80
TUBE LUMINAIRES	40 - 80 lm/W @ CRI80
SODIUM STREET LIGHTS	50 - 110 lm/W @ CRI25