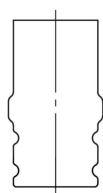


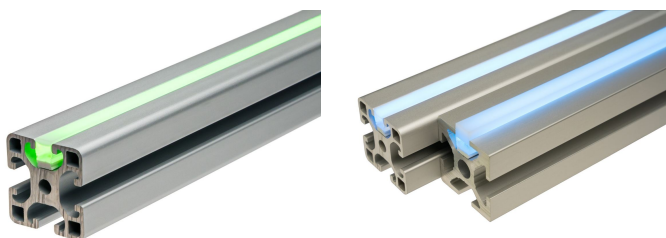
# AQUALUC X - suitable for ITEM profiles

## Light lines for status and condition indication

- ideally suited for machines with standard construction profiles to implement the signalling and display of machine statuses
- ready to install and requires no additional assembly, tool-free installation without additional cabling
- enables a clear display of progress and machine statuses directly in the operator's field of vision in various colors such as red, green, blue and mixed colors
- the pixel-precise LED control enables precise visualization of progress, such as fill levels (Aqualuc X LEVEL). e.g. the fill levels (Aqualuc X LEVEL)
- enables secure connection to existing machine control systems via M8 connectors
- the light is encased in polyurethane and not silicone, which ensures a high level of robustness and durability
- available in different lengths



Querschnitt AQUALUC X



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

|                                    | 60240501                                                                                                                                                            | 60250501 | 60240503        | 60250503 |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------|----------|
| Article                            | AQUALUC X SIGNAL                                                                                                                                                    |          | AQUALUC X LEVEL |          |
| Type of color                      | RGB                                                                                                                                                                 |          | Pixel           |          |
| Typ. total luminous flux per metre | 490 lm/m                                                                                                                                                            |          | 406 lm/m        |          |
| Typ. luminous flux per metre red   | 106 lm/m                                                                                                                                                            |          | 101 lm/m        |          |
| Typ. luminous flux per metre green | 317 lm/m                                                                                                                                                            |          | 244 lm/m        |          |
| Typ. luminous flux per metre blue  | 67 lm/m                                                                                                                                                             |          | 61 lm/m         |          |
| Efficiency                         | 41 lm/W                                                                                                                                                             |          | 29 lm/W         |          |
| Beam angle                         | 120 °                                                                                                                                                               | 180 °    | 120 °           | 180 °    |
| Dimming                            | dimmable                                                                                                                                                            |          |                 |          |
| LEDs per meter                     | 120                                                                                                                                                                 |          | 60              |          |
| L70 bei Ta < 35°C                  | >50000 h                                                                                                                                                            |          |                 |          |
| Remarks                            | Connection/forwarding cable: 1 - 6 m with free wire ends<br>Note polarity - Wire assignment: white: +5V DC / red: DAT / green: GND<br>Communication standard WS2812 |          |                 |          |

## ELECTRICAL DATA

|                   | 60240501 | 60250501 | 60240503 | 60250503 |
|-------------------|----------|----------|----------|----------|
| Operating voltage | 24 V DC  |          | 5 V DC   |          |
| Power per meter   | 12 W/m   |          | 14 W/m   |          |

## MECHANICAL DATA

|                    | 60240501         | 60241001 | 60241501 | 60242001 | 60250501 | 60251001 | 60251501 | 60252001 |
|--------------------|------------------|----------|----------|----------|----------|----------|----------|----------|
| Article            | AQUALUC X SIGNAL |          |          |          |          |          |          |          |
| Length             | 520 mm           | 1020 mm  | 1520 mm  | 2020 mm  | 520 mm   | 1020 mm  | 1520 mm  | 2020 mm  |
| Width              | 8,7 mm           |          |          |          |          |          |          |          |
| Height             | 15,35 mm         |          |          |          |          |          |          |          |
| Bending radius     | 150 mm           |          |          |          |          |          |          |          |
| Type of protection | IP 67            |          |          |          |          |          |          |          |

|                    | 60240503        | 60241003 | 60241503 | 60242003 | 60250503 | 60251003 | 60251503 | 60252003 |
|--------------------|-----------------|----------|----------|----------|----------|----------|----------|----------|
| Article            | AQUALUC X LEVEL |          |          |          |          |          |          |          |
| Length             | 504 mm          | 1004 mm  | 1504 mm  | 2004 mm  | 504 mm   | 1004 mm  | 1504 mm  | 2004 mm  |
| Width              | 8,7 mm          |          |          |          |          |          |          |          |
| Height             | 15,35 mm        |          |          |          |          |          |          |          |
| Bending radius     | 150 mm          |          |          |          |          |          |          |          |
| Type of protection | IP 67           |          |          |          |          |          |          |          |

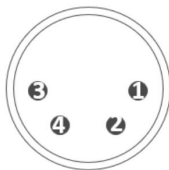
Aqualuc products have a length tolerance +/- 5 mm at < 1 m and +/- 0.2 % at > 1 m

## GENERAL DATA

|                        | 60240501                      | 60250501 | 60240503 | 60250503 |
|------------------------|-------------------------------|----------|----------|----------|
| Ambient temperature Ta | -20 °C ~ +40 °C               |          |          |          |
| Connector cable        | 0,35m cable with M8 connector |          |          |          |
| Dimm                   | dimnable                      |          |          |          |

## STECKERBELEGUNG

|                             |                                                                                           |                                                                |
|-----------------------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| Signalisierung              | RGB                                                                                       | Pixel                                                          |
| Betriebsspannung            | 24 V DC                                                                                   | 5 V DC                                                         |
| Anschluss M8 Steckverbinder | 1 = WH + (common anode)<br>2 = RD - (cathode)<br>3 = BU - (cathode)<br>4 = GN - (cathode) | 1 = nicht belegt<br>2 = + 5 V DC<br>3 = - (Ground)<br>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 |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------|----------|----------|
| <b>Description</b>           | M8 connector, stainless steel, 4-pole, screwable, moulded on cable oval 1 x 0,5 mm <sup>2</sup> + 3 x 0,34 mm <sup>2</sup> |          |          |
| <b>Indoor/Outdoor</b>        | Outdoor                                                                                                                    |          |          |
| <b>IP protection class</b>   | IP 67                                                                                                                      |          |          |
| <b>Cable sheath material</b> | PUR                                                                                                                        |          |          |
| <b>Halogen-free</b>          | Yes                                                                                                                        |          |          |
| <b>Color of cable</b>        | white                                                                                                                      |          |          |
| <b>Wire cross-section</b>    | 1 x 0,5 mm <sup>2</sup> + 3 x 0,34 mm <sup>2</sup>                                                                         |          |          |
| <b>Length</b>                | 350 mm                                                                                                                     | 10000 mm | 3000 mm  |
| <b>Remarks</b>               | the specified IP protection class applies to the screwed state                                                             |          |          |



## STEUERUNGEN

|                | 66000001                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 66000002                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 66000003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Remarks</b> | Intelligente e-Line Viso-RGB-Ansteuerung für bis zu 16,5 Mio. Farbvariationen, via Ethernet einfach ins bestehende System integrierbar, (SPS; computergestützte Hardware, u.v.m), pro Modul bis zu 2 Meter LED-RGB Band ansteuerbar, erweiterbar durch beliebig viele Slave Module, 5V, 12V, 24V, 48V Variante möglich, Anwendungsbeispiele: Fehleranzeigen, IO/NIO Anzeige, Zutrittsanzeige, bedienerfreundlichere visuelle Darstellung als Erweiterungsmöglichkeit der Stableuchtenfunktion, Designelement, u.v.m. | Intelligente e-Line Viso-Pixel-Ansteuerung für bis zu 16,5 Mio. Farbvariationen, via Ethernet einfach ins bestehende System integrierbar, (SPS; computergestützte Hardware, u.v.m), pro Modul bis zu 2 Meter LED-RGB Band ansteuerbar, erweiterbar durch beliebig viele Slave Module, 5V Variante, Anwendungsbeispiele: Füllstandanzeige, Fortschrittanzeige, Pick-by-Light, Zutrittsanzeige, bedienerfreundlichere visuelle Darstellung als Erweiterungsmöglichkeit der Stableuchtenfunktion, u.v.m | Intelligente e-line Viso-RGB-Ansteuerung für bis zu 4 Farben, pro Modul bis zu 2 Meter LED-RGB Band ansteuerbar, 5V, 12V, 24V, 48V Relais-Variante möglich, einfachste Lösung ohne Softwareaufwand zum Nachrüsten in bestehende Systeme (SPS, computergeschützte Hardware, u.v.m.) via Digitalausgänge, Anwendungsbeispiele: Fehleranzeigen, IO/NIO Anzeige, Zutrittsanzeige, bedienerfreundlichere visuelle Darstellung als Erweiterungsmöglichkeit der Stableuchtenfunktion, Designelement, u.v.m. |

## 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

Bitte helfen Sie mit, Abfall zu vermeiden. Sollten Sie sich einmal von diesem Artikel trennen wollen, so bedenken Sie bitte, dass viele seiner Komponenten aus wertvollen Rohstoffen bestehen und wiederverwertet werden können. Entsorgen Sie ihn daher nicht in der Mülltonne, sondern führen Sie ihn bitte Ihrer Sammelstelle für Elektrogeräte zu. Vielen Dank für Ihre Mithilfe!

