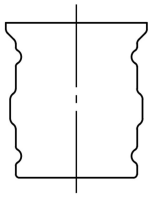
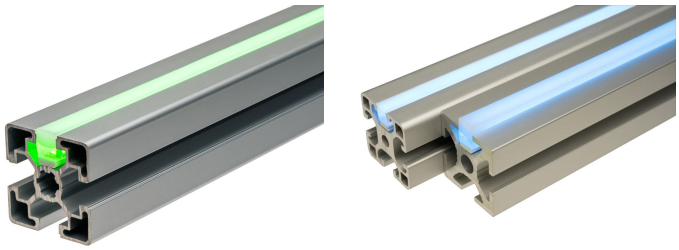
AQUALUC X - fits Bosch 40x40L profiles

Light line for status and condition indicators

- ideally suited for machines with standard construction profiles to implement the signaling and display of machine statuses
- ready to install with no additional assembly required; tool-free installation with no need for additional cabling
- enables a clear display of progress and machine statuses directly within the operator's field of vision, using various colors like red, green, blue, and mixed hues
- the pixel-precise LED control provides accurate visualization of progress, such as fill levels (Aqualuc X LEVEL)
- the 180° variant enables lateral detection of the signaling
- provides a secure connection to existing machine control systems via M8 connector
- the encapsulation of the luminaire is made from polyurethane rather than silicone, enabling exceptional robustness and durability



Querschnitt AQUALUC X



Note: Illustration in installed condition

Please observe the installation and safety instructions at https://www.barthelme.de/content/en/manuals.aspx !

For manufacturing reasons, there are tolerances in the dimensions of both the construction profiles and the AQUALUC X. This can make installation more difficult. To prevent damage, installation is only permitted in conjunction with technical Vaseline (Art. 63500024)!

PHOTOMETRIC DATA

	60200501	60200503	60210501	60210503
Article	AQUALUC X SIGNAL	AQUALUC X LEVEL	AQUALUC X SIGNAL	AQUALUC X LEVEL
Type of color	RGB	Pixel	RGB	Pixel
Length	520 mm	504 mm	520 mm	504 mm
Typ. total luminous flux per metre	490 lm/m	406 lm/m	490 lm/m	406 lm/m
Typ. luminous flux per metre red	106 lm/m	101 lm/m	106 lm/m	101 lm/m
Typ. luminous flux per metre green	317 lm/m	244 lm/m	317 lm/m	244 lm/m
Typ. luminous flux per metre blue	67 lm/m	61 lm/m	67 lm/m	61 lm/m
Efficiency	41 lm/W	29 lm/W	41 lm/W	29 lm/W
Beam angle	120 °		180 °	
Dimming	dimmable			
LEDs per meter	120	60	120	60
L70 bei Ta < 35°C	>50000 h			
Remarks	Connection/forwarding cable: 1 - 6 m with free wire ends Note polarity - Wire assignment: white: +5V DC / red: DAT / green: GND Communication standard WS2812			

ELECTRICAL DATA

	60200501	60210501	60200503	60210503
Operating voltage	24 V DC		5 V DC	
Power per meter	12 W/m		14 W/m	

When using Aqualuc X LEVEL products, it is essential to ensure that the programmed color sequences do not exceed the M8 connector's maximum current rating of 4 A.

MECHANICAL DATA

	60200501	60201001	60201501	60202001	60210501	60211001	60211501	60212001
Article	AQUALUC X SIGNAL							
Beam angle	120 °				180 °			
Length	520 mm	1020 mm	1520 mm	2020 mm	520 mm	1020 mm	1520 mm	2020 mm
Width	11,4 mm							
Height	12,5 mm				15,5 mm			
Bending radius	150 mm							
Type of protection	IP 67							

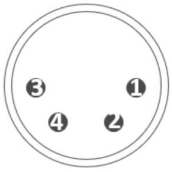
	60200503	60201003	60201503	60202003	60210503	60211003	60211503	60212003
Article	AQUALUC X LEVEL							
Beam angle	120 °				180 °			
Length	504 mm	1004 mm	1504 mm	2004 mm	504 mm	1004 mm	1504 mm	2004 mm
Width	11,4 mm							
Height	12,5 mm				15,5 mm			
Bending radius	150 mm							
Type of protection	IP 67							

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

GENERAL DATA

	60200501	60210501	60200503	60210503
Ambient temperature Ta	-20 ° C ~ +40 ° C			
Connector cable	0,35m cable with M8 connector			
Dimm	dimmable			

PIN ASSIGNMENT

Signalisierung	RGB	Pixel
Betriebsspannung	24 V DC	5 V DC
Anschluss M8 Steckverbinder 	1 = WH + (common anode) 2 = RD = - (cathode) 3 = BU = - (cathode) 4 = GN = - cathode)	1 = nicht belegt 2 = + 5 V DC 3 = - (Ground) 4 = Data

ACCESSORIES

	63500024
Description	Technical Vaseline, high purity, chemically neutral, 80 g tube, suitable for all mounting profiles
Material	various
Remarks	For the assembly of the AQUALUC absolutely recommended

	66313403	66313410	66313430
Description	M8 connector, stainless steel, 4-pole, screwable, moulded on cable oval 1x 0,5 mm^2 + 3x 0,34 mm^2		
Indoor/Outdoor	Outdoor		
IP protection class	IP 67		
Cable sheath material	PUR		
Halogen-free	Yes		
Color of cable	white		
Wire cross-section	1 x 0,5 mm^2 + 3 x 0,34 mm^2		
Length	350 mm	10000 mm	3000 mm
Remarks	the specified IP protection class applies to the screwed state		

CONTROLLER

	66000001	66000002	66000003
Description	Controller SIGNAL 240-24-RGB M	Controller LEVEL 210-05-P-M	Controller SIGNAL 230-24-R
Remarks	Intelligent e-Line Viso RGB control system for up to 16.5 million color variations; easily integrated into existing systems via Ethernet (PLCs, computer-based hardware, and more); controls up to 2 meters of RGB LED strip per module; expandable with any number of slave modules; 5V, 12V, 24V, 48V versions available, application examples: error indicators, OK/NOT OK indicators, access indicators, more user-friendly visual display as an extension of the status light function, design element, and much more.	Intelligent e-Line Viso-Pixel control for up to 16.5 million color variations, easily integrated into existing systems via Ethernet (PLC; computer-based hardware, and more), capable of controlling up to 2 meters of RGB LED strip per module, expandable with any number of slave modules, 5V version, application examples: Level indicator, progress indicator, pick-by-light, access indicator, more user-friendly visual display as an extension of the standard light function, and much more	Intelligent e-line Viso RGB controller for up to 4 colors; supports up to 2 meters of RGB LED strip per module; 5V, 12V, 24V, 48V relay version available, simplest solution requiring no software effort for retrofitting into existing systems (PLCs, computer-controlled hardware, and more) via digital outputs, application examples: error indicators, OK/NOT OK indicators, access indicators, more user-friendly visual display as an extension of the status light function, design element, and more.

NOTES

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 2 years and begins on the day of shipment. Reference is the date of the delivery bill. The guarantee period may differ for accessories.

DISPOSAL

Please help to avoid waste. Should you ever wish to part with this item, please remember that many of its components are made of valuable raw materials and can be recycled. Therefore, please do not dispose of it in the dustbin, but please take it to your collection point for electrical appliances. Thank you for your cooperation!