

# AQUALUC S:OLID Monochrome Bright 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-5011-0028       | AQUA-5011-0031 | AQUA-5011-0042 | AQUA-5011-0061 |
|------------------------------------|----------------------|----------------|----------------|----------------|
| 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 | 501 lm/m             | 557 lm/m       | 643 lm/m       | 574 lm/m       |
| Efficiency                         | 66 lm/W              | 73 lm/W        | 84 lm/W        | 75 lm/W        |
| EEC of installed light source(s)   | F                    | E              | D              |                |
| Typ. color rendering index         | 88                   | 86             | 84             | 88             |
| Beam angle                         | 120 °                |                |                |                |
| Dimming                            | dimmable             |                |                |                |
| LED strip used                     | LEDlight flex 12 48V |                |                |                |
| L90/B10 bei Ta < 60°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-5011-0028 | AQUA-5011-0031 | AQUA-5011-0042 | AQUA-5011-0061 |
|-------------------|----------------|----------------|----------------|----------------|
| Operating voltage | 48 V DC        |                |                |                |
| Power per meter   | 8,7 W/m        |                |                |                |

## MECHANICAL DATA

|                      | AQUA-5011-0028 | AQUA-5011-0031 | AQUA-5011-0042 | AQUA-5011-0061 |
|----------------------|----------------|----------------|----------------|----------------|
| 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-5011-0028  | AQUA-5011-0031 | AQUA-5011-0042 | AQUA-5011-0061 |
|--------------------------------------|---|----------------|----------------|----------------|
| Ambient temperature Ta               | -20 ° C ~ +60 ° C   |                |                |                |
| Max. temperature Tc                  | 66 ° 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<br>5012 – monochrome HIGH BRIGHTNESS   monochrome HIGH BRIGHTNESS | 0028 – 2800 K<br>0031 – 3100 K<br>0042 – 4000 K<br>0061 – 6100 K |                                       | 21 – einseitig   one-sided<br>22 – beidseitig   double-sided<br>23 – Rückseite, einseitig   one-sided, rear<br>24 – Rückseite, beidseitig   double-sided, rear | 001 – 1 m-Kabel   cable<br>002 – 2 m-Kabel   cable<br>003 – 3 m-Kabel   cable<br>004 – 4 m-Kabel   cable<br>005 – 5 m-Kabel   cable<br>006 – 6 m-Kabel   cable<br>008 – 8 m-Kabel   cable | 000 – keine Weiterleitung   no cable out-feed<br>001 – 1 m-Kabel   cable<br>002 – 2 m-Kabel   cable<br>003 – 3 m-Kabel   cable<br>004 – 4 m-Kabel   cable<br>005 – 5 m-Kabel   cable<br>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.