



### IP-PROTECTED LED LIGHT LINES

# » MADE IN GERMANY «











QUALITY.

KNOWLEDGE.

INNOVATION.

FLEXIBILITY.

DEDICATION.





The fully encapsulated LED light lines of the AQUALUC series are characterised by excellent colour fidelity, provide effective heat dissipation and withstand external influences even in harsh environments.

The AQUALUC encapsulation materials have successfully passed several test series in which the resistance against salt, water, UV-radiation, abrasion, dust and various chemicals were tested.

LED light lines of the AQUALUC series have proven themselves for many years in indoor and outdoor areas.

## **TECHNICAL HIGHLIGHTS**

reel-to-reel manufacturing enables production lengths without solder points

only one bin per light color after 3-Step-MacAdam for outstanding color fidelity and high reproducibility

high quality Infineon ICs for constant current control provide uniform brightness and correct color rendering over the entire light emission surface

double layer FPC with PCBs made of non-recycled copper ensure reliable operation of the light lines even with increased Ta and Tc values

the combination of polyurethane and ceramic materials provides protection against moisture with very good thermal management and high flexibility of the plastic

high UV resistance without yellowing of surfaces

## **DESIGN HIGHLIGHTS**

Made-to-order: manufactured exactly to your desired length

excellent color fidelity and absolutely homogeneous\*, bright illumination over the entire light emission surface

the matt, flat light emission surfaces enable a visually attractive integration of the LED light lines, also in switched off state

no shape-changing components like feed in-feed blocks or end caps

water, dirt and dust repellent, odourless

high-quality, air pocket-free encapsulation

rear in-feed point enables long, continuous light lines

## FOR THE CREATION OF UNFORGETTABLE LIGHT EXPERIENCES

**FURTHER INFORMATION CAN BE FOUND AT BARTHELME.DE** 

\* does not apply to AQUALUC mini

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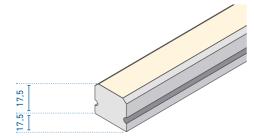


## BARTHELME AQUALUC OVERVIEW

#### **AQUALUC S:OLID**

Walkable, IP 68-protected, homogeneous LED light line with very high luminous flux for indoor, outdoor and underwater areas. Can be used as accent or direct lighting. Available in various white tones, RGB and RGBW.

	Bright	High Brightness	
Dimensions		17,5 x 17,5 mm	
Bending Radius	starr	starr	
Voltage	24 V DC	24 V DC	
Power	8 W/m	17,3 W/m	
Efficacy	84 lm/W	72 lm/W	
Luminous flux	671 lm/m	1.224 lm/m	
Ta <sub>max</sub>	60 °C	35 °C	
Tc <sub>max</sub>	66 °C	63 °C	
max. build length with 1 m cable in-feed	2.720 mm	2.720 mm	

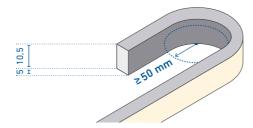


All values refer to versions with 3100 K

#### **AQUALUC** mini

P 67-protected, homogeneous LED light line with high luminous flux for accent lighting in indoor and outdoor areas. Ideal for applications with a small installation space requirement. Available in various white tones and RGB.

	Standard	Bright	High Brightness
Dimensions	10,5 x 5 mm	10,5 x 5 mm	10,5 x 5 mm
Bending Radius	≥ 50 mm	≥ 50 mm	≥ 50 mm
Voltage	24 V DC	24 V DC	24 V DC
Power	5,3 W/m	8,0 W/m	17,3 W/m
Efficacy	122 lm/W	122 lm/W	117 lm/W
Luminous flux	648 lm/m	971 lm/m	2.025 lm/m
Ta <sub>max</sub>	55 °C	50 °C	40 °C
Tc <sub>max</sub>	68 °C	70 °C	72 °C
max. build length with 1 m cable in-feed	9.651 mm	9.261 mm	4.791 mm

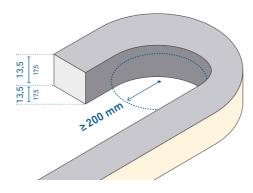


All values refer to versions with 3300 K and clear encapsulation

#### **AQUALUC W:AVE**

IP 67-protected, homogeneous LED light line with high luminous flux for accent lighting in indoor applications and outdoor areas. Available in different white tones, RGB or RGBW versions and with pixel-controlled LED strip for dynamic effect lighting.

	Bright	High Brightness
Dimensions	13,5 x 13,5 mm	17,5 x 17,5 mm
Bending Radius	≥ 200 mm	≥ 200 mm
Voltage	24 V DC	24 V DC
Power	8,0 W/m	17,3 W/m
Efficacy	86 lm/W	75 lm/W
Luminous flux	687 lm/m	1.296 lm/m
Ta <sub>max</sub>	55 °C	40 °C
Tc <sub>max</sub>	69 °C	62 °C
max. build length with 1 m cable in-feed	7.102 mm	4.792 mm



All values refer to versions with 3200 K

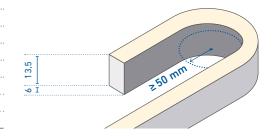
You have several possibilities to mount the AQUALUC:

from a holding profile for straight mounting, a holder set or double-sided adhesive tape to construction adhesive for flexible use.

#### **AQUALUC C:URVE mini**

IP 67-protected, homogeneous LED light line with high luminous flux for accent lighting in indoor and outdoor areas. Ideal for applications with a small installation space requirement. Available in various white tones.

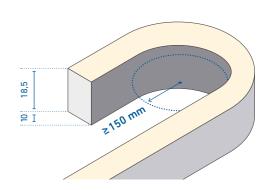
	C:URVE mini	
Dimensions	6 x 13,5 mm	
Bending Radius	≥ 50 mm	
Voltage	24 V DC	
Power	8,0 W/m	
Efficacy	35 lm/W	
Luminous flux	278 lm/m	
Ta <sub>max</sub>	50 °C	
Tc <sub>max</sub>	67 °C	
max. build length with 1 m cable in-feed	9.261 mm	



#### **AQUALUC C:URVE**

IP 67 protected, homogeneous LED light line with high luminous flux for accent lighting in indoor applications and outdoor areas. Available in different white tones, RGB or RGBW versions and with pixel-controlled LED strip for dynamic effect lighting.

	Standard	Bright	High Brightness
Dimensions	10 x 18,5 mm	10 x 18,5 mm	10 x 18,5 mm
Bending Radius	≥ 150 mm	≥ 150 mm	≥ 150 mm
Voltage	24 V DC	24 V DC	24 V DC
Power	5,3 W/m	8,0 W/m	17,3 W/m
Efficacy	54 lm/W	50 lm/W	46 lm/W
Luminous flux	287 lm/m	399 lm/m	777 lm/m
Ta <sub>max</sub>	60 °C	55 °C	40 °C
Tc <sub>max</sub>	71 °C	68 °C	66 °C
max. build length with 1 m cable in-feed	8.662 mm	8.662 mm	4.792 mm

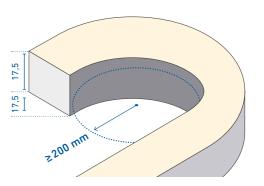


All values refer to versions with 3200 K

#### **AQUALUC C:URVE WIDE**

IP 67-protected, homogeneous LED light line with very high luminous flux for indoor and outdoor use. Can be used as accent or direct lighting. Available in various white tones.

	C:URVE WIDE	
Dimensions	17,5 x 17,5 mm	
Bending Radius	≥ 200 mm	
Voltage	24 V DC	
Power	17,3 W/m	
Efficacy	69 lm/W	
Luminous flux	1.200 lm/m	
Ta <sub>max</sub>	40 °C	
Tc <sub>max</sub>	62 °C	
max. build length with 1 m cable in-feed	4.792 mm	***************************************



All values refer to versions with 3200 K

You have several possibilities to mount the AQUALUC:

from a holding profile for straight mounting, a holder set or double-sided adhesive tape to construction adhesive for flexible use.

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# LIMITLESS FREEDOM OF DESIGN

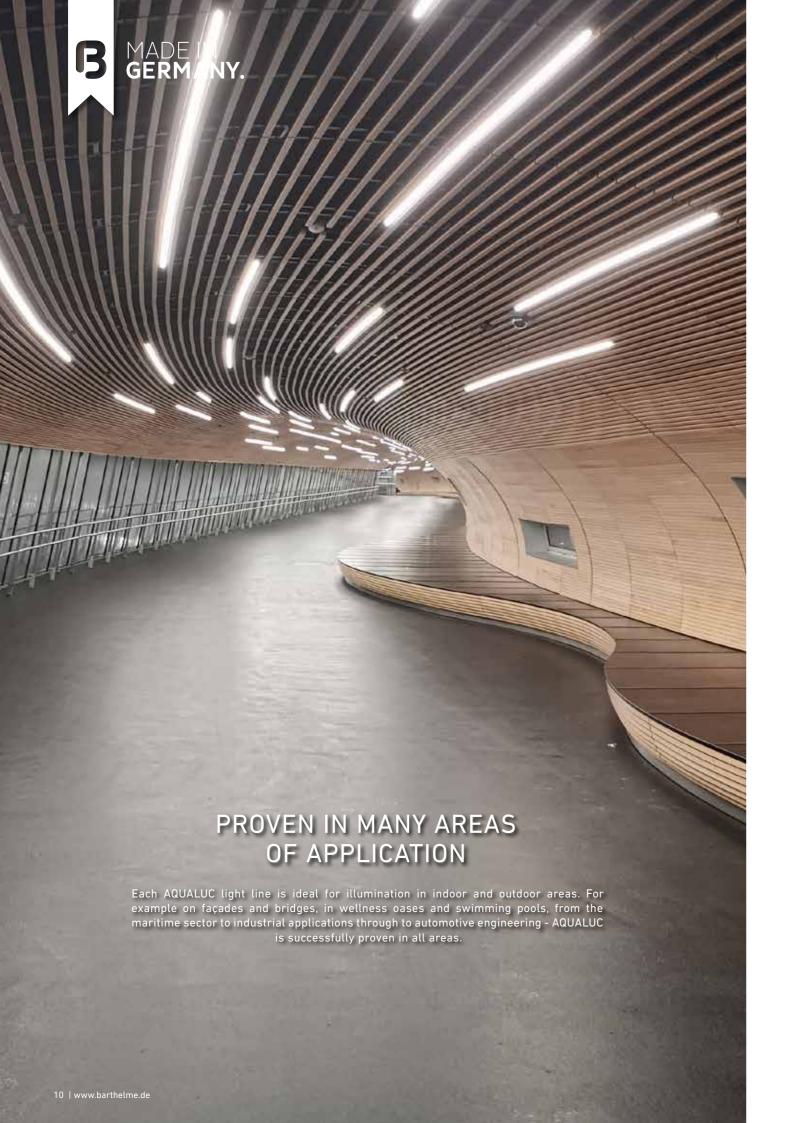
Depending on the design, AQUALUC can be shaped into curve or wave form and can be fitted to a range of architectural conditions. Highlight: AQUALUC C:URVE WIDE in combination with AQUALUC W:AVE enables installations on all axes.

AQUALUC W:AVE

AQUALUC C:URVE WIDE

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# CUSTOMIZED SOLUTIONS ARE OUR PASSION

Design your own light line and realise your individual visions.

#### VARIATION POSSIBILITIES WITH THE AQUALUC LIGHT LINES:

» «

Encapsulation: clear or opal

» «

LED strips: integration of a Barthelme LED strip preferred by you (e.g. with regard to LED spacing, color temperature, lumen/watt, lumen/meter etc.)

» «

Light emission: an additional, second light emission surface is possible with AQUALUC W:AVE and C:URVE

» «

Sheathing: all-round translucent or white outer surfaces

Our team is looking forward to your inquiry and developing a solution together with you - your LED light line "AQUALUC CUSTOM:MADE"

#### NOTE

Changes in the product components result in divergent product properties.
Dimensional changes to the profile cross-section of the respective AQUALUC light lines are not possible.

#### **VERSION 03|2020**

#### © JOSEF BARTHELME GMBH & CO. KG

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**BARTHELME.DE** 

