# **Bartheime**LED Solutions

# LEDlight flex 08 10 STANDARD 3000 IP66-MFC

- length 400 cm
- LED strips with protection against dew humidity
- ideal for applications in environments with increased humidity (e.g. bathroom and protected outdoor areas)
- good colour rendering: CRI Ra typ. 90
- Long service life L70 > 60,000 h at Tc < 80 °C</li>
- Current control by IC for constant brightness via the complete light line
- with TVS surge protection diode
- with high-quality 3M double-sided adhesive tape



# Please observe the installation and safety instructions at https://www.barthelme.de/content/en/manuals.aspx!

Note re light sources/EPREL: Our LED reels are not subject to classification according to the currently valid regulations. An LED reel contains interconnected light sources, the number and energy efficiency class of which are listed in the data sheet.

#### PHOTOMETRIC DATA



	50412828T	50412833T	50412834T
Typ. color temperature	2700 K	3000 K	4000 K
Light color	warm white	white	cold white
Typ. luminous flux per meter	2800 lm/m	2940 lm/m	3120 lm/m
Efficiency	97 lm/W	102 lm/W	109 lm/W
Built-in light source	C50012828	C50012833	C50012834
Number of light sources	80		
EEC of built-in light source	F E		
Typ. color rendering index	90		
LED beam angle	120 °		
Lifetime L70	>60000 h		

#### **ELECTRICAL DATA**

	50412828T	50412833T	50412834T
Operating voltage	24 V DC		
Typ. operating current	4,8 A		
Typ. power	115 W		
Typ. power per meter	28,8 W/m		

## **MECHANICAL DATA**

	50412828T	50412833T	50412834T
Length stripe	4000 mm		
Width stripe	10 mm		
Height stripe	1,4 mm		
Number of LEDs per cut	6		
Number of cuts	80		
Length per cut	50 mm		
Type of protection	66-MFC		

<sup>\*</sup>The LEDlight flex IP 66-MFC (= micro film coating) series has a silicone micro coating for protection against dew humidity. This means that applications in environments with increased humidity (e.g. bathrooms and protected outdoor areas) can also be equipped with Barthelme LEDlight flex lighting



solutions. Since the MFC tapes, in contrast to the complete encapsulation of the AQUALUC series, have a wafer-thin coating, the LED strip must always be additionally protected by a suitable housing. For use in directly weathered areas, an IP-protected housing must be used. We recommend the use of approved bearded helmets, aluminium profiles as well as suitable covers and end caps. An IP66 test according to DIN EN 60598-1 was carried out for the test. The test specimen is exposed to a strong jet of water from all directions for 3 minutes. In order to achieve the dielectric strength according to DIN EN 60598-1, a suitable housing must also be used. Please note that the IP protective layer is damaged during cutting and soldering. To restore full protection, the cut and solder joints must be resealed. A recommendation of our approved protective lacquers can be found at www.barthelme.de. The use of LED strip connectors to connect and join LED strips without tools is not permitted with the MFC strips.

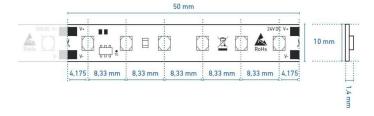
#### **GENERAL DATA**

	50412828T	50412833T	50412834T
Max. operable length <sup>1</sup>	3600 mm		
Storage temperature	-30° C ~ +80° C		
Max. temperature Tc <sup>2</sup>	80 ° C		

<sup>&</sup>lt;sup>1</sup>The value given applies to the application of the rated voltage at the first module section. When using a supply line, the maximum operable length changes depending on the supply line length and its cross section. At www.barthelme.de you will find an overview table for orientation.

It is possible to operate the entire roll length (4000 mm) with one feed. The change in brightness between the beginning and end of the LED strip is approx. 15%.

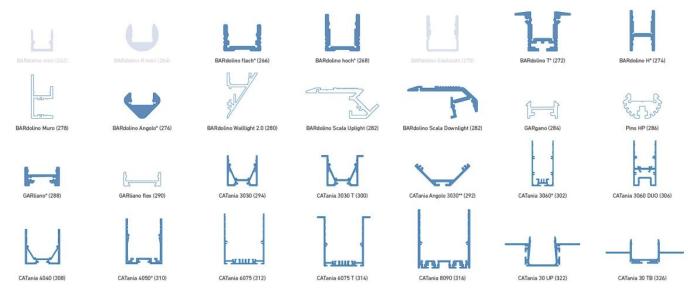
#### **TECHNICAL DRAWING**



## NOTE FOR INSTALLATION IN PROFILES

Never glue the LED strip over a profile joint! Due to physical expansion or contraction of the profile due to temperature fluctuations, the LED strip can be damaged. This can be remedied by using the right parts for the solder pads at the joint and by using flexible connections, e.g. soldered flexible wire bridges or LED strip connectors.

# **USE IN PROFILES**



weiß: LED-Punkte sichtbar, kein homogenes Lichtbild I white: LED dots visible, no uniform light distribution blau: homogenes Lichtbild möglich I blue: uniform light distribution is possible \*\* eine homogene Lichtlinie ist nur in Kombination mit einer hohen Abdeckung möglich I a uniform light line is only possible in combination with a high diffuser \*\* = nur in Kombination mit halbrunder Abdeckung I only in combination with semi-circular diffuser

@ max. Ta = 25 °C im Betrieb und Montagesituation Aufbau (Einbau bei CATania 30 UP und CATania 30 TB) ansonsten ggf. unzureichende Kühlung I @ max. Ta = 25 °C in operation and surface mounted installation [recessed installation with CATania 30 UP and CATania 30 TB] otherwise possibility of insufficient cooling

Bitte beachten: Unzureichende Kühlung beschädigt den LED-Streifen! | Please note: insufficient cooling will damage the LED strips!

<sup>&</sup>lt;sup>2</sup>The Tc point is marked on each cut. This should be measured in the thermally stable state.



# **NOTE**

LEDs and the electronic components/devices required for their operation are wearing parts and can function for many years depending on use and location. In general, these products are subject to an aging process, the light output of LEDs decreases in the course of their operating life. The aging of LEDs is due to thermal influences. Our LEDs correspond to the operating life, which has e.g. a L90/B10 value. This means that the installed LEDs of a given type retain at least 90% of their luminous efficiency and a maximum of 10% of the installed LEDs can deviate from this. Thus, the decrease of the luminous effect of the LED within the above-mentioned scope within the operating life does not represent a defect according to the current state of technology.

The guarantee period for the product is 5 years and begins on the day of shipment. Reference is the date of the delivery bill. The guarantee period may differ for accessories.