

# AQUALUC mini High Brightness frosted 48 V

- fully encapsulated flexible LED light line with thermal conductive 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



	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	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			
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 mm <sup>2</sup>		
Indoor/Outdoor	Outdoor		
Cable sheath material	PUR		
Halogen-free	Yes		
Color of cable	white		
Wire cross-section	2x 0,5 mm <sup>2</sup>		
Length	350 mm	10000 mm	3000 mm



## ARTICLE NUMBER SCHEME

AQUA	XXXX	XXXX	XXXX	XX	XXX	XXX
	1	2	3	4	5	6
	TYP   TYPE	LICHTFARBE   LIGHT COLOUR	WUNSCHLÄNGE IN MM   WISH LENGTH IN MM	KABEL-ZUFÜHRUNG   CABLE FEED	ZULEITUNG   CABLE IN-FEED	WEITERLEITUNG   CABLE OUT-FEED
	<ul style="list-style-type: none"> <li>• 2011 – High Brightness clear</li> <li>• 2012 – High Brightness frosted</li> </ul>	<ul style="list-style-type: none"> <li>• High Brightness clear</li> <li>• 0030 – 3000 K</li> <li>• 0033 – 3300 K</li> <li>• 0045 – 4500 K</li> <li>• 0065 – 6500 K</li> <li>• High Brightness frosted</li> <li>• 0027 – 2700 K</li> <li>• 0031 – 3100 K</li> <li>• 0040 – 4000 K</li> <li>• 0056 – 5600 K</li> </ul>		<ul style="list-style-type: none"> <li>• 21 – einseitig   one-sided</li> <li>• 22 – beidseitig   double-sided</li> </ul>	<ul style="list-style-type: none"> <li>• 001 – 1 m-Kabel   cable</li> <li>• 002 – 2 m-Kabel   cable</li> <li>• 003 – 3 m-Kabel   cable</li> <li>• 004 – 4 m-Kabel   cable</li> <li>• 005 – 5 m-Kabel   cable</li> <li>• 006 – 6 m-Kabel   cable</li> <li>• 101 – 0,35-m-Kabel mit M8-Stecker</li> <li>• 0,35 m cable with M8 connector</li> </ul>	<ul style="list-style-type: none"> <li>• 000 – keine Weiterleitung   no cable out-feed</li> <li>• 001 – 1 m-Kabel   cable</li> <li>• 002 – 2 m-Kabel   cable</li> <li>• 003 – 3 m-Kabel   cable</li> <li>• 004 – 4 m-Kabel   cable</li> <li>• 005 – 5 m-Kabel   cable</li> <li>• 006 – 6 m-Kabel   cable</li> <li>• 102 – 0,35-m-Kabel mit M8-Buchse</li> <li>• 0,35 m cable with M8 socket</li> </ul>

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.