



**Art.-No.: 0020410007**

## FEATURES

Input voltage: 24 V DC  
 LED qty: 120 LED  
 Power consumption per meter (nom.): 28.8 W  
 LED Type: SMD 5050 (60mA)  
 Color: RGB



## DECOLine LED Flex Modul 120 24V

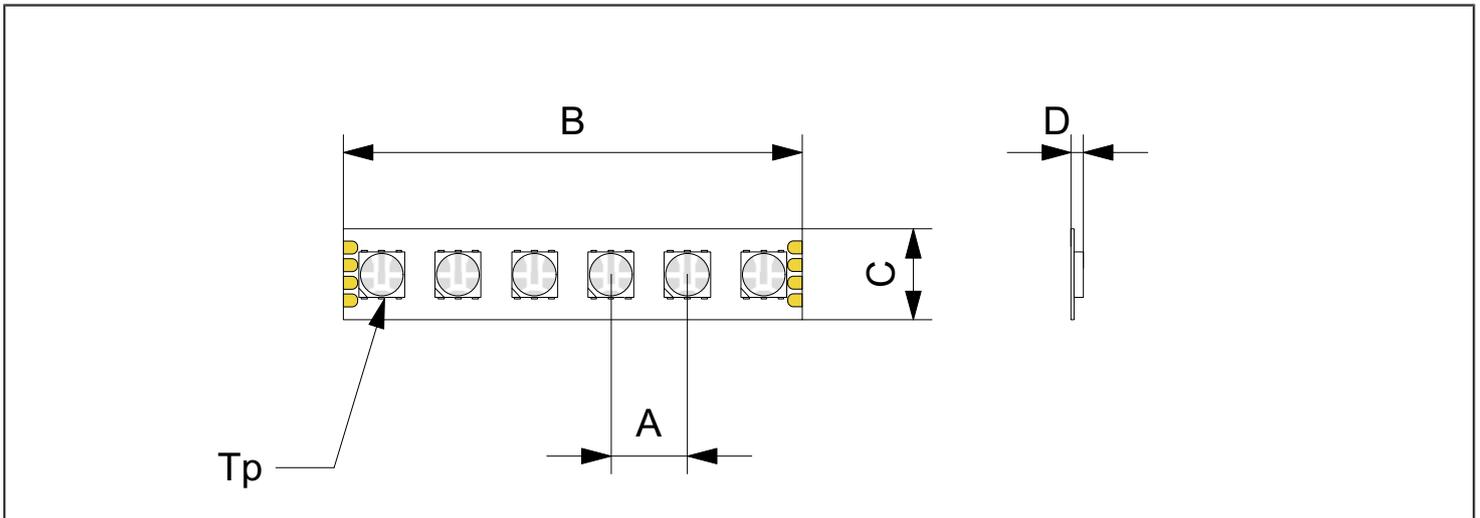
### MECHANICAL FEATURES

LED quantity per cutting unit		6 LED
LED quantity per meter		120 LED
LED pitch	A	8.33 mm
length of LED module		50 mm
length of cutting unit	B	50 mm +/-0.5
Dimension - length (roll)		5000 mm +/-25

### MECHANICAL FEATURES

Dimension - width	C	10 mm +/-0,3
Dimension - height	D	2.1 mm +/-0,2
IP-Protection class		IP20
Type of protection		-
PCB Type		FPC
PCB Colour		RAL. 9003/9010
Tape on Backside (type)		3M 300LSE

### DRAWING



## ELECTRICAL FEATURES

Modul driving method	Constant voltage - common anode
Input voltage	24 V DC
Power consumption per meter (nom.)	28.8 W
Power consumption per unit	Typ. 1.3 W
ESD Protection	2000 V

## PHOTOMETRIC FEATURES

Associated rated lumen maintenance (Lx) failure rate (Bx)	L70F10
Dominant wave length (typ.) RGB	622 / 523 / 467 nm

The indicated values of the colors (R/G/B) refer to a LED module without protective coating or encapsulation. Please note that sealing materials may alter the color and the color perception of the LED module.

## ELECTRICAL FEATURES

Startup time	< 2 ms
Reverse polarity protection	no
max. strip length for one side feeding	1700 mm
Dimmable	yes
Dimming method	PWM

## PHOTOMETRIC FEATURES

Luminous flux per meter (typ.) (R/G/B)	210 lm / 540 lm / 120 lm
Beam angle	120 °
Rated life time (@Tp=55°C)	36000 h
Photobiological risk group (EN62471)	Free group

## ENVIRONMENTAL CONDITIONS

Performance Temperature range (Tp)	-20 °C - 60 °C
Ambient temperature range (Ta)	-20 °C - 40 °C
Related humidity	< 90 %

## GENERAL INFORMATION

This datasheet is part of the product. It contains important notices for operating and handling this product. Retain this datasheet for later reference or forward it if you give this product to a third party.

## APPROPRIATE USAGE AND EXCLUSION OF LIABILITY

The LED module serves as a component to be used in lighting fixtures. Please pay attention to the intended use and the current regulations. The electrical, mechanical as well as the optical properties and limit values can be found in the datasheet for the LED module. Only use the LED Module as stated in the datasheet. An other usage as assigned is not permitted and can damage the product severely. Furthermore this can also cause a high risk of a short circuit, an electric strike, etc. For all property and personal damage, which occur out of inappropriate usage, the operator will be liable. Operational and connection errors are not in the range of our influence, therefore we can not take any responsibility for damages caused by this. For inappropriate or improper usage, reconstruction of the LED Module, improper transportation, changes on the LED Module the warranty claim expires. Technical data can be changed anytime without prior notice. Liability or warranty for completeness, currency and correctness of the stated data is excluded.

## GENERAL INSTALLATION AND SAFETY INFORMATION FOR LED MODULES / ELECTROSTATIC DISCHARGE (ESD)

The LED modules can be cut with a suitable tool (e.g.: scissors) at the marked points. All modules are factory-made electrical connected. The module is equipped with soldering pads at the cutting points. The LED module is lead-free/RoHs-compliant and equipped with an adhesive tape, which is specified in this datasheet. Electrostatic discharge (ESD) can damage or destroy the LED Module. Static charges must be discharged when working with the LED module. We recommend to wear a grounded wristband to discharge appearing electrostatic charge in a controlled way. The LED modules can be cut with a suitable tool (e.g.: scissors) at the marked points. All modules are factory-made electrical connected. The module is equipped with soldering pads at the cutting points. The LED module is lead-free/RoHs-compliant and equipped with an adhesive tape, which is specified in this datasheet. Electrostatic discharge (ESD) can damage or destroy the LED Module. Static charges must be discharged when working with the LED module. We recommend to wear a grounded wristband to discharge appearing electrostatic charge in a controlled way. Static charges may arise when removing a protection sheet or while cleaning plastic surfaces. Only anti-static materials are suitable when packing this product. The LED modules can be cut with a suitable tool (e.g.: scissors) at the marked points. All modules are factory-made electrical connected. The module is equipped with soldering pads at the cutting points. The LED module is lead-free/RoHs-compliant and equipped with an adhesive tape, which is specified in this datasheet. Electrostatic discharge (ESD) can damage or destroy the LED Module. Static charges must be discharged when working with the

LED module. We recommend to wear a grounded wristband to discharge appearing electrostatic charge in a controlled way. Static charges may arise when removing a protection sheet or while cleaning plastic surfaces. Only anti-static materials are suitable when packing this product.

## PROCESSING NOTES

The LED modules can be cut at the marked points. The bonding takes place while soldering the wire to the designated soldering pads. Please pay attention to the correct assignment of the wires (+/-/R/G/B). While soldering the soldering time of <10 seconds with a max. soldering temperature of 260°C or <4 seconds with a max. temperature of 310°C must be adhered to. The fixation of the LED module takes place with the on the backside mounted double sided adhesive tape. The surface must be free from fat, oil, silicon, dust and dirt. Further advices regarding the characteristics of the tape and the processing you can gather from the manufacturer datasheet, which we will gladly forward to you on request. While mounting this LED module on electric leading surfaces an isolation has to be fixed at the end of the module between the LED module and the leading surface. When connecting the wire to the LED module an appropriate wire-cross-section has to be chosen. The lead wire should have a strain relief. Please pay attention to appropriate operating devices. Avoid mechanical strain on to the components of the LED module.

## IMPORTANT NOTES

The technical data and the energy efficiency of the LED modules resulting from this data are partially dependant on ambient conditions in the application. The data stated in this datasheet are based on a not processed module. During processing the LED module has to be cooled adequately. Inadequate cooling can lead to a change of the parameters that are stated in the datasheet. It can also cause a massive degradation of the lifetime. The exceedance of the stated operating voltage can cause an overload of the LED module and will reduce the lifetime, in the worst case it can destroy the LED module. The conducting path on the LED modules shall not be damaged or interrupted during processing. In an application with an increased humidity or dustpollution the LED module needs to be implemented in an extra casing with the appropriate protection level. Please note the in the data sheet stated temperatures for the installation situation. For flexible LED modules the smallest bending radius is 50mm. To avoid a damage to the electrical components, the LED module shall not be strongly curved or kinked. Repeated bending should be avoided.

**Status: 26.09.2023**

**The technical data was correct at time of printing and is subject to change without prior notice or warning.**