

# AQUALUC mini High Brightness frosted 48 V

- fully encapsulated flexible LED light line with thermal conducive polyurethane-ceramic compound and IP 67 protection
- only one bin per color according to 3 step MacAdam
- high efficiency with Barthelme LEDlight flex High Efficiency LED strip of up to 98 lm/W (at light color 840)
- resistant to water, UV radiation, abrasion and chemicals
- compact dimensions of only 10,5 x 5 mm
- small bending radius of only 50 mm (only one axis)
- current limiter and high amount of copper in FPC enable a long lifetime
- with 48 V technology for extra long feed-in lengths; several sections can be connected and operated with only one power supply unit



## Please observe the installation and safety instructions at https://www.barthelme.de/content/en/manuals.aspx ! When ordering, please note the article number scheme at the end of the data sheet.

## PHOTOMETRIC DATA

48	17,3 W/m	78 •	PITCH	DIMM		IP67	A.	SDCM
VDC	W/m	⊢ m →	■ 12 ●		120°			3

	AQUA-2012-0027	AQUA-2012-0031	AQUA-2012-0040	AQUA-2012-0056		
Type of color		White				
Encapsulation		frosted				
Typ. color temperature	2700 K	3100 K	4000 K	5600 K		
Light color	warm white	white	cold white	daylight		
Typ. total luminous flux per metre	1180 lm/m	1332 lm/m	1494 lm/m	1388 lm/m		
Efficiency	78 lm/W	88 lm/W	98 lm/W	91 lm/W		
EEC of installed light source(s)	F	E	D			
Typ. color rendering index	87	8	86 89			
Beam angle	120 °					
Dimming		dimmable				
LED strip used		LEDlight flex 12 48V				
L90/B10 bei Ta < 40°C	>60.000 h					

PHOTOMETRIC DATA TOLERANCES IN THE AQUALUC FAMILY: The stated photometric data of the AQUALUC products are typical values which in practice are influenced by the binning of the LED's as well as the individual production steps in the encapsulation process. Factors such as layer thickness, type of encapsulation and the light color of the uncoated LED's have an influence on the resulting color temperature of the finished AQUALUC product. As each of these factors are subject to process and production related tolerances the resulting photometric data of the AQUALUC products can deviate from the stated typical values.

## **ELECTRICAL DATA**

	AQUA-2012-0027	AQUA-2012-0031	AQUA-2012-0040	AQUA-2012-0056	
Operating voltage 48 V DC		/ DC			
Power per meter	17,3 W/m				

#### MECHANICAL DATA

	AQUA-2012-0027	AQUA-2012-0031	AQUA-2012-0040	AQUA-2012-0056	
Width	10,5 mm				
Height	5 mm				
Bending radius	50 mm				
Type of protection	IP 67				



Aqualuc products have a length tolerance +/- 5 mm at < 1 m and +/- 0.2 % at > 1 m

#### **GENERAL DATA**

	AQUA-2012-0027	AQUA-2012-0031	AQUA-2012-0040	AQUA-2012-0056	
Ambient temperature Ta	-20 °C ~ +40 ° C				
Max. temperature Tc	72 ° C				
Max. buildable length with 1 m cable	9650 mm				
Remarks	Connection/forwarding cable: optionally 1 - 6 m with free wire ends or 0.35 m with M8 plug				

## ACCESSORIES

	40100107	40100108	
Description	AQUALUC mini polycarbonate plastic support profile with adhesive tape, UV resistant		
Material	Plastics		
Length	1000 mm 2000 mm		
Width	13 mm		
Height	9,9 mm		
Fire protection class	B2 (DIN 4102)		
Ambient temperature	-40 ~ +130 ° C		
Remarks	Material: Polycarbonat		

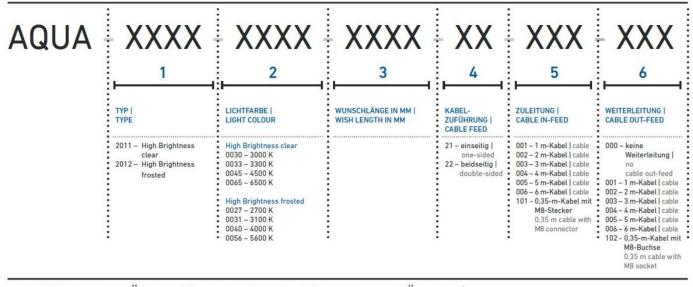
	30033019	63500033	
Description	heat resistant double-sided tape, with excellent adhesive properties	Silicone adhesive and sealant, one-component, transparent, cartridge 290 ml	
Material	Acryl		
Length	33000 mm		
Width	9 mm		
Height	0,4 mm		
Remarks	33 m x 9 mm	not suitable for PC-plastic profiles	

	66313203	66313210	66313230		
Description	M8 connector, stainless steel, 2-pole, screwable, moulded on cable with cross section 2x 0.5 ${\sf mm}^2$				
Indoor/Outdoor	Outdoor				
Cable sheath material	PUR				
Halogen-free	Yes				
Color of cable	white				
Wire cross-section	2x 0,5 mm²				
Length	350 mm	10000 mm	3000 mm		





## ARTICLE NUMBER SCHEME



IN INDIVIDUELLEN LÄNGEN, MIT BEIDSEITIGER EINSPEISUNG ERHÄLTLICH | AVAILABLE IN INDIVIDUAL LENGTHS, WITH OPTIONAL IN-FEED ON BOTH SIDES

## NOTE

During the production of encapsulated luminaires, air bubbles may be enclosed in the material. These bubbles are production-related and do not constitute a defect. If the bubbles are within the beam path of an LED, this can constitute a defect.

#### NOTE CHEMICALS

The AQUALUC encapsulation materials have successfully passed various test series in which resistance to salt, water, UV radiation, abrasion, dust and chemicals were tested. Each AQUALUC light line is ideally suited for indoor and outdoor illumination. For example on facades and bridges, in wellness oases and swimming pools, from maritime areas to industrial applications and vehicle technology - AQUALUC is already being used successfully everywhere.Despite the use of high quality materials and a robust design, there are chemical-related limitations in the areas of application. Please refer to the following link:

https://www.barthelme.de/shared/download/katalog/AQUALUC-Chemische-Mittel-Chemical-Agents.pdf

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.