LINEAR FLEX BASIC ML
LFBML-SC000-24V-6S167-20

PRODUCT DESCRIPTION

- Voltage-based, flexible LED module
- Ideal for colourful, decorative, and industrial lighting purposes
- Suitable for sign lighting or illuminated advertisements
- Available in red, green, blue, yellow
- Service life of >36.000 hours
- Double layer circuit board with optimised thermal management
- Fixed using self-adhesive 3M adhesive tape

TECHNICAL DATA/OVERVIEW

Operating voltage	24 VDC
Nominal capacity / m	14,4 W
Nominal capacity / segment	1,44 W
LED type	SMD 5050
LED spacing	16,7 mm
LED quantity / m	60
Cut size	100 mm / 6 LED
Dimensions (l x w x h)	5000 x 10 x 2 mm
Service life	>36.000 h / L70
Tc point temperature	Tc max. +70 °C
Ambient temperature	-25 … +50 °C
ESD classification	Testing severity level 1

CONNECTION-RELATED INFORMATION

Padmaße (l x b)	2 x 2 mm
Anzahl Pads [Stk]	2
max. Leitungsquerschnitt	0,75 mm²
max. Konfektionslänge [m]	5

FULFILLMENT OF STANDARDS

EN 62031:2015	2011/65/EU	referring to
EN 62471:2009	2009/125/EU	IEC 62717

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SPECIFIC DATA OVERVIEW

Item no.	Light colour	LED type	Dimming	Operating voltage
9009080	Red	SMD 5050	PWM (pulse width modulation)	24 VDC
9009081	Yellow	SMD 5050	PWM (pulse width modulation)	24 VDC
9009082	Green	SMD 5050	PWM (pulse width modulation)	24 VDC
9009083	Blue	SMD 5050	PWM (pulse width modulation)	24 VDC

PHOTOMETRIC DATA

Item no.	Light colour	Typical wavelength	Wavelength tolerance	Typical luminous flux / m	Luminous flux tolerance	CRI (Ra)	Beam angle
9009080	Red	625 nm	620 nm - 630 nm	420 lm	± 20 %	-	120°
9009081	Yellow	587 nm	584 nm - 590 nm	420 lm	± 20 %	-	120°
9009082	Green	522 nm	520 nm - 525 nm	1001 lm	± 15 %	-	120°
9009083	Blue	467 nm	465 nm - 470 nm	232 lm	± 32 %	-	120°

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ELECTRICAL DATA

Item no.	Nominal voltage	Typical capacity / m	Typical current / m	Current tolerance
9009080	24 VDC	14,4 W	0,60 A	± 6 %
9009081	24 VDC	14,4 W	0,60 A	± 6 %
9009082	24 VDC	14,6 W	0,61 A	± 6 %
9009083	24 VDC	13,9 W	0,58 A	± 8 %

THERMAL DATA

Item no.	Service life	Rated service life	tc rated	tp rated	Ambient temperature	Storage temperature
9009080	>36.000 h	L70 B10	70 °C	65° C	-25 … +50 °C	-20 … +65 °C
9009081	>36.000 h	L70 B10	70 °C	65° C	-25 … +50 °C	-20 … +65 °C
9009082	>36.000 h	L70 B10	70 °C	65° C	-25 … +50 °C	-20 … +65 °C
9009083	>36.000 h	L70 B10	70 °C	65° C	-25 … +50 °C	-20 … +65 °C

FURTHER INFORMATION

Item no.	Max. feed-in length	Max. bending radius	IP rating	Water protection	Fixture
9009080	5000 mm	30 mm	IP 00	—	self-adhesive
9009081	5000 mm	30 mm	IP 00	—	self-adhesive
9009082	5000 mm	30 mm	IP 00	—	self-adhesive
9009083	5000 mm	30 mm	IP 00	—	self-adhesive

PRODUCT KEY DESCRIPTION

LFBML	SW800	24V	5S100	20
category	photometrical Code	voltage- / current-based	layout code	protection class

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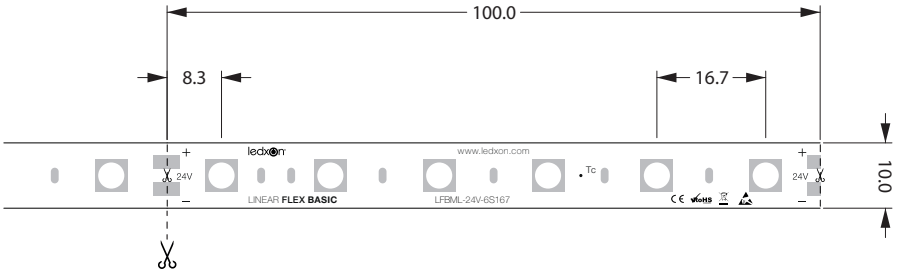
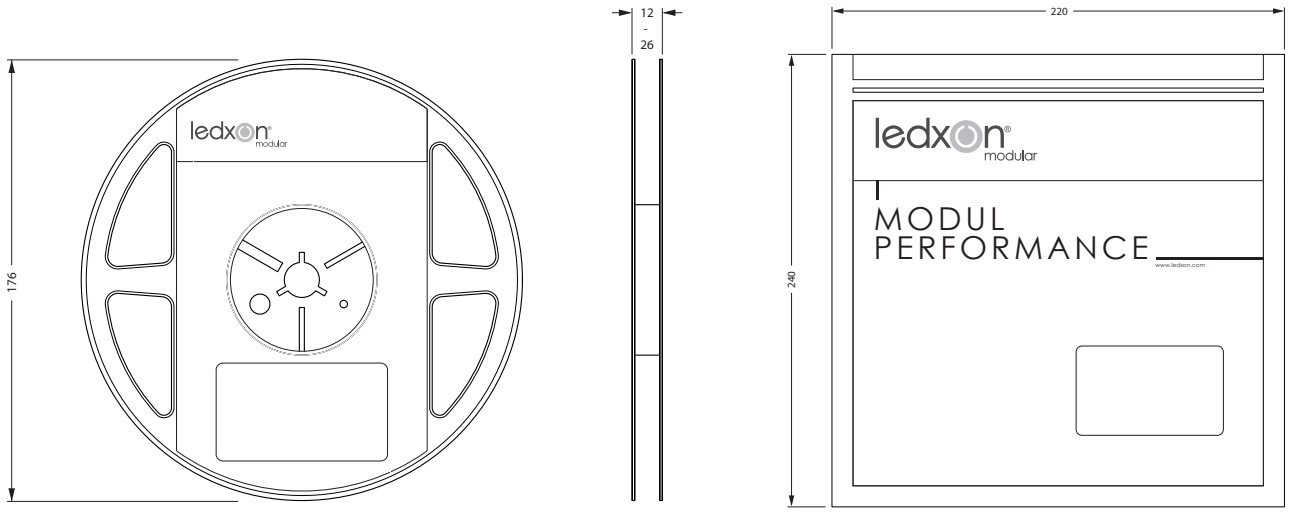
DIMENSIONS

Item no.	Length	Width	Height	Cut size	LED / cut size	LED / m	LED spacing
9009080	5000 mm	10 mm	2 mm	100 mm	6 pcs.	60 pcs.	16,7 mm
9009081	5000 mm	10 mm	2 mm	100 mm	6 pcs.	60 pcs.	16,7 mm
9009082	5000 mm	10 mm	2 mm	100 mm	6 pcs.	60 pcs.	16,7 mm
9009083	5000 mm	10 mm	2 mm	100 mm	6 pcs.	60 pcs.	16,7 mm



ORDER INFORMATION

Item no.	Item description	Packaging unit (PU)	Ordering unit (OU)	Weight gross / PU	Dimensions / PU length x width x height
9009080	LFBML-SC625-24V-6S167-20	1 roll = 5 m	1 metre	132 g	240 mm x 220 mm x 15,5 mm
9009081	LFBML-SC589-24V-6S167-20	1 roll = 5 m	1 metre	132 g	240 mm x 220 mm x 15,5 mm
9009082	LFBML-SC525-24V-6S167-20	1 roll = 5 m	1 metre	132 g	240 mm x 220 mm x 15,5 mm
9009083	LFBML-SC470-24V-6S167-20	1 roll = 5 m	1 metre	132 g	240 mm x 220 mm x 15,5 mm



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INFORMATION ON SERVICE LIFE

The maximum Tc/Tp temperature is a crucial factor for the service life information relating to ledxon LED modules.
If the permitted limits are exceeded, this shall significantly reduce the service life and may even result in the destruction of the modules.
The expected service life of >36,000 hours represents a purely statistical parameter. (L70/B10 at Tp = 65°C)
For optimum operation of ledxon LED modules, we recommend installation only on rigid and stationary surfaces.
The heatsink must provide for sufficient heat dissipation such that the maximum permitted temperature is not exceeded at the Tc point.
The temperatures at the Tc point must be measured in accordance with the specifications stated in EN 60598-1.

INFORMATION ON PHOTOMETRIC AND ELECTRICAL DATA

Capacity coordinates and tolerances in accordance with CIE 1931
Measurement environment temperature: ta = 25°
Measurement tolerance for colour coordinates (x / y) +/- 0.005
The maximum permitted operating voltage must not be exceeded. Otherwise a reduction in service life or a failure may occur.
All ledxon LED modules can be dimmed using PWM (pulse width modulation).

SAFETY AND INSTALLATION INFORMATION

When installing flexible LED modules, the maximum permitted bend radius must be not be fallen short of.
Bending these modules laterally results in damage to the printed circuit board.
In order to ensure optimum adherence for the double-sided 3M adhesive tape, ledxon recommends installing the modules only on dry, clean surfaces that are free of grease, oil and silicone. ledxon does not accept any liability for the correct adhesion of the LED modules.
When installing ledxon LED modules, standard ESD safety precautions must be complied with.
ledxon flexible LED modules are delivered without cabling. These modules are electrified by soldiering leads onto the soldering pads provided. The maximum permitted cable cross-section must be observed in this process. Here, the soldering temperature of 270°C for a maximum of 10 seconds must not be exceeded. ledxon modules that are equipped with LED types SMD 5050 and 5630 are subject to photobiological risk group 1.