

# LINEAR FLEX BASIC ML LFBML-MW800800-24V-12D167-20



# PRODUCT DESCRIPTION

- Voltage-based, flexible LED module
- Ideal for versatile decorative and accented lighting purposes
- Suitable for use where moderate lighting levels are required
- Very high light quality and colour consistency (MacAdam 3)
- Dynamic white light setting from 2700 K to 6000 K
- Service life of >36.000 hours / L70B10
- 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	28,8 W
Nominal capacity / segment	2,88 W
LED type	SMD 5050
LED spacing	16,7 mm
LED quantity / m	120
Cut size	100 mm / 12 LED
Dimensions (I x w x h)	5000 x 20 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



Pad dimensions (Ixw)	2 x 2 mm
Quantity of pads	3
Max. wire cross section	0,75 mm <sup>2</sup>
Max. assembly length [m]	5



## **FULFILMENT OF STANDARDS**

EN 62031	IEC 62717	DIN 5510-2
EN 62471	EN 45545, -1, -3	CE / RoHS







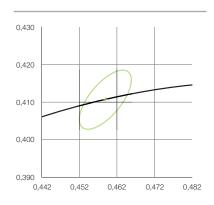
# **SPECIFIC DATA OVERVIEW**

Item no.	Light colour	Nominal colour temp.	Typical lumen / m	Tolerance	Operating voltage
0000000	warm white	2700 K	952 lm	3 SDCM	24 VDC
9009233	cool white	6000 K	1008 lm	3 SDCM	24 VDC

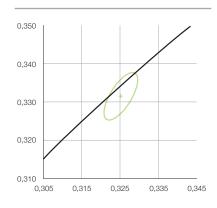
#### **PHOTOMETRIC DATA**

Item no.	Nominal colour	Colour	Colour location	Typical luminous	Luminous flux	CRI	Beam
	temperature	temperature	coordinates (x,y)	flux / m	tolerance	(Ra)	angle
0000000	2700 K	2710 K	0,4590 / 0,4107	952 lm	± 29 %	≥ 80	120°
9009233	6000 K	5852 K	0,3251 / 0,3314	1008 lm	± 29 %	≥ 80	120°

#### 2700 K



### 6000 K







# **ELECTRICAL DATA**

Item no.	Nominal voltage	Typical capacity / m	Typical current	Current toler- ance	Energy classification
0000000	24 VDC	13,4 W	0,56 A	± 19 %	
9009233	24 VDC	13,4 W	0,56 A	± 19 %	A

#### **THERMAL DATA**

Item no.	Service life	Rated service life	tc rated	tp rated	Ambient temperature	Storage temperature
9009233	>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
9009233	5000 mm	30 mm	IP 00	_	self-adhesive

#### PRODUCT KEY DESCRIPTION

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

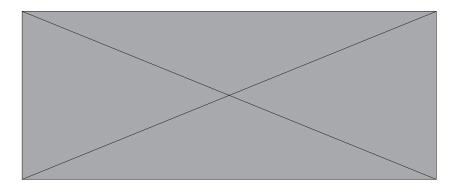






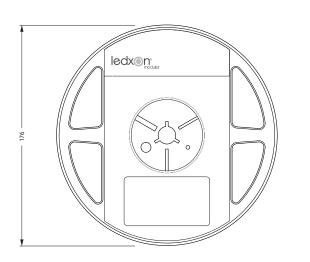
#### **DIMENSIONS**

Item no.	Length	Width	Height	Cut size	LED / cut size	LED / m	LED spacing
9009233	5000 mm	20 mm	2 mm	100 mm	12 pcs.	120 pcs.	16,7 mm

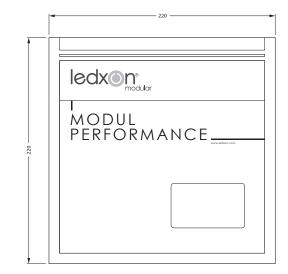


#### **ORDER INFORMATION**

Item no.	Item description	Packaging		Weight	Dimensions / PU	
	, and the second	unit (PU)	unit (OU)	gross / PU	length x width x height	
9009233	LFBML-MW827860-24V-12D167-20	1 roll = 5 m	1 metre	242 g	240 mm x 220 mm x 28 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

Tolerance range of photometric and electrical data +/-10%

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.

