

AQUALUC S:OLID Monochrome High Brightness 48 V

- fully encapsulated rigid LED light line with thermal conductive polyurethane-ceramic compound and IP 68* protection
- for underwater installations up to a depth of 1.2 m
- only one bin per color according to 3 step MacAdam
- protected by hard encapsulation against mechanical, physical and chemical influences
- resistant to water and UV radiation
- uniform, absolute homogeneous illumination over the entire light emitting surface
- as opposed to metal, no occurrence of oxidation (rust) as housing completely made of plastic
- current limiter and high amount of copper in FPC enable a long lifetime
- rear side in-feed possible for side-by-side installation of multiple modules



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-5012-0028	AQUA-5012-0031	AQUA-5012-0042	AQUA-5012-0061
Type of color	White			
Typ. color temperature	2800 K	3100 K	4200 K	6100 K
Light color	warm white	white	cold white	daylight
Typ. total luminous flux per metre	975 lm/m	1102 lm/m	1250 lm/m	1114 lm/m
Efficiency	64 lm/W	72 lm/W	82 lm/W	73 lm/W
EEC of installed light source(s)	F		E	
Typ. color rendering index	87	86	84	88
Beam angle	120 °			
Dimming	dimmable			
LED strip used	LEDlight flex 12 48V			
L90/B10 bei Ta < 35°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-5012-0028	AQUA-5012-0031	AQUA-5012-0042	AQUA-5012-0061
Operating voltage	48 V DC			
Power per meter	17,3 W/m			

MECHANICAL DATA

	AQUA-5012-0028	AQUA-5012-0031	AQUA-5012-0042	AQUA-5012-0061
Width			17,5 mm	
Height			17,5 mm	
Type of protection			IP 68	
Impact resistance IK			IK10	

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

GENERAL DATA

	AQUA-5012-0028	AQUA-5012-0031	AQUA-5012-0042	AQUA-5012-0061
Ambient temperature Ta	-20 ° C ~ +35 ° C			
Max. temperature Tc	63 ° C			
Max. buildable length with 1 m cable	2720 mm			
Remarks	Connection/forwarding cable: optionally 1 - 6 m with free wire ends			

ACCESSORIES

	40100140	40100141	40100142
Description	AQUALUC S:OLID bracket set, 316L stainless steel, 10x brackets, 10 screws, 10 dowels	AQUALUC S:OLID support profile, PC plastic, UV resistant	
Material	316L stainless steel	PC	
Length	20 mm	1000 mm	2000 mm
Width	19,1 mm	21,6 mm	
Height	9,2 mm	13,5 mm	
Remarks	Halter-Set, V4A-Edelstahl, 10x Halter, 10 Schrauben, 10 Dübel 5x28	When the AQUALUC S:OLID is inserted, the holding profile expands to a dimension of up to 22.5 mm.	

	30033019	63500024	63500033
Description	heat resistant double-sided tape, with excellent adhesive properties	Technical Vaseline, high purity, chemically neutral, 80 g tube, suitable for all mounting profiles	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	For the assembly of the AQUALUC absolutely recommended	not suitable for PC-plastic profiles



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
	5011 – monochrome BRIGHT monochrome BRIGHT 5012 – monochrome HIGH BRIGHTNESS monochrome HIGH BRIGHTNESS	0028 – 2800 K 0031 – 3100 K 0042 – 4000 K 0061 – 6100 K		21 – einseitig one-sided 22 – beidseitig double-sided 23 – Rückseite, einseitig one-sided, rear 24 – Rückseite, beidseitig double-sided, rear	001 – 1 m-Kabel cable 002 – 2 m-Kabel cable 003 – 3 m-Kabel cable 004 – 4 m-Kabel cable 005 – 5 m-Kabel cable 006 – 6 m-Kabel cable 008 – 8 m-Kabel cable	000 – keine Weiterleitung no cable out-feed 001 – 1 m-Kabel cable 002 – 2 m-Kabel cable 003 – 3 m-Kabel cable 004 – 4 m-Kabel cable 005 – 5 m-Kabel cable 006 – 6 m-Kabel cable

IN INDIVIDUELLEN LÄNGEN, MIT BEIDSEITIGER UND RÜCKSEITIGER EINSPEISUNG ERHÄLTlich | AVAILABLE IN INDIVIDUAL LENGTHS, WITH OPTIONAL IN-FEED ON BOTH SIDES AND REAR SIDE

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.