LED RIBBONS - CONSTANT VOLTAGE

120 OPTIMUM

Basic LED ribbon with 120 LEDs (3528 OPTIMUM) per meter

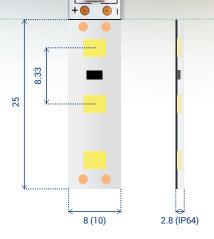
- Developed as low-cost product with moderate level of homogeneity of light
- Ideal for short-term applications (e.g. booths, etc.)
- Lifetime L70 (30% lumen depreciation) 25.000 hours of operation at Tc
- Warranty 2 years



Technical parameters

DRIVING	12 VDC
POWER CONSUMPTION	9.6 W/m
NO. OF LEDS	120 LEDs/m
MAX T _c	40 °C
LED TYPE	3528 OPTIMUM
MAX. LENGTH*	3 m
PACKING	2,5 m

 $\star\delta$ 20 = 120 sections (1 section = 25 mm) is the length of LED ribbon from the connection, at which lumen depreciation reaches 20%.





Product variants

ORDER CODE	PRODUCT NAME	ССТ	IP RATING	EFFICACY	FLUX**
00201670	LED RIBBON 120/W Optimum	cool white	IP20	83 lm/W	800 lm/m
00201671	LED RIBBON 120/WW Optimum	warm white	IP20	79 lm/W	760 lm/m
on request	LED RIBBON 120/NW Optimum	neutral white	IP20	83 lm/W	800 lm/m
00202522	LED RIBBON 120/W IP64 Optimum	cool white	IP64	72 lm/W	700 lm/m
00202523	LED RIBBON 120/WW IP64 Optimum	warm white	IP64	70 lm/W	680 lm/m
on request	LED RIBBON 120/NW IP64 Optimum	neutral white	IP64	72 lm/W	700 lm/m

^{**} 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
00201287	RS-15-12	12 VDC	15 W	IP20	62.5 x 51 x 28	2 years	1.25 m
00200783	LPH-18-12	12 VDC	18 W	IP67	140 x 30 x 22	2 years	1.50 m
00201288	RS-25-12	12 VDC	25 W	IP20	78 x 51 x 28	2 years	2.10 m
00200786	LPV-35-12	12 VDC	35 W	IP67	148 x 40 x 30	2 years	2.95 m
00200809	RS-50-12	12 VDC	50 W	IP20	99 x 97 x 36	2 years	4.20 m
00200803	LPV-60-12	12 VDC	60 W	IP67	162.5 x 42.5 x 32	2 years	5.00 m
00200808	RS-100-12	12 VDC	100 W	IP20	159 x 97 x 38	2 years	8.35 m
00200917	LPV-100-12	12 VDC	100 W	IP67	190 x 52 x 37	2 years	8.35 m
00200799	CLG-150-12A	12 VDC	130 W	IP67	222.2 x 68 x 38.8	3 years	10.85 m
00200553	RS-150-12	12 VDC	150 W	IP20	199 x 98 x 38	2 years	12.50 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