

# Blue Lagoon

UV-C and Pool equipment 

PRODUCT CATALOGUE 2024





## Company Introduction



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VGE B.V. is a prominent company dedicated to enhancing the well-being of individuals through timely innovations. Located in the southern part of the Netherlands, we are renowned for manufacturing a unique range of swimming pool equipment. Our focus lies in delivering high-quality products and fostering harmonious collaborations with our customers. Being situated in the Brainport Region, the Netherlands' top technology hub, fills us with pride. As a global leader in the field, VGE B.V. specializes in the development and production of UV-C equipment for various water treatment applications. We constantly introduce new products and continuously enhance our existing offerings.

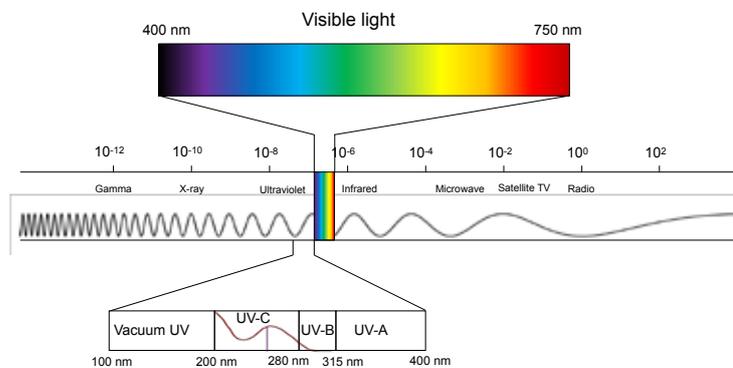
By leveraging large-scale production, we provide our customers with products that offer exceptional price-quality ratios. Sustainability is ingrained in our production and development processes, with a strong emphasis on environmental friendliness and energy conservation. With over four decades of experience since our establishment in 1982, we have developed technically advanced products that are used in more than 70 countries worldwide. Our dedicated sales team eagerly anticipates the opportunity to ensure seamless order processing and deliver the best service and advice to our valued customers.



## UV-C Treatment

UV radiation can be divided into four main categories; UV-A, UV-B, UV-C and Vacuum UV. The UV-C spectrum (200 to 280 nanometers) is the most lethal range of wavelengths for microorganisms. UV-C radiation can cause permanent damage to microorganisms. Each type of microorganism requires a specific UV-C radiation exposure rate to successfully complete the disinfection process.

The targeted microorganism must be directly exposed to the UV-C radiation long enough for the radiation to penetrate the microorganism's cell wall. However, it takes only a fraction of a second for UV-C radiation to inactivate waterborne microorganisms by breaking through the microorganism's cell wall and damaging their DNA. This often destroys the organism, or at the very least will impair its ability to reproduce.



### UV radiation is effective against all microorganisms

Water purification by UV-C radiation is the most effective sanitizing method available today. UV radiation destroys microorganisms in domestic pools up to 99.9%.

### UV pool sanitizers contribute to crystal-clear water

The most important perpetrator of cloudy water, microorganisms such as algae, will be eliminated by UV pool sanitizers. Chloramines can also be the indirect cause of cloudy water, especially when the disinfection level of free chlorine in the water is too low. UV-C lamps destroy microorganisms up to 99.9% and break down chloramines up to 80%.

### With UV purifiers, you can reduce the use of chemicals for water treatment

UV-C purification makes sure there is more stability in pools and spas, therefore adding extra chemicals can be prevented.

### The end user will have lower costs in chemicals and maintenance

Materials in and around the pool suffer from chemicals added to the pool water. Because UV-C radiation destroys most of the harmful chloramines in the water, the materials in and around the pool get affected much less and need less maintenance.

### There is no risk of overdosing with UV pool sanitizers

Overdosing chemicals in pools and spas can, as mentioned before, causing serious health problems and even foamy or cloudy water. UV radiation cannot be overdosed and destroys all of the microorganisms.

### UV is a green, non-hazardous technology

Last but not least - UV radiation is an environmentally friendly way to sanitize pool water!



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### UL certified

UL is a world leader in product safety testing and certification. For more than a 100 years, manufacturers have had their merchandise evaluated and tested for safety risks by an independent, third-party safety certification organization.



### Stainless steel housing

A stainless steel interior provides a reflection of UV radiation and this increases the efficiency of the radiation by up to 35%. In addition, the stainless steel ensures a longer life of the housing.



### ETL certified

The ETL Listed Mark is proof that your product has been independently tested and meets the applicable published standard. The ETL Mark is proof of product compliance to North American safety standards.



### Salt-water

These units are suitable for salt-water applications. They are designed to avoid corrosion or damage of the unit from the salt-water.



### Pool Pro Only

The product is only intended for professional use. It should be installed in a professional application or assembled with other applications.



### PVC

A PVC housing adds corrosion resistance as opposed to a 316 L housing. We use a special UV-resistant PVC.

## Overview

| Model number | Model Name                          | Recommended Flow Rate for 30mJ/cm <sup>2</sup> | Max. working pressure in Bar | Maximum flow rate in m <sup>3</sup> /h | UV-C Lamp         | Brand lamp        | Inlet/outlet diameter (mm/inch) | Height of reactor in cm ± | Distance between inlet / outlet in cm ± | Weight in kg ± |
|--------------|-------------------------------------|--|------------------------------|--|-------------------|-------------------|---------------------------------|---------------------------|---|----------------|
| BPM00401     | Xpert MP UV-C 400 W                 | 13***  | 10                           | 8***                                   | 1 x MP 400 W SBT  | VGE               | 2"                              | 25                        |   | 2 + 4**        |
| BPM00601     | Xpert MP UV-C 600 W                 | 19****   | 10                           | 12****                                 | 1 x MP 600 W SBT  | VGE               | DN 80                           | 28                        |   | 11 + 4**       |
| BP07082      | Xpert Buster UV-C 80 W              | 15   | 4                            | 20                                     | 1 x 80 W          | VGE - LightTech   | 2"                              | 93                        | 73,3                                    | 9,7            |
| BP07132      | Xpert Buster UV-C 140 W             | 23   | 4                            | 28                                     | 1 x 140 W Amalgam | VGE - LightTech   | 2,5"                            | 93                        | 72                                      | 9,6            |
| BP07392      | Xpert Buster UV-C 420 W             | 49*  | 4                            | 49                                     | 3 x 140 W Amalgam | VGE - LightTech   | 3"                              | 93                        | 70,4                                    | 22,4           |
| BH12752      | Xpert AOP Compact Ozone & UV-C 75 W | 18   | 2,5                          | 23                                     | 1 x 75 W / Ozone  | VGE - LightTech   | 63-50                           | 100                       | 77                                      | 8,4            |
| BP08752      | Xpert Duplex UV-C 80 W              | 17   | 2,5                          | 23                                     | 1 x 80 W          | VGE - LightTech   | 63-50                           | 100                       | 77                                      | 5,5            |
| BP08132      | Xpert Duplex UV-C 140 W             | 23   | 2,5                          | 23                                     | 1 x 140 W Amalgam | VGE - LightTech   | 63-50                           | 100                       | 77                                      | 5,6            |
| BP02752      | Inox UV-C 75 W                      | 18   | 5                            | 23                                     | 1 x 75 W          | Philips           | 2"                              | 100                       | 78,5                                    | 7,2            |
| BP02132      | Inox UV-C 130 W                     | 22   | 5                            | 23                                     | 1 x 130 W Amalgam | Philips           | 2"                              | 100                       | 78,5                                    | 7,3            |
| BE11402      | Signal UV-C 40 W                    | 11   | 2                            | 23                                     | 1 x 40 W          | VGE - LightTech   | 63-50                           | 100                       | 77                                      | 4,1            |
| BH11752      | Signal UV-C 75 W                    | 16   | 2                            | 23                                     | 1 x 75 W          | VGE - LightTech   | 63-50                           | 100                       | 77                                      | 4,3            |
| BH11402      | Signal UV-C 130 W                   | 22   | 2                            | 23                                     | 1 x 130 W Amalgam | VGE - LightTech   | 63-50                           | 100                       | 77                                      | 4,5            |
| BH01402      | Timer UV-C 40 W                     | 11   | 2                            | 23                                     | 1 x 40 W          | Philips           | 63-50                           | 100                       | 77                                      | 4,1            |
| BH01752      | Timer UV-C 75 W                     | 16   | 2                            | 23                                     | 1 x 75 W          | Philips           | 63-50                           | 100                       | 77                                      | 4,3            |
| BH01132      | Timer UV-C 130 W                    | 22   | 2                            | 23                                     | 1 x 130 W Amalgam | Philips           | 63-50                           | 100                       | 77                                      | 4,5            |
| BE02162      | Tech UV-C 16 W                      | 5  | 2                            | 23                                     | 1 x 16 W          | VGE - LightTech   | 63-50                           | 56                        | 34                                      | 2,8            |
| BE02402      | Tech UV-C 40 W                      | 11   | 2                            | 23                                     | 1 x 40 W          | VGE - LightTech   | 63-50                           | 100                       | 77                                      | 3,6            |
| BE02752      | Tech UV-C 75 W                      | 16   | 2                            | 23                                     | 1 x 75 W          | VGE - LightTech   | 63-50                           | 100                       | 77                                      | 3,9            |
| BE03132      | Tech UV-C 130 W                     | 22   | 2                            | 23                                     | 1 x 130 W Amalgam | Philips           | 63-50                           | 100                       | 77                                      | 5,0            |
| BE07402      | Salt-water short UV-C 40 W          | 8  | 2                            | 23                                     | 1 x 40 W          | VGE - LightTech   | 63-50                           | 48                        | 37                                      | 2,5            |
| BE06402      | Salt-water UV-C 40 W                | 9  | 2                            | 23                                     | 1 x 40 W          | Philips Smart Cap | 63-50                           | 100                       | 77                                      | 3,0            |
| BE06752      | Salt-water UV-C 75 W                | 14   | 2                            | 23                                     | 1 x 75 W          | Philips Smart Cap | 63-50                           | 100                       | 77                                      | 3,2            |
| BH10402      | Salt-water Timer UV-C 40 W          | 9  | 2                            | 23                                     | 1 x 40 W          | Philips           | 63-50                           | 100                       | 77                                      | 4,0            |
| BH10752      | Salt-water Timer UV-C 75 W          | 14   | 2                            | 23                                     | 1 x 75 W          | Philips           | 63-50                           | 100                       | 77                                      | 4,2            |
| BH04402      | Copper Ionizer UV-C 40 W            | 11   | 2                            | 23                                     | 1 x 40 W          | VGE - LightTech   | 63-50                           | 100                       | 77                                      | 5,0            |
| BH04752      | Copper Ionizer UV-C 75 W            | 16   | 2                            | 23                                     | 1 x 75 W          | VGE - LightTech   | 63-50                           | 100                       | 77                                      | 5,2            |
| BE09422      | Xpose                               | 14   | 1                            | 15                                     | 1 x 42 W          | VGE               | 32-38-60                        | 55                        | 19                                      | 4,5            |
| BE01212      | Spa UV-C 21 W - 230 V               | 3  | 1                            | 13                                     | 1 x 21 W          | VGE - LightTech   | 50                              | 35                        | 17                                      | 1,7            |
| BE01211UL    | Spa UV-C 21 W - 120 V               | 3  | 1                            | 13                                     | 1 x 21 W          | VGE - LightTech   | 50                              | 35                        | 17                                      | 1,7            |
| BE01122      | Spa UV-C 12 W                       | 3  | 1                            | 13                                     | 1 x 12 W          | Philips           | 50                              | 40,5                      | 17                                      | 1,6            |
| BE01151      | Spa UV-C 15 W                       | 3  | 1                            | 13                                     | 1 x 15 W          | Philips           | 50                              | 40,5                      | 17                                      | 1,6            |

\* Recommend flow rate for 40 mJ/cm<sup>2</sup>

\*\* 4 kg weight of the control monitor

\*\*\* flow 400 J/m<sup>2</sup> (Disinfection) 13 m<sup>3</sup>/h flow 600 J/m<sup>2</sup> (Chloramine reduction) 8 m<sup>3</sup>/h

\*\*\*\* Flow 400 J/m<sup>2</sup> (Disinfection) 19 m<sup>3</sup>/h Flow 600 J/m<sup>2</sup> (Chloramine reduction) 12 m<sup>3</sup>/h



## Blue Lagoon Xpert-Series especially for Pool professionals!



The Blue Lagoon Xpert range is specifically branded and designed for pool professionals! This range includes 5 models, available in various wattages. The UV-C units come with a practical and professionally designed Timer box that features a LED-timer, ensuring accurate monitoring and visualization of the lamp's lifespan.

### Blue Lagoon Xpert medium pressure UV-C

The medium pressure UV lamps emit a wide spectrum of Ultraviolet (UV) light which not only gives very good disinfection results but is also excellent for photolysis applications like the reduction of chloramine in pool

applications. The single ended lamp in combination with the S.B.T. (Single-end Bayonet Technology) and the on-chamber visual lamp status indication makes the systems extremely user friendly.

### Blue Lagoon Xpert Buster UV-C

The Buster UV-C is made out of 316L stainless steel and comes in the types: 80 W, 140 W amalgam or 420 W (3x 140 W) amalgam. These units are equipped with interchangeable supports for easy installation horizontally and vertically.

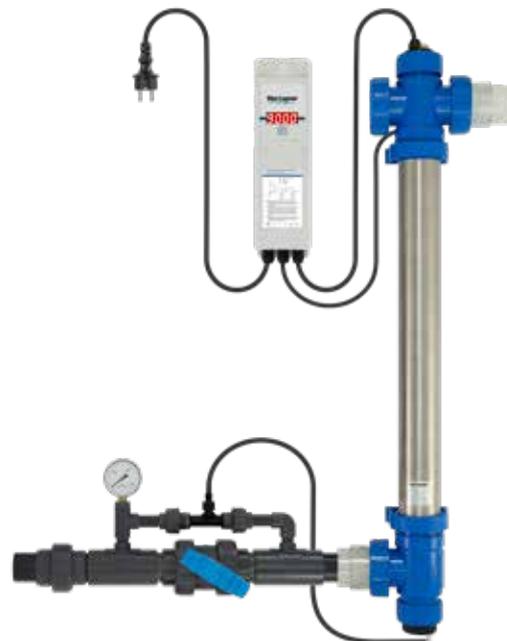


## Blue Lagoon Xpert-Series especially for Pool professionals!



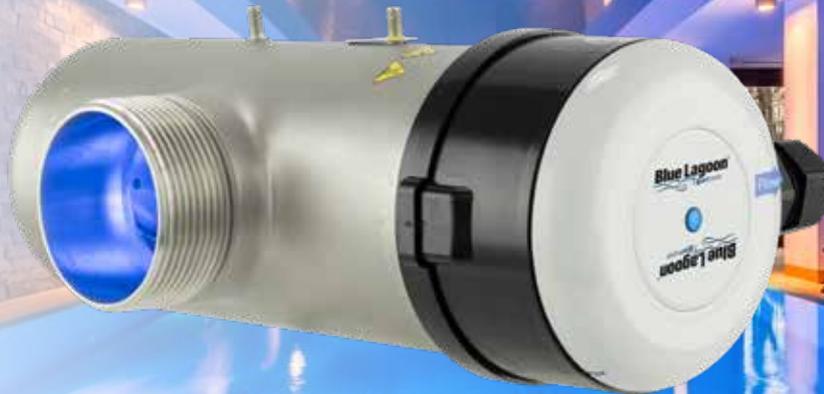
### Blue Lagoon Xpert Duplex UV-C

The Duplex UV-C is made out of Duplex stainless steel and comes in two types: 80 W and 140 W amalgam. The unit is suitable for all types of swimming pools, such as chlorinated and salt-water (electrolysis) pools. The Duplex stainless steel will not be affected by the salt-water and this prevents corrosion to the housing.



### Blue Lagoon Xpert AOP UV-C

The combination of ozone and UV-C, integrated in this cleverly designed disinfection system, ensures fresh and healthy pool water with the possibility of providing a minimum use of chlorine. The lamp has a double function, producing ozone and UV-C radiation at the same time. The ozone in the water will be completely broken down by the UV-C radiation. Because of this, so called OH-radicals are being produced which have a high oxidation potential. This results in oxidation of the organic pollution in the water and the UV-C radiation will also disinfect the water at the same time.



## Blue Lagoon Xpert UV-C MP 400 W



### Blue Lagoon Xpert UV-C MP 400 W

The Blue Lagoon Xpert-series medium pressure UV lamps emit a wide spectrum of Ultraviolet (UV) light, which gives very good disinfection results and is also excellent for photolysis applications like the reduction of chloramine in pool applications. The single ended lamp in combination with the S.B.T. (Single-end Bayonet Technology) and the on-chamber visual lamp status indication makes the systems extremely user friendly. The unit has a compact design and a cross flow irradiation chamber design with low pressure loss. The single-ended lamp is easy to (re)place.



### Advantages of the Blue Lagoon Xpert UV-C MP 400 W

- Effective chloramine reduction
- Compact chamber design
- The breakdown of chloramines ensures less water change and therefore less consumption of water
- Easy to (re)place single ended lamp and while system is pressurised fast lamp replacement without tools
- Visual lamp indication in the lamp head
- Fast lamp replacement without tools
- Glass bead-blasted chamber of stainless steel 316L
- Cross flow irradiation chamber design, low pressure loss
- Electronic lamp power supply
- Long lamp life
- Internal irradiation chamber finish of RA 0,8 µm
- Less use of chemicals
- Made in the Netherlands

# Blue Lagoon Xpert UV-C MP 400 W Technical



|  | <b>400 W</b>                            |
|--|---|
| Art. number                                      | BPM00401                                |
| Type   | 400-85                                  |
| EAN  | 8714404042338                           |
| Max. pressure                                    | 10 bar                                  |
| flow 400 J/m <sup>2</sup> (Disinfection)         | 13 m <sup>3</sup> /h                    |
| flow 600 J/m <sup>2</sup> (Chloramine reduction) | 8 m <sup>3</sup> /h                     |
| Diameter unit Ø                                  | 85 mm                                   |
| Length unit                                      | 25 cm                                   |
| Diameter in-outlet Ø                             | 2" male                                 |
| Housing material                                 | 316L                                    |
| Control panel                                    | Compact                                 |
| Lamp power                                       | 400 W                                   |
| Lamp   | Blue Lagoon MP 400 W SBT                |
| Lifespan lamp                                    | 9.000 hours UV-C                        |
| Bi-metal switch                                  | ✓                                       |
| Indicator  | ✓                                       |
| Replace lamp alert                               | ✓                                       |
| Flow switch                                      | -                                       |
| Weight   | 2 Kg + 4 Kg (weight of electrical part) |



## Spare parts

|          |          |   |
|----------|----------|---|
| <b>A</b> | F980600  | Lamp Blue Lagoon MP 400 W SBT                       |
| <b>B</b> | QG101    | Quartz Glass MP 195 x 38 x 1,5 mm (400 - 600 W)     |
| <b>D</b> | EPM00402 | Blue Lagoon Xpert UV Electrical Part MP Compact 400 |
| <b>X</b> | B290146  | Thermostat Bi-metal switch 60 °C 10 m cable         |
| <b>C</b> | CA050    | Cable + Lamp Socket MP 2 m 18 AWG                   |
| <b>G</b> | SP0054   | Seal Service Set MP UV-C                            |

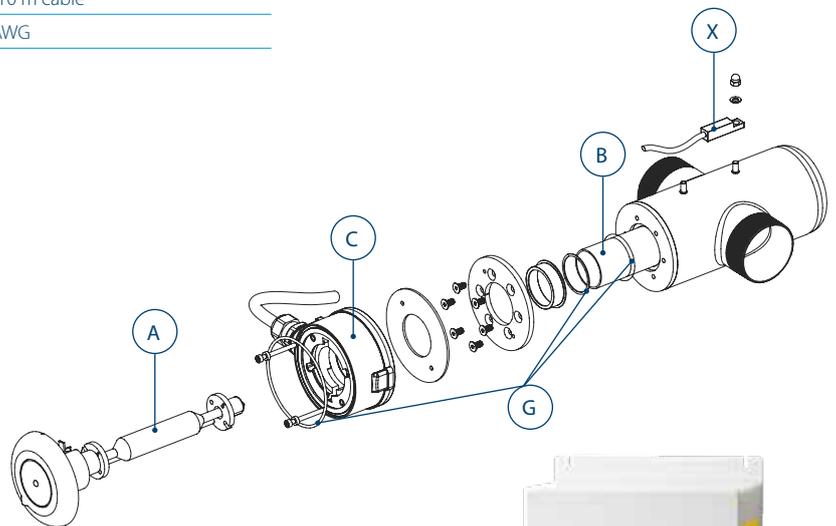
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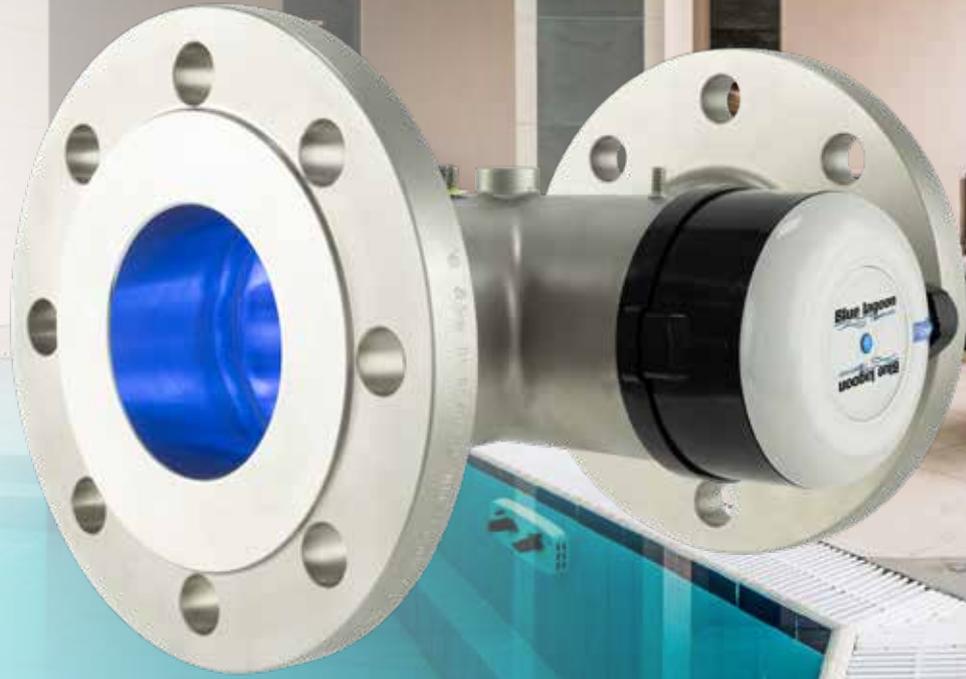
|          |        |                    |
|----------|--------|--------------------|
| <b>*</b> | SP0058 | Torque screwdriver |
|----------|--------|--------------------|

F980600 - Lamp Blue Lagoon MP 400 W SBT



B290146 - Thermostat Bi-metal switch 60 °C 10 m cable





## Blue Lagoon Xpert UV-C MP 600 W



### Blue Lagoon Xpert MP 600

The Blue Lagoon Xpert-series MP 600 is a robust and reliable UV system for, not only the disinfection of water in many industries but also for an excellent reduction of chloramines in pool water treatment applications. The single ended lamp in combination with the S.B.T. (Single-end Bayonet Technology) and the on-chamber visual lamp status indication makes the systems extremely user friendly. The 316L stainless steel treatment chamber is equipped with DN 80 flanges for easy installation. The MP 600 unit has a compact design and a cross flow irradiation chamber design with low pressure loss. The single-ended lamp is easy to (re) place. Last but not least, the Blue Lagoon medium-pressure MP 600 offers an effective chloramine reduction.

### Advantages of the Blue Lagoon Xpert UV-C MP 600

- Compact chamber design
- Easy to (re)place single ended lamp
- Visual lamp indication in the lamp head
- Easy to (re)place single ended lamp and while system is pressurised fast lamp replacement without tools
- Glass bead-blasted chamber of stainless steel 316L
- Cross flow irradiation chamber design, low pressure loss
- Electronic lamp power supply
- Long lamp life
- Internal irradiation chamber finish of RA 0,8 µm
- Less use of chemicals
- Effective chloramine reduction
- Made in the Netherlands

# Blue Lagoon Xpert UV-C MP 600 W Technical



## 600 W

|  |  |
|--|--|
| Art. number                                      | BPM00601                                 |
| Type   | 600-85                                   |
| EAN  | 8714404042406                            |
| Max. pressure                                    | 10 bar                                   |
| Flow 400 J/m <sup>2</sup> (Disinfection)         | 19 m <sup>3</sup> /h                     |
| Flow 600 J/m <sup>2</sup> (Chloramine reduction) | 12 m <sup>3</sup> /h                     |
| Diameter unit Ø                                  | 85 mm                                    |
| Length unit                                      | 28 cm                                    |
| Diameter in-outlet Ø                             | DN 80                                    |
| Housing material                                 | 316L                                     |
| Control panel                                    | Compact                                  |
| Lamp power                                       | 600 W                                    |
| Lamp   | Blue Lagoon MP 600 W SBT                 |
| Lifespan lamp                                    | 9.000 hours UV-C                         |
| Bi-metal switch                                  | ✓  |
| Indicator  | ✓  |
| Replace lamp alert                               | ✓  |
| Flow switch                                      | -  |
| Weight   | 11 Kg + 4 Kg (weight of electrical part) |
| Quantity full pallet                             | 24                                       |



## Spare parts

|   |          |   |
|---|----------|---|
| A | F980605  | Lamp Blue Lagoon MP 600 W SBT                       |
| B | QG101    | Quartz Glass MP 195 x 38 x 1,5 mm (400 - 600 W)     |
| D | EPM00601 | Blue Lagoon Xpert UV Electrical Part MP Compact 600 |
| X | B290146  | Thermostat Bi-metal switch 60 °C 10 m cable         |
| C | CA050    | Cable + Lamp Socket MP 2 m 18 AWG                   |
| Y | B212103  | Stainless steel 316L plug 1/4" with collar          |
| Z | SP0054   | Seal Service Set MP UV-C                            |

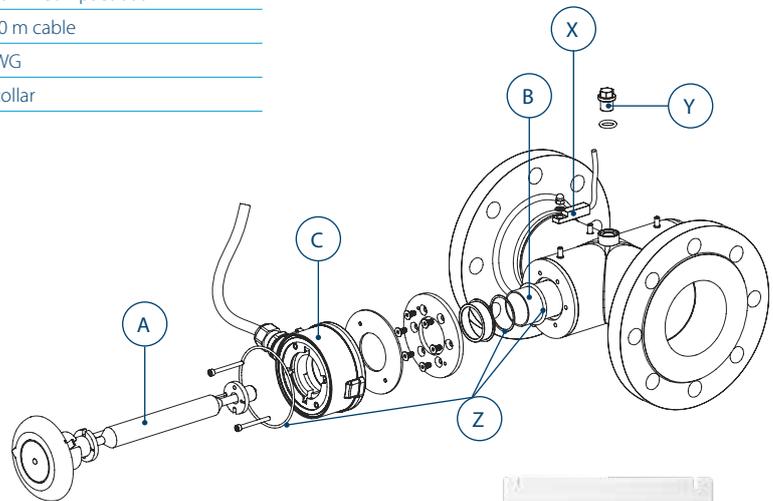
### Optional

|   |        |                    |
|---|--------|--------------------|
| * | SP0058 | Torque screwdriver |
|---|--------|--------------------|

F980605 - Lamp Blue Lagoon MP 600 W SBT



B290146 - Thermostat Bi-metal switch 60 °C 10 m cable





**BUSTER**

## Blue Lagoon Xpert Buster UV-C



### Blue Lagoon Xpert Buster UV-C

The Buster UV-C is made out of 316L stainless steel and comes in the types: 80 W, 140 W amalgam or 420 W (3x140 W) amalgam.

### Accessible ease of use

The Blue Lagoon Xpert Buster UV-C is fully equipped. The lamp life is up to 16.000 hours. In addition, a flow switch switches off the lamp if there is insufficient water flow. There is a LED indicator that informs about lamp life and the transparent lamp head allows for easy visual lamp inspection.

### Easy to install

Whether you want to place this UV-C unit horizontally or vertically, the interchangeable supports make both possible.

In addition, the cable between the timer box and the unit is extra long for optimal flexibility.

### Advantages of the Blue Lagoon Xpert Buster UV-C

- Up to 35% higher UV-C yield
- Crystal clear water guaranteed
- Long lamp life (up to 16.000 hours)
- Easy to maintain
- Can be placed both horizontally and vertically
- Made in the Netherlands
- The Buster units are equipped with interchangeable supports for easy installation horizontally and vertically

# Blue Lagoon Xpert Buster UV-C Technical



|   | 80 W                 | 140 W                   | 420 W   |
|---|----------------------|-------------------------|---|
| Art. number                               | BP07082              | BP07132                 | BP07392   |
| Type                                      | 80 W                 | 140 W                   | 420 W   |
| EAN                                       | 8714404040136        | 8714404045216           | 8714404045773                                     |
| Rec. flow for 30 mJ/cm <sup>2</sup>       | 15 m <sup>3</sup> /h | 23 m <sup>3</sup> /h    | 49 m <sup>3</sup> /h (for 40 mJ/cm <sup>2</sup> ) |
| Max. pressure                             | 4 bar                | 4 bar                   | 4 bar   |
| Max. flow                                 | 20 m <sup>3</sup> /h | 28 m <sup>3</sup> /h    | 49 m <sup>3</sup> /h                              |
| Diameter unit Ø                           | 114 mm               | 154 mm                  | 219 mm  |
| Length unit                               | 93 cm                | 93 cm                   | 93 cm   |
| Diameter in-outlet Ø                      | 2" male threaded     | 2,5" male threaded      | 3" male threaded                                  |
| Housing material                          | 316 L                | 316 L                   | 316 L   |
| Electronic ballast                        | 230 V AC 50 Hz       | 230 V AC 50 Hz          | 230 V AC 50 Hz                                    |
| Lamp power                                | 80 W                 | 140 W                   | 3 x 140 W   |
| Lamp                                      | VGE T5 80 W          | VGE T6 140 W Amalgam 4P | 3x T6 140 W Amalgam 4P                            |
| Operating environment ballast temperature | 1-40 °C              | 1-40 °C                 | 1-40 °C   |
| Lifespan lamp                             | 9.000 h UV-C         | 16.000 h UV-C           | 16.000 h UV-C                                     |
| Indicator                                 | √                    | √                       | √   |
| Replace lamp alert                        | √                    | √                       | √   |
| Flow switch                               | -                    | √                       | √   |
| Quantity full pallet                      | 18 pcs               | 15 pcs                  | 6 pcs   |

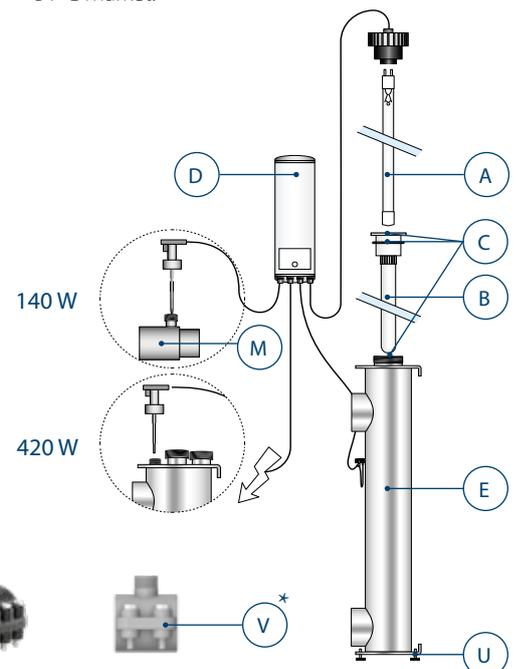


## Spare parts

|   |          |  |
|---|----------|--|
| A | F980010  | Lamp VGE T5 80 W 4P Base X   |
|   | F980020  | Lamp VGE T6 140 W Amalgama 4P Base X                                   |
| B | QG075    | Quartz Glass VSC 870 x 30 mm 140 W AM                                  |
| C | E800912  | Set (3pcs) O-ring for quartz glass                                     |
|   | EP080020 | Electrics Xpert Buster UV-C 80 W                                       |
| D | EP130016 | Electrics Xpert Buster UV-C 140 W incl. flow switch                    |
|   | EP390005 | Electrics Xpert Buster UV-C 420 W incl. flow switch                    |
| E | B212130  | Housing Xpert Buster UV-C 80 W   |
|   | B212131  | Housing Xpert Buster UV-C 140 W  |
|   | B212120  | Housing Xpert Buster UV-C 420 W  |
| M | B290020  | Reduction piece 63/63 mm 3/4" male threaded for flow switch            |
|   | B290021  | Reduction piece 60.3/60.3 mm 3/4" USA/UK male threaded for flow switch |
| U | E801533  | Adjustable foot stainless steel M8                                     |

### Optional

|   |         |  |
|---|---------|--|
| V | B290177 | Tapping saddle 50 x 3/4" male thread for flow switch |
|   | B290170 | Tapping saddle 63 x 3/4" male thread for flow switch |
|   | B290176 | Tapping saddle 75 x 3/4" male thread for flow switch |



### Amalgam lamp

The amalgam version includes a flow switch that will turn off the lamp when the flow is too low. The UV-C amalgam lamp is less affected by temperature fluctuations in the water and generates a constant, powerful radiation. Amalgam UV-C radiation is known as being the most powerful UV-C radiation available on the UV-C market.



**AOP**

## Blue Lagoon Xpert AOP Compact Ozone & UV-C



### Triple disinfection for maximum protection

Say goodbye to smelly, chlorine-filled pool water with the Blue Lagoon AOP Compact Ozone & UV-C. This innovative disinfection system is the ultimate solution to keep your pool water fresh and healthy with minimal chlorine usage. It provides triple disinfection, combining ozone, OH-radicals, and UV-C to ensure maximum protection against harmful bacteria and viruses.

### Advantages of the Blue Lagoon Xpert AOP Compact Ozone & UV-C

- This unit provides triple disinfection: ozone, OH radicals and UV-C
- A stand-alone electronic ballast to guarantee an efficient and stable power supply in addition to maximum installation flexibility
- Up to 35% more UV-C yield as a result of reflection by the stainless steel reactor
- Duplex stainless steel housing, suitable for use in chlorine and salt electrolysis pools
- The ozone UV-C lamp produces ozone and UV-C for 9,000 hours
- The device will indicate when the lamp needs replacing
- Easy installation and maintenance
- Made in the Netherlands



## Blue Lagoon Xpert AOP Compact Ozone & UV-C

### Operation

The combination of ozone and UV-C makes it possible to have a pool with minimal chlorine usage. Through the supplied venturi, air is sucked in from the outside into the space between the UV-C lamp and the quartz sleeve. The special UV-C lamp generates radiation of both 254nm and 185nm. The 185nm radiation converts the available oxygen into ozone. The produced ozone (max. 0,6 g/h) is mixed with water through the venturi to perform its disinfection and oxidising job. Inside the UV-C housing, any residual ozone will be converted by the 254 nm UV-C radiation into OH radicals (the so called Advanced Oxidation Process) that have an even stronger oxidising power than ozone.

### Revolutionary Operation for Maximum Results

The Blue Lagoon AOP Compact Ozone & UV-C's revolutionary combination of ozone and UV-C produces OH radicals that have an even stronger oxidizing power than ozone, resulting in the oxidation of organic pollutants in the water. This system's double-function lamp produces both ozone and UV-C, ensuring that the water is disinfected and purified at the same time.

### Long-Lasting Performance and Easy Maintenance

The device's ozone UV-C lamp produces ozone and UV-C for up to 9.000 hours, and the unit will indicate when the lamp needs replacing. Additionally, the Blue Lagoon AOP Compact Ozone & UV-C is easy to install and maintain, making it a hassle-free solution for clean pool water.

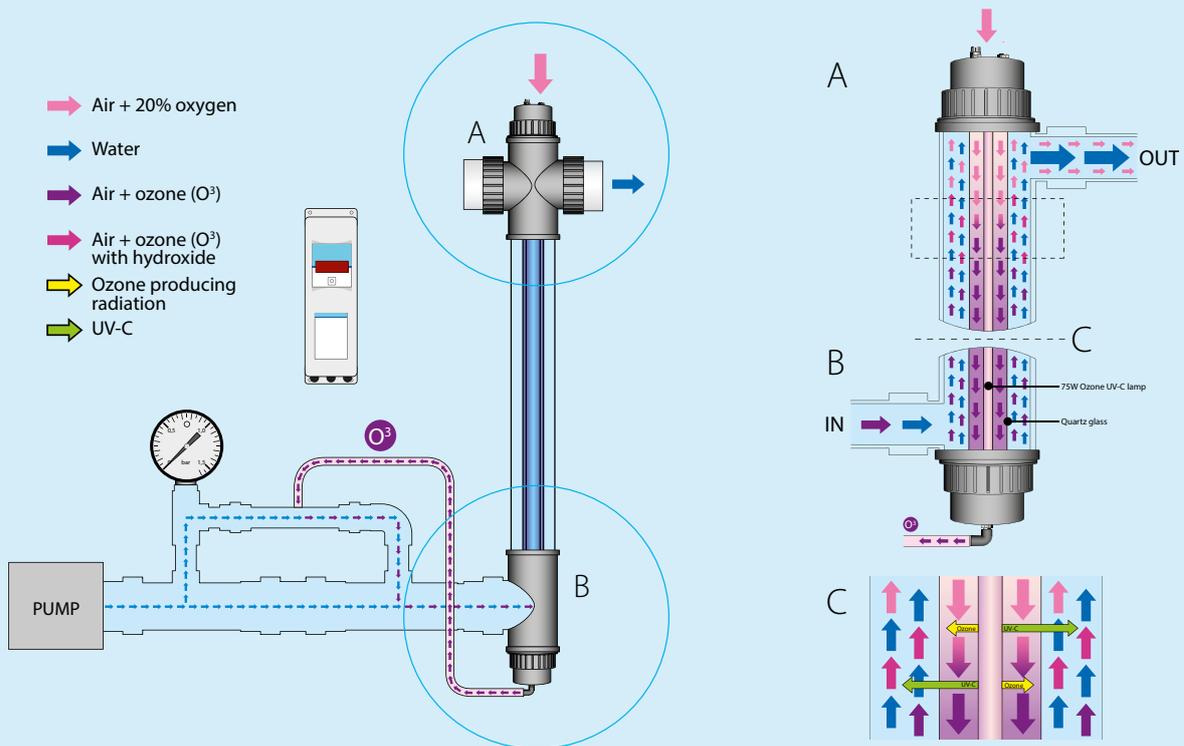
The combination of ozone and UV-C, integrated in this cleverly designed disinfection system, ensures fresh and healthy pool water with the possibility of providing a minimum use of chlorine.



### What is AOP?

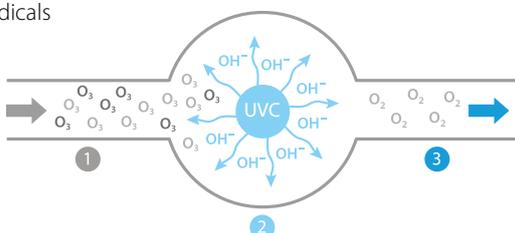
The VGE Advanced Oxidation Process (AOP) combines the benefits of ozone and UV-C into one device. When ozone is used in combination with UV-C light in water, hydroxyl radicals ( $\cdot\text{OH}$ ) are created. These radicals are very effective in oxidizing micropollutants in the water and therefore reducing the organic and inorganic pollution in the water. Chlorine disinfection by-products such as THM and chloramines are being reduced. The UV-C light not only disinfects the water very effectively, also chlorine resistant organisms like Cryptosporidium and Giardia are successfully being inactivated. Lastly it directly reduces the chloramines in the water. The UV-C system is designed in a way that all the ozone in the water is being used for the AOP process, therefore no deozonation device is needed if the advised flowrates are met. AOP is a very effective and efficient way of sanitizing and disinfecting your pool. As a result the amount of chlorine in a pool can be kept to a minimum.

# Blue Lagoon Xpert AOP Compact Ozone & UV-C



## More about AOP

The Advanced Oxidation Process (AOP) is the best available water treatment technology at this moment. AOP uses  $\cdot\text{OH}$  radicals which have the highest oxidation potential of oxidants that can be used in water treatment systems. When dissolved ozone (1) is irradiated by UV-C radiation in a UV treatment chamber (2), then  $\cdot\text{OH}$ -radicals are created. The lifetime of  $\cdot\text{OH}$ -radicals is extremely short, because of that the entire treatment process takes place within the UV treatment chamber. Treated water (3) is without  $\cdot\text{OH}$ -radicals



The lamp has a double function, producing ozone and UV-C radiation at the same time. The ozone in the water will be completely broken down by the UV-C radiation. Because of this, so called  $\cdot\text{OH}$ -radicals are being produced which have a high oxidation potential. This results in oxidation of the organic pollution in the water and the UV-C radiation will also disinfect the water at the same time.

## Benefits AOP:

- Strong combination of ozone (oxidation) and UV-C (disinfection);
- Improves the disinfection efficiency;
- Makes a pool with a minimal amount of chlorine possible;
- Effective against chlorine-resistant microorganisms;
- Prevents skin and eye irritation;
- Can be quickly added to existing filtration systems.



### 75 W

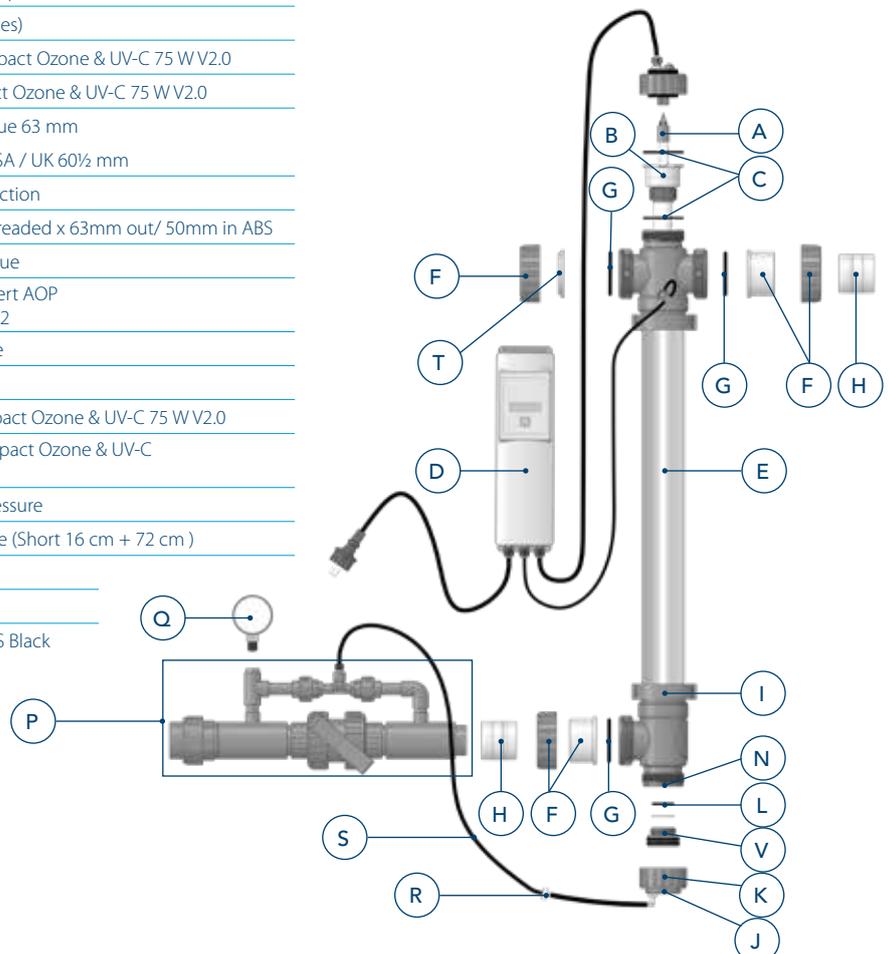
|                                     |                                      |
|-------------------------------------|--------------------------------------|
| Art. number                         | BH12752                              |
| Type                                | 75 W                                 |
| EAN                                 | 8714404040617                        |
| Rec. flow for 30 mJ/cm <sup>2</sup> | 18 m <sup>3</sup> /h                 |
| Max. pressure                       | 2,5 bar                              |
| Max. flow                           | 23 m <sup>3</sup> /h                 |
| Diameter unit Ø                     | 70 mm                                |
| Length unit                         | 100 cm                               |
| Diameter in-outlet Ø                | 63 mm / 50 mm / 1½"                  |
| Housing material                    | DUPLEX                               |
| Electronic ballast                  | 230 V AC 50 Hz                       |
| Lamp power                          | 75 W                                 |
| Lamp                                | VGE T5 75 W Ozone                    |
| Lifespan lamp                       | 9.000 hours Ozone - 9.000 hours UV-C |
| Ozone                               | 0,6 gr/h                             |
| Timer                               | √                                    |
| Replace lamp alert                  | √                                    |
| Weight                              | 5,6 Kg                               |
| Quantity full pallet                | 24 pcs                               |



## Spare parts

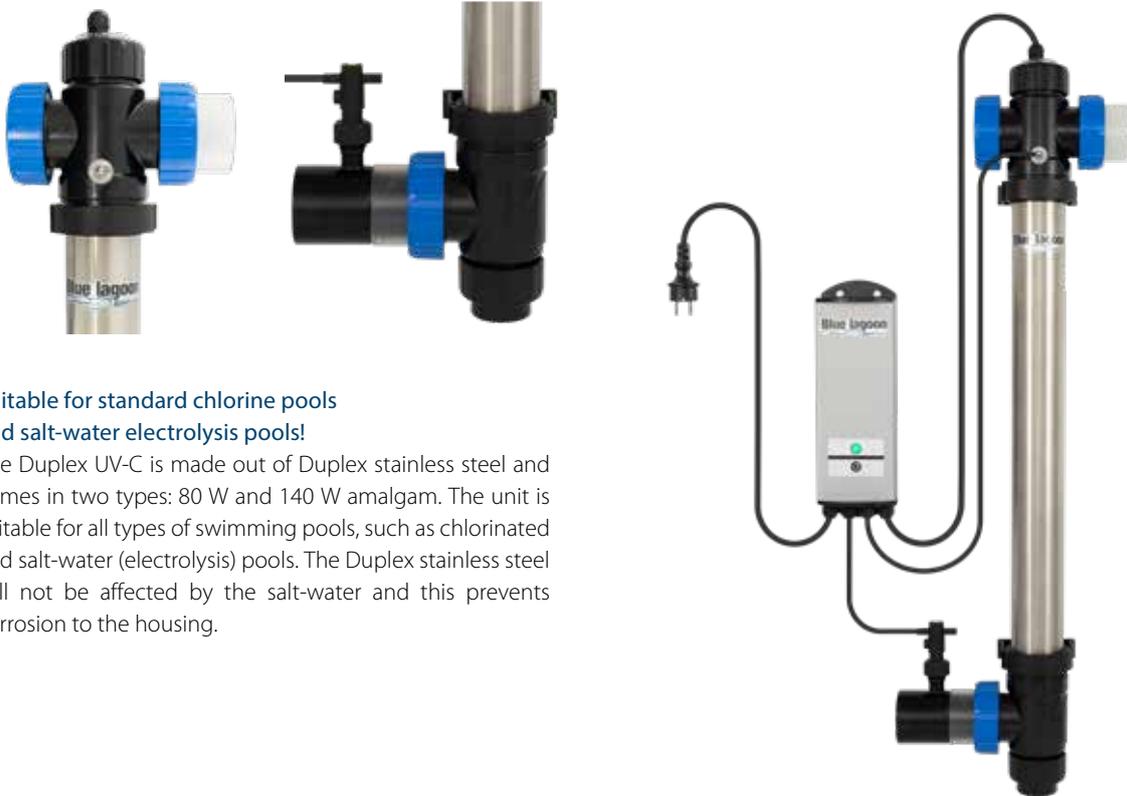
|   |           |  |
|---|-----------|--|
| A | 4800033   | Lamp VGE T5 75 W Ozone Base H                                      |
| B | QG109     | Quartz Glass VSC 925 x 30 mm open end AM                           |
| C | E800912   | O-Ring for quartz sleeve (3 pieces)                                |
| D | EP075070  | Electrics for BL Xpert AOP Compact Ozone & UV-C 75 WV2.0           |
| E | H170024   | Housing BL Xpert AOP Compact Ozone & UV-C 75 WV2.0                 |
| F | B915000   | Set (2pcs) 3-way connection blue 63 mm                             |
|   | E800944   | Set (2pcs) 3-way connection USA / UK 60½ mm                        |
| G | E800941   | Set (2pcs) O-rings 3-way connection                                |
| H | F990115   | Reduction piece 1,5" female threaded x 63mm out/ 50mm in ABS       |
| I | B290006   | Mounting bracket 75 mm PP Blue                                     |
| J | F990103   | End cap with air plug for BL Xpert AOP Compact Ozone & UV-C 75 WV2 |
| K | B290010   | Nut 70 mm x 33.5 mm ABS Blue                                       |
| L | 3902158   | O-ring NBR 57 mm x 2.5 mm  |
| N | 3902269   | Sealing set BL Xpert AOP Compact Ozone & UV-C 75 W V2.0            |
| P | 4800068   | Venturi unit BL Xpert AOP Compact Ozone & UV-C (excl. manometer)   |
| Q | 4800099   | Manometer for Ozone High pressure                                  |
| R | 4800145   | Ozone Viton Check valve + hose (Short 16 cm + 72 cm)               |
| S | 4800020   | PU hose black for Ozone  |
| T | F990196BU | Closing lid black  |
| V | 3901013   | Open Glass adapter T-piece ABS Black                               |

\* For pre 2021 model, please see our website



## DUPLEX

### Blue Lagoon Xpert Duplex UV-C



Suitable for standard chlorine pools  
and salt-water electrolysis pools!

The Duplex UV-C is made out of Duplex stainless steel and comes in two types: 80 W and 140 W amalgam. The unit is suitable for all types of swimming pools, such as chlorinated and salt-water (electrolysis) pools. The Duplex stainless steel will not be affected by the salt-water and this prevents corrosion to the housing.

#### Advantages of the Blue Lagoon Xpert Duplex UV -C

- Salt-water suitable
- multiple installation options for easy installation
- Equipped with a flow switch to turn of the lamp at insufficient water flow (not included with 80 W)
- Visual lamp indicator in top of unit
- Made in the Netherlands

# Blue Lagoon Xpert Duplex UV-C Technical



|                      | 80 W                  | 140 W                          |
|----------------------|-----------------------|--------------------------------|
| Art. number          | BP08752               | BP08132                        |
| Type                 | 80 W                  | 140 W                          |
| EAN                  | 8714404046329         | 8714404980920                  |
| Max. pressure        | 2,5 bar               | 2,5 bar                        |
| Max. flow            | 23 m <sup>3</sup> /h  | 23 m <sup>3</sup> /h           |
| Diameter unit Ø      | 70 mm                 | 70 mm                          |
| Length unit          | 100 cm                | 100 cm                         |
| Diameter in-outlet Ø | 63 mm / 50 mm / 1½"   | 63 mm / 50 mm / 1½"            |
| Housing material     | DUPLEX                | DUPLEX                         |
| Electronic ballast   | 230 V AC 50 Hz        | 230 V AC 50 Hz                 |
| Lamp power           | 80 W                  | 140 W                          |
| Lamp                 | VGE LightTech T6 80 W | VGE LightTech T6 140 W Amalgam |
| Lifespan lamp        | 9.000 hours           | 16.000 hours                   |
| Indicator            | √                     | √                              |
| Replace lamp alert   | √                     | √                              |
| Flow switch          | -                     | √                              |
| Quantity full pallet | 24 pcs                | 24 pcs                         |

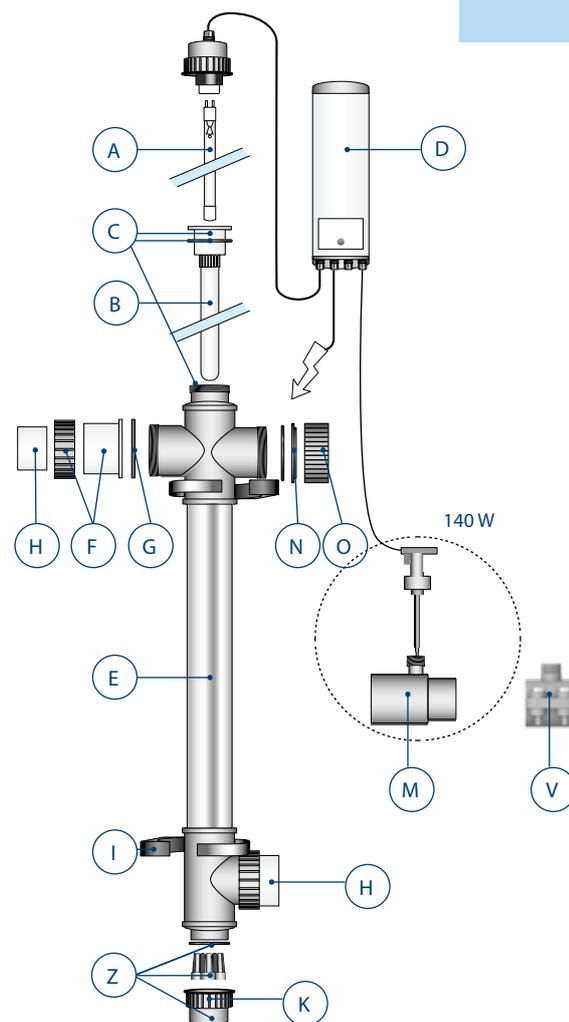


## Spare parts

|   |           |   |
|---|-----------|---|
| A | F980010   | Lamp VGE T5 80 W 4P Base X  |
|   | F980020   | Lamp VGE T6 140 W Amalgama 4P Base X                                |
| B | QG015     | Quartz Glass VSC 933 x 25 mm 40/75/80 W AM                          |
|   | QG012     | Quartz Glass VSC 920 x 30 mm 130 / 140 W AM                         |
| C | E800912   | Set (3pcs) O-ring for quartz glass                                  |
| D | EP080008  | Electrics for Blue Lagoon Xpert Duplex UV-C 80 W                    |
|   | EP130021  | Electrics for Blue Lagoon Xpert Duplex UV-C 140 W incl. flow switch |
| E | H170004   | Housing Blue Lagoon Xpert UV-C duplex 80 W / 140 W                  |
| F | B915000   | Set (2pcs) 3-way connection blue 63 mm                              |
|   | E800944   | Set (2pcs) 3-way connection USA / UK 60½ mm                         |
| G | E800941   | Set (2pcs) O-rings 3-way connection                                 |
| H | F990115   | Reduction piece 1.5" female threaded x 63 mm out/ 50 mm in ABS      |
| I | E801107   | Mounting bracket 75 mm PP black                                     |
| K | B290010   | Nut 70 mm x 33.5 mm for end cap ABS Blue                            |
|   | B290020   | Reduction piece 63/63 3/4" male thread for flow switch              |
| M | B290021   | Reduction piece 60.3/60.3 3/4" USA/UK male thread for flow switch   |
| N | F990196BU | Closing lid black   |
| O | B290009   | Nut 83.5 mm x 32 mm ABS Blue  |
| Z | SP0073    | Quartz Glass Stabilizer Replacement Kit                             |

### Optional

|   |         |  |
|---|---------|--|
|   | B290177 | Tapping saddle 50 x 3/4" male thread for flow switch |
| V | B290170 | Tapping saddle 63 x 3/4" male thread for flow switch |
|   | B290176 | Tapping saddle 75 x 3/4" male thread for flow switch |





## Blue Lagoon Inox UV-C



### Operation

Thanks to the Blue Lagoon Inox UV-C, your swimming pool water will be disinfected efficiently and safely and the quality of your water will remain excellent. The UV-C radiation inactivates bacteria, viruses and other microorganisms and stops them from multiplying. This device is able to reduce chlorine concentration up to 50%!

### Advantages of the Blue Lagoon Inox UV-C

- Up to 35% more UV-C yield as a result of reflection by the stainless steel reactor
- Philips UV-C lamp
- A flow switch will turn off the lamp at insufficient water flow
- Integrated adjustable timer for the UV-C lamp
- Digital indication when the lamp needs replacing
- Complete 316L stainless steel housing
- Easy installation and maintenance
- Made in the Netherlands

# Blue Lagoon INOX UV-C Technical



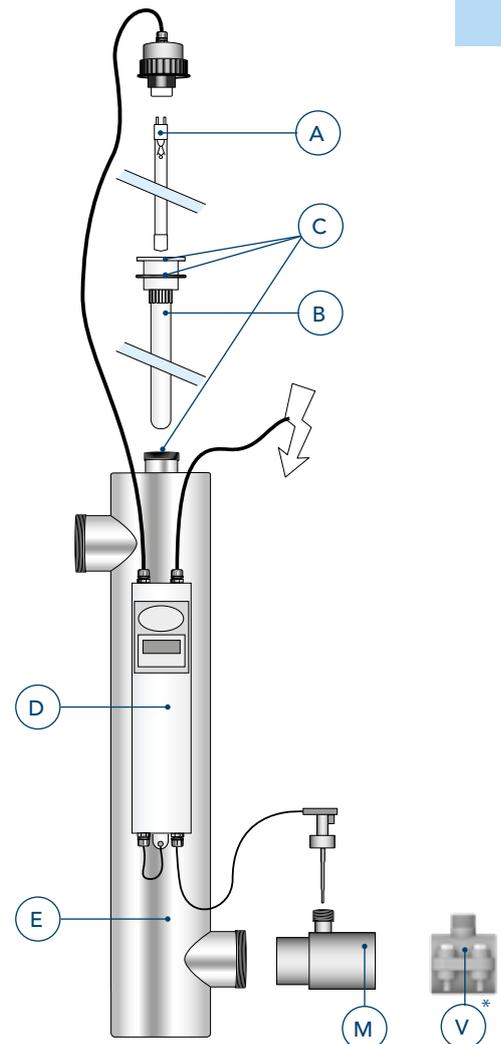
|                                     | <b>75 W</b>                      | <b>130 W</b>                    |
|-------------------------------------|----------------------------------|---------------------------------|
| Art. number                         | BP02752                          | BP02132                         |
| Type                                | 75 W                             | 130 W                           |
| EAN                                 | 8714404038669                    | 8714404038676                   |
| Rec. flow for 30 mJ/cm <sup>2</sup> | 18 m <sup>3</sup> /h             | 22 m <sup>3</sup> /h            |
| Max. pressure                       | 5 bar                            | 5 bar                           |
| Max. flow                           | 23 m <sup>3</sup> /h             | 23 m <sup>3</sup> /h            |
| Diameter unit Ø                     | 114 mm                           | 114 mm                          |
| Length unit                         | 100 cm                           | 100 cm                          |
| Diameter in-outlet Ø                | 2" Male thr.                     | 2" Male thr.                    |
| Housing material                    | 316 L                            | 316 L                           |
| Electronic ballast                  | 230 V AC 50 Hz                   | 230 V AC 50 Hz                  |
| Lamp power                          | 75 W                             | 130 W                           |
| Lamp                                | Philips TUV 36T5 HO 4P-SE (75 W) | Philips TUV 130 W 4P-SE Amalgam |
| Lifespan lamp                       | 9.000 hours                      | 12.000 hours                    |
| Timer                               | ✓                                | ✓                               |
| Flow switch                         | ✓                                | ✓                               |
| Replace lamp alert                  | ✓                                | ✓                               |
| Weight                              | 7,2 Kg                           | 7,3 Kg                          |
| Quantity full pallet                | 21 pcs                           | 21 pcs                          |

## Spare parts

|          |            |   |
|----------|------------|---|
| <b>A</b> | E800902P   | Lamp Philips TUV 36T5 75 W HO 4P-SE Base C AM                                 |
|          | E800904    | Lamp Philips TUV XPT 130 W 4P-SE Amalgama Base E                              |
| <b>B</b> | QG015      | Quartz Glass VSC 933 x 25 mm 40/75/80 W AM                                    |
|          | QG012      | Quartz Glass VSC 920 x 30 mm 130 / 140 W AM                                   |
| <b>C</b> | E800912    | Set (3pcs) O-ring for quartz glass  |
| <b>D</b> | EP075010.1 | Electrics for BL UV-C INOX 75 W incl. flow switch                             |
|          | EP130007   | Electrics for BL UV-C INOX 130 W Amalgama incl. flow switch                   |
| <b>E</b> | B212002    | Housing for Blue Lagoon Inox UV-C   |
| <b>M</b> | B290020    | Reduction piece 63/63 mm 3/4" male threaded for flow switch                   |
|          | B290021    | Reduction piece 60.3/60.3 mm 3/4" <b>USA/UK</b> male threaded for flow switch |

### Optional

|          |         |   |
|----------|---------|---|
| <b>V</b> | B290177 | Tapping saddle <b>50 x 3/4"</b> male thread for flow switch |
|          | B290170 | Tapping saddle <b>63 x 3/4"</b> male thread for flow switch |
|          | B290176 | Tapping saddle <b>75 x 3/4"</b> male thread for flow switch |





### Operation

The Blue Lagoon Signal UV-C contains an integrated timer that accurately monitors and visualises the hours by changing colour! A warning will be given by a blinking LED when the lamp needs to be replaced. Thanks to the Blue Lagoon Signal UV-C your swimming pool water will be disinfected efficiently, safely and the quality of your water will remain excellent.

### Amalgam lamp

The amalgam version includes a flow switch that will turn off the lamp when the flow is too low. The UV-C amalgam lamp is less affected by temperature fluctuations in the water and generates a constant, powerful radiation.

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### Advantages of the Blue Lagoon Signal UV-C

- LED-function to visualise the remaining lifetime of the lamp
- Up to 35% more UV-C yield as a result of reflection by the stainless steel reactor
- 316L stainless steel housing
- Easy to install and easy to maintain
- Comes with Ø63mm to Ø50mm fittings, 1½" female threaded
- Made in the Netherlands

# Blue Lagoon Signal UV-C Technical



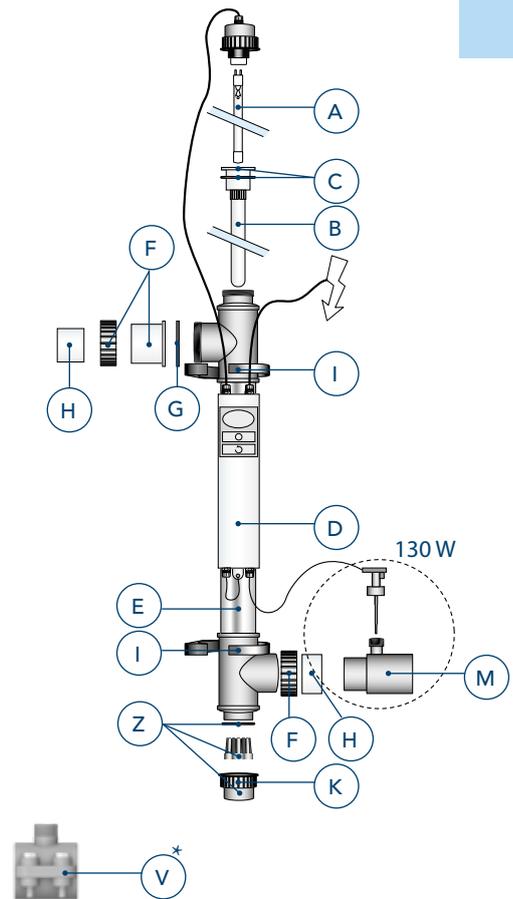
|                                     | 40 W                 | 75 W                 | 130 W Amalgam              |
|-------------------------------------|----------------------|----------------------|----------------------------|
| Art. number                         | BE11402              | BE11752              | BH1132                     |
| Type                                | 40 W                 | 75 W                 | 130 W                      |
| EAN                                 | 8714404045193        | 8714404045261        | 8714404045124              |
| Rec. flow for 30 mJ/cm <sup>2</sup> | 11 m <sup>3</sup> /h | 16 m <sup>3</sup> /h | 22 m <sup>3</sup> /h       |
| Max. pressure                       | 2 bar                | 2 bar                | 2 bar                      |
| Max. flow                           | 23 m <sup>3</sup> /h | 23 m <sup>3</sup> /h | 23 m <sup>3</sup> /h       |
| Diameter unit Ø                     | 70 mm                | 70 mm                | 70 mm                      |
| Length unit                         | 100 cm               | 100 cm               | 100 cm                     |
| Diameter in-outlet Ø                | 63 mm / 50 mm / 1½"  | 63 mm / 50 mm / 1½"  | 63 mm / 50 mm / 1½"        |
| Housing material                    | 316L                 | 316L                 | 316L                       |
| Electronic ballast                  | 230 V AC 50 Hz       | 230 V AC 50 Hz       | 230 V AC 50 Hz             |
| Lamp power                          | 40 W                 | 75 W                 | 130 W                      |
| Lamp                                | VGE T5 40 W 4P       | VGE T5 75 W 4P       | LightTech T6 130 W Amalgam |
| Lifespan lamp                       | 9.000 hours          | 9.000 hours          | 16.000 hours               |
| Indicator                           | √                    | √                    | √                          |
| Replace lamp alert                  | √                    | √                    | √                          |
| Flow switch                         | -                    | -                    | √                          |
| Weight                              | 4,1 Kg               | 4,3 Kg               | 4,5 Kg                     |
| Quantity full pallet                | 24 pcs               | 24 pcs               | 24 pcs                     |

## Spare parts

|   |          |   |
|---|----------|---|
|   | F980002  | Lamp VGE T5 40 W 4P Base F                                      |
| A | F980004  | Lamp VGE T5 75 W 4P Base F                                      |
|   | F980008  | Lamp VGE T6 130 W Amalgama 4P Base M                            |
| B | QG015    | Quartz Glass VSC 933 x 25 mm 40/75/80 W AM                      |
|   | QG012    | Quartz Glass VSC 920 x 30 mm 130 / 140 W AM                     |
| C | E800912  | Set (3pcs) O-ring for quartz glass                              |
| D | EP040035 | Electrics for BL UV-C Signal 40 W                               |
|   | EP075039 | Electrics for BL UV-C Signal 75 W                               |
|   | EP130014 | Electrics for BL UV-C Signal 130 W                              |
| E | B212003  | Housing Blue Lagoon Timer/Signal UV-C 40/75 W                   |
|   | B910003  | Housing Blue Lagoon Timer/Signal UV-C 130 W                     |
| F | B915000  | Set (2pcs) 3-way connection blue 63 mm                          |
|   | E800944  | Set (2pcs) 3-way connection USA / UK 60½ mm                     |
| G | E800941  | Set (2pcs) O-rings 3-way connection                             |
| H | F990115  | Reduction piece 1.5" female threaded x 63 mm out/ 50 mm in ABS  |
| I | B290006  | Mounting bracket 75 mm PP Blue                                  |
| K | B290010  | Nut 70 mm x 33.5 mm for end cap ABS Blue                        |
| M | B290020  | Reduction piece 63/63 mm 3/4" male threaded for flow switch     |
|   | B290021  | Reduction piece 60.3/60.3 mm 3/4" male threaded for flow switch |
| Z | SP0073   | Quartz Glass Stabilizer Replacement Kit                         |

### \*Optional

|   |         |  |
|---|---------|--|
| V | B290177 | Tapping saddle 50 x 3/4" male thread for flow switch |
|   | B290170 | Tapping saddle 63 x 3/4" male thread for flow switch |
|   | B290176 | Tapping saddle 75 x 3/4" male thread for flow switch |



# Timer

## Blue Lagoon Timer UV-C



### Operation

The Blue Lagoon Timer UV-C contains an integrated timer that accurately monitors the number of operating hours. You can therefore see exactly when the lamp must be replaced. This device is able to reduce the chlorine concentration up to 50%!

### Amalgam lamp

The amalgam version includes a flow switch that will turn off the lamp when the flow is too low. The UV-C amalgam lamp is less affected by temperature fluctuations in the water and generates a constant, powerful radiation.

Amalgam UV-C radiation is known as being the most powerful UV-C radiation available on the UV-C market.

### Advantages of the Blue Lagoon Timer UV-C

- Timer function that indicates the remaining lifetime of the lamp
- A built-in electronic ballast to ensure a smooth power supply
- Up to 35% more UV-C yield as a result of reflection by the stainless steel interior
- 316L stainless steel housing
- Easy to install and easy to maintain
- Comes with Ø63mm to Ø50mm fittings, 1½" female threaded
- Made in the Netherlands

# Blue Lagoon Timer UV-C Technical



|                                     | 40 W                          | 75 W                             | 130 W                           |
|-------------------------------------|-------------------------------|----------------------------------|---------------------------------|
| Art. number                         | BH01402                       | BH01752                          | BH01132                         |
| Type                                | 40 W                          | 75 W                             | 130 W                           |
| EAN                                 | 8714404034319                 | 8714404034388                    | 8714404034654                   |
| Rec. flow for 30 mJ/cm <sup>2</sup> | 11 m <sup>3</sup> /h          | 16 m <sup>3</sup> /h             | 22 m <sup>3</sup> /h            |
| Max. pressure                       | 2 bar                         | 2 bar                            | 2 bar                           |
| Max. flow                           | 23 m <sup>3</sup> /h          | 23 m <sup>3</sup> /h             | 23 m <sup>3</sup> /h            |
| Diameter unit Ø                     | 70 mm                         | 70 mm                            | 70 mm                           |
| Length unit                         | 100 cm                        | 100 cm                           | 100 cm                          |
| Diameter in-outlet Ø                | 63 mm / 50 mm / 1½"           | 63 mm / 50 mm / 1½"              | 63 mm / 50 mm / 1½"             |
| Housing material                    | 316L                          | 316L                             | 316L                            |
| Electronic ballast                  | 230 V AC 50 Hz                | 230 V AC 50 Hz                   | 230 V AC 50 Hz                  |
| Lamp power                          | 40 W                          | 75 W                             | 130 W                           |
| Lamp                                | Philips TUV 36T5 4P-SE (40 W) | Philips TUV 36T5 HO 4P-SE (75 W) | Philips TUV 130 W 4P-SE Amalgam |
| Lifespan lamp                       | 9.000 hours                   | 9.000 hours                      | 12.000 hours                    |
| Timer                               | √                             | √                                | √                               |
| Replace lamp alert                  | √                             | √                                | √                               |
| Flow switch                         | -                             | -                                | √                               |
| Weight                              | 4,1 Kg                        | 4,3 Kg                           | 4,5 Kg                          |
| Quantity full pallet                | 24 pcs                        | 24 pcs                           | 24 pcs                          |

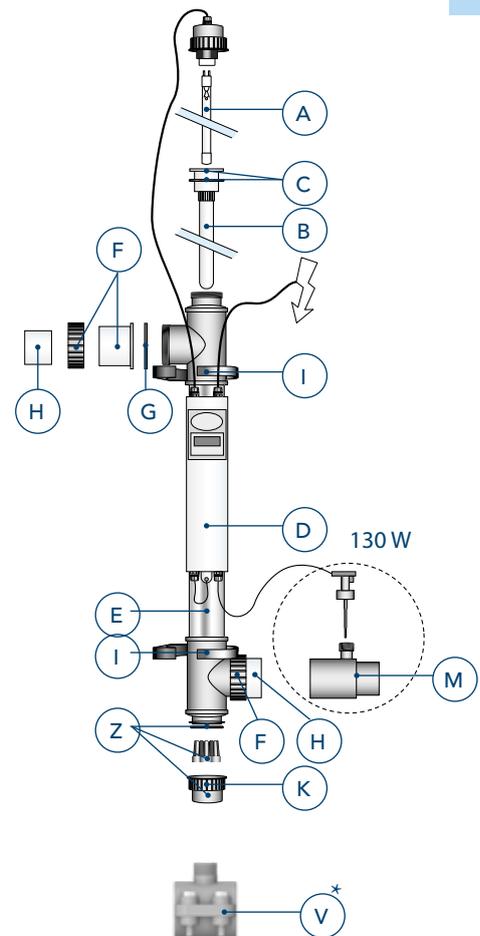


## Spare parts

|   |          |  |
|---|----------|--|
| A | E800901P | Lamp Philips TUV 36T5 40 W 4P-SE Base C                                |
|   | E800902P | Lamp Philips TUV 36T5 75 W HO 4P-SE Base C AM                          |
|   | E800904  | Lamp Philips TUV XPT 130 W 4P-SE Amalgama Base E                       |
| B | QG015    | Quartz Glass VSC 933 x 25 mm 40/75/80 W AM                             |
|   | QG012    | Quartz Glass VSC 920 x 30 mm 130 / 140 W AM                            |
| C | E800912  | Set (3pcs) O-ring for quartz glass                                     |
| D | EP040004 | Electrics for BL UV-C Timer 40 W                                       |
|   | EP075006 | Electrics for BL UV-C Timer 75 W                                       |
|   | EP130006 | Electrics for BL UV-C Timer 130 W Amalgama                             |
| E | B212003  | Housing Blue Lagoon Timer/Signal UV-C 40/75 W                          |
|   | B910003  | Housing Blue Lagoon Timer/Signal UV-C 130 W                            |
| F | B915000  | Set (2pcs) 3-way connection blue 63 mm                                 |
|   | E800944  | Set (2pcs) 3-way connection USA / UK 60½ mm                            |
| G | E800941  | Set (2pcs) O-rings 3-way connection                                    |
| H | F990115  | Reduction piece 1.5" female threaded x 63 mm out/ 50 mm in ABS         |
| I | B290006  | Mounting bracket 75 mm PP Blue   |
| K | B290010  | Nut 70 mm x 33.5 mm for end cap ABS Blue                               |
| M | B290020  | Reduction piece 63/63 mm 3/4" male threaded for flow switch            |
|   | B290021  | Reduction piece 60.3/60.3 mm 3/4" USA/UK male threaded for flow switch |
| Z | SP0073   | Quartz Glass Stabilizer Replacement Kit                                |

### Optional

|   |         |  |
|---|---------|--|
| V | B290177 | Tapping saddle 50 x 3/4" male thread for flow switch |
|   | B290170 | Tapping saddle 63 x 3/4" male thread for flow switch |
|   | B290176 | Tapping saddle 75 x 3/4" male thread for flow switch |





## Blue Lagoon Tech UV-C



### Perfect for installations where space is limited

Introducing the Blue Lagoon Tech UV-C: the perfect solution for limited spaces that require high disinfection efficiency. Compact and powerful, the Tech UV-C is designed to provide an environmentally-friendly solution for your swimming pool water disinfection needs.

### Easy to install and maintain

Besides the fact that the Blue Lagoon Tech UV-C device is very efficient and powerful, it is also easy to install and maintain. The housing is made of 316L stainless steel and comes with Ø63mm to Ø50mm fittings and 1½" female threaded connections.

### Advantages of the Blue Lagoon Tech UV-C

- A built-in electronic ballast to ensure an efficient and stable power supply
- Up to 35% more UV-C yield as a result of reflection by the stainless steel reactor
- 316L stainless steel housing
- Easy to install and easy to maintain
- Including adapters Ø 63mm to Ø 50mm, 1½" female threaded
- Made in the Netherlands

# Blue Lagoon Tech UV-C Technical



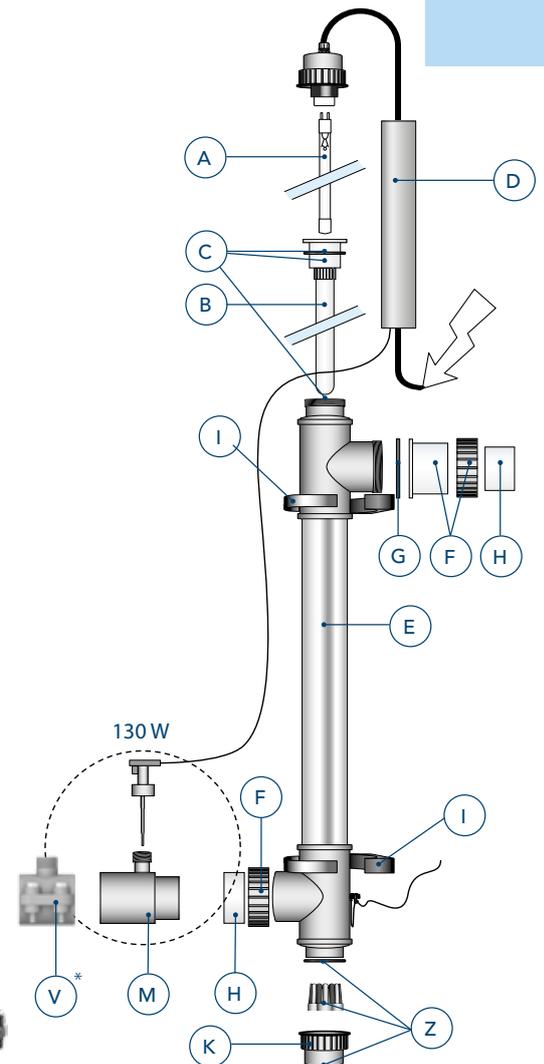
|                                     | 16 W                 | 40 W                 | 75 W                 | 130 W Almagam         |
|-------------------------------------|----------------------|----------------------|----------------------|-----------------------|
| Art. number                         | BE02162              | BE02402              | BE02752              | BE03132               |
| Type                                | 16 W                 | 40 W                 | 75 W                 | 130 W                 |
| EAN                                 | 8714404034456        | 8714404034234        | 8714404034166        | 8714404029988         |
| Rec. flow for 30 mJ/cm <sup>2</sup> | 5 m <sup>3</sup> /h  | 11 m <sup>3</sup> /h | 16 m <sup>3</sup> /h | 22 m <sup>3</sup> /h  |
| Max. pressure                       | 2,5 bar              | 2,5 bar              | 2,5 bar              | 2,5 bar               |
| Max. flow                           | 23 m <sup>3</sup> /h  |
| Diameter unit Ø                     | 70 mm                | 70 mm                | 70 mm                | 70 mm                 |
| Length unit                         | 56 cm                | 100 cm               | 100 cm               | 100 cm                |
| Diameter in-outlet Ø                | 63 mm / 50 mm / 1½"   |
| Housing material                    | 316L                 | 316L                 | 316L                 | 316L                  |
| Electronic ballast                  | 230 V AC 50 Hz        |
| Lamp power                          | 16 W                 | 40 W                 | 75 W                 | 130 W                 |
| Lamp                                | VGE T5 16 W 4P       | VGE T5 40 W 4P       | VGE T5 75 W 4P       | Philips 130 W Amalgam |
| Lifespan lamp                       | 9.000 hours          | 9.000 hours          | 9.000 hours          | 12.000 hours          |
| Flow switch                         | -                    | -                    | -                    | √                     |
| ETL certified                       | -                    | √                    | √                    | √                     |
| Weight                              | 2,8 Kg               | 3,6 Kg               | 3,9 Kg               | 5,0 Kg                |
| Quantity full pallet                | 60 pcs               | 30 pcs               | 30 pcs               | 30 pcs                |

## Spare parts

|   |          |   |
|---|----------|---|
| A | F980065  | Lamp VGE T5 16 W 4P Base F                                      |
|   | F980002  | Lamp VGE T5 40 W 4P Base F                                      |
|   | F980004  | Lamp VGE T5 75 W 4P Base F                                      |
|   | E800904  | Lamp Philips TUV XPT 130 W 4P-SE Amalgama Base E                |
| B | QG018    | Quartz Glass VSC 400 x 25 mm 16/40 W AM                         |
|   | QG015    | Quartz Glass VSC 933 x 25 mm 40/75/80 W AM                      |
|   | QG012    | Quartz Glass VSC 920 x 30 mm 130/140 W AM                       |
| C | E800912  | Set (3pcs) O-ring for quartz glass                              |
| D | EP040011 | Electrics for BL UV-C Tech 16/40 W                              |
|   | EP075014 | Electrics for BL UV-C Tech 75 W                                 |
|   | EP130009 | Electrics for BL UV-C Amalgama 130 W + flow switch              |
| E | B910000  | Housing Blue Lagoon Tech UV-C 16 W                              |
|   | B910002  | Housing Blue Lagoon Tech UV-C 40/75 W                           |
|   | B910005  | Housing Blue Lagoon Tech UV-C 130 W                             |
| F | B915000  | Set (2pcs) 3-way connection blue 63 mm                          |
|   | E800944  | Set (2pcs) 3-way connection USA / UK 60½ mm                     |
| G | E800941  | Set (2pcs) O-rings 3-way connection                             |
| H | F990115  | Reduction piece 1,5" female threaded x 63mm out/ 50mm in ABS    |
| I | B290006  | Mounting bracket 75 mm PP Blue                                  |
| K | B290010  | Nut for end cap Blue Lagoon Tech UV-C                           |
| M | B290020  | Reduction piece 63/63 mm 3/4" male threaded for flow switch     |
|   | B290021  | Reduction piece 60,3/60,3 mm 3/4" male threaded for flow switch |
| Z | SP0073   | Quartz Glass Stabilizer Replacement Kit                         |

### \*Optional

|   |         |  |
|---|---------|--|
| V | B290177 | Tapping saddle 50 x 3/4" male thread for flow switch |
|   | B290170 | Tapping saddle 63 x 3/4" male thread for flow switch |
|   | B290176 | Tapping saddle 75 x 3/4" male thread for flow switch |





SALT-WATER

## Blue Lagoon Salt-water UV-C



The Blue Lagoon Salt-water UV-C is especially developed for disinfection of salt-water. Because of that the disinfection system is suitable for salt- and seawater pools.

### Operation

Thanks to the special white PVC - housing the salt has no corrosive influence. With the Blue Lagoon Salt-water UV-C you can disinfect your water in an efficient and safe way. The connection at the bottom allows 360° connection flexibility. This is ideal for corner installations, or for a combination with other units.

### Advantages of the Blue Lagoon Salt-water UV-C

- Especially developed for salt-water pools
- Philips T5 Smart Cap lamp included
- PVC - housing
- Easy installation and maintenance
- Including adapters Ø 63mm to Ø 50mm, 1½" female threaded
- Made in the Netherlands

# Blue Lagoon Salt-water UV-C Technical

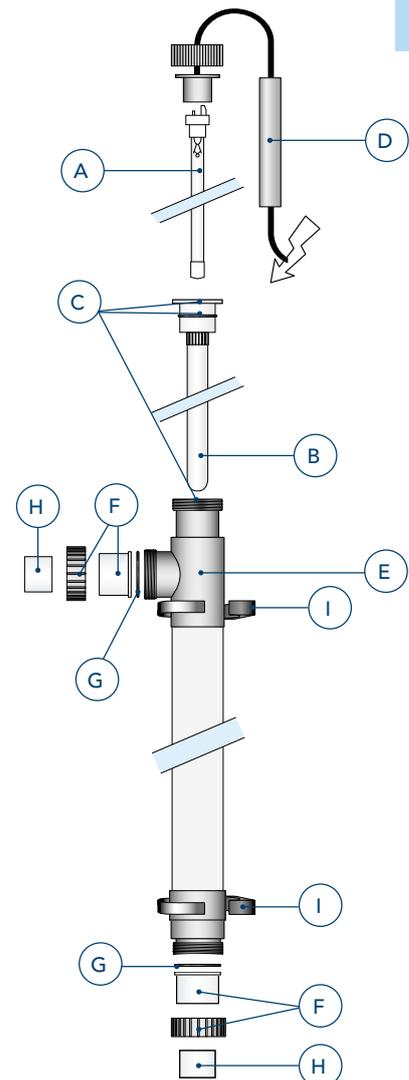


|                                     | 40 W SHORT           | 40 W                   | 75 W                   |
|-------------------------------------|----------------------|------------------------|------------------------|
| Art. number                         | BE07402              | BE06402                | BE06752                |
| Type                                | 40 W                 | 40 W                   | 75 W                   |
| EAN                                 | 8714404044394        | 8714404043489          | 8714404043496          |
| Rec. flow for 30 mJ/cm <sup>2</sup> | 8 m <sup>3</sup> /h  | 9 m <sup>3</sup> /h    | 14 m <sup>3</sup> /h   |
| Max. pressure                       | 2 bar                | 2 bar                  | 2 bar                  |
| Max. flow                           | 23 m <sup>3</sup> /h | 23 m <sup>3</sup> /h   | 23 m <sup>3</sup> /h   |
| Diameter unit Ø                     | 70 mm                | 70 mm                  | 70 mm                  |
| Length unit                         | 48 cm                | 100 cm                 | 100 cm                 |
| Diameter in-outlet Ø                | 63 mm / 50 mm / 1½"  | 63 mm / 50 mm / 1½"    | 63 mm / 50 mm / 1½"    |
| Housing material                    | PVC                  | PVC                    | PVC                    |
| Electronic ballast                  | 230 V AC 50 Hz       | 230 V AC 50 Hz         | 230 V AC 50 Hz         |
| Lamp power                          | 40 W                 | 40 W                   | 75 W                   |
| Lamp                                | VEGE T5 40 W 365mm   | Philips Smart Cap 40 W | Philips Smart Cap 75 W |
| Lifespan lamp                       | 9.000 hours          | 9.000 hours            | 9.000 hours            |
| Weight                              | 2,5 Kg               | 3,0 Kg                 | 3,2 Kg                 |
| Quantity full pallet                | 40 pcs               | 30 pcs                 | 30 pcs                 |



## Spare parts

|   |           |  |
|---|-----------|--|
| A | B280006   | Lamp Philips TUV Smart Cap 40 W Base D AM                      |
|   | B280005   | Lamp Philips TUV Smart Cap 75 W Base D AM                      |
|   | F980068   | Lamp VEGE T5 40 W 4P 365 mm Base C                             |
| B | QG020     | Quartz Glass VSC 933 x 28,5 mm 40/75 W AM                      |
|   | QG018     | Quartz Glass VSC 400 x 25 mm 16/40 W AM                        |
| C | E800912   | Set (3pcs) O-ring for quartz glass                             |
| D | EP040019  | Electrics for BL Saltwater UV-C 40 W                           |
|   | EP075015  | Electrics for BL Saltwater UV-C 75 W                           |
|   | EP040021  | Electrics for BL Saltwater UV-C 40 W short                     |
| E | B910002ZW | Housing Blue Lagoon Saltwater UV-C 40/75 W                     |
|   | B910004ZW | Housing Blue Lagoon Saltwater UV-C 40 W short                  |
| F | B915000   | Set (2pcs) 3-way connection blue 63mm                          |
| G | E800941   | Set (2pcs) O-rings 3-way connection                            |
| H | F990115   | Reduction piece 1.5" female threaded x 63 mm out/ 50 mm in ABS |
| I | B290006   | Mounting bracket 75 mm PP Blue                                 |





## SALT WATER TIMER

### Blue Lagoon Salt-water Timer UV-C



The Blue Lagoon Salt-water Timer UV-C is especially developed for disinfection of salt-water. The unit is equipped with an integrated timer which accurately monitors the number of operating hours.

#### Operation

The Blue Lagoon Salt-water Timer UV-C is especially developed for salt-water and seawater pools (salt electrolysis). Thanks to the special white PVC housing the salt has no corrosive influence. In addition, the device contains an integrated timer that accurately monitors the number of operating hours. You can therefore see exactly when the lamp must be replaced. With the Blue Lagoon Salt-water Timer UV-C you can disinfect your water in an efficient and save way. The result is an excellent water quality.

The connection at the bottom allows 360° connection flexibility. This is ideal for corner installations or for combination with other units.

#### Advantages of the Blue Lagoon Salt-water Timer UV-C

- Timer function that indicates the remaining lifetime of the lamp
- Especially developed for salt-water pools
- PVC - housing
- Easy to install and easy to maintain
- Comes with Ø63mm to Ø50mm fittings, 1" female threaded
- Made in the Netherlands

# Blue Lagoon Saltwater Timer UV-C Technical

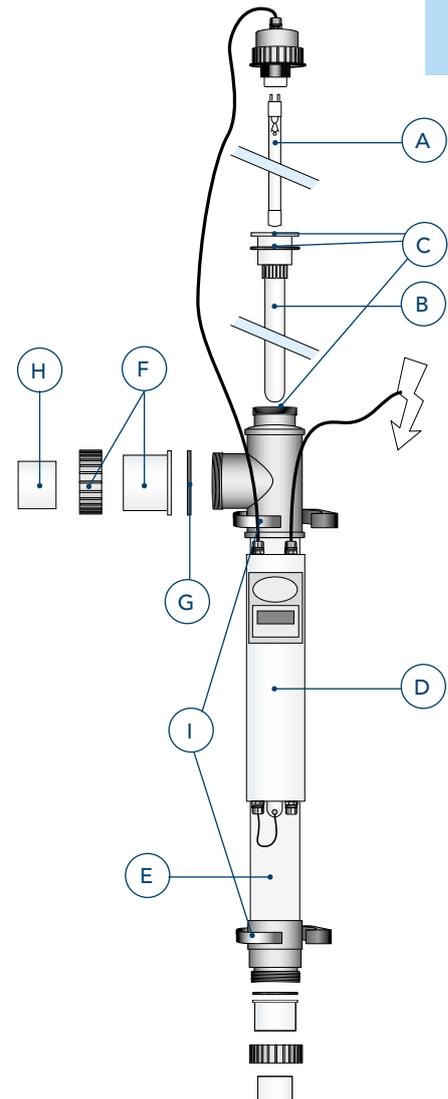


|                                     | 40 W                          | 75 W                             |
|-------------------------------------|-------------------------------|----------------------------------|
| Art. number                         | BH10402                       | BH10752                          |
| Type                                | 40 W                          | 75 W                             |
| EAN                                 | 8714404046718                 | 8714404046787                    |
| Rec. flow for 30 mJ/cm <sup>2</sup> | 9 m <sup>3</sup> /h           | 14 m <sup>3</sup> /h             |
| Max. pressure                       | 2 bar                         | 2 bar                            |
| Max. flow                           | 23 m <sup>3</sup> /h          | 23 m <sup>3</sup> /h             |
| Diameter unit Ø                     | 70 mm                         | 70 mm                            |
| Length unit                         | 100 cm                        | 100 cm                           |
| Diameter in-outlet Ø                | 63mm / 50mm / 1 1/2"          | 63mm / 50mm / 1 1/2"             |
| Housing material                    | PVC                           | PVC                              |
| Electronic ballast                  | 230 V AC 50 Hz                | 230 V AC 50 Hz                   |
| Lamp power                          | 40 W                          | 75 W                             |
| Lamp                                | Philips TUV 36T5 4P-SE (40 W) | Philips TUV 36T5 HO 4P-SE (75 W) |
| Lifespan lamp                       | 9.000 hours UV-C              | 9.000 hours UV-C                 |
| Timer                               | √                             | √                                |
| Replace lamp alert                  | √                             | √                                |
| Flow Switch                         | -                             | -                                |
| Weight                              | 4,0 Kg                        | 4,2 Kg                           |
| Quantity full pallet                | 24                            | 24                               |



## Spare parts

|   |           |  |
|---|-----------|--|
| A | E800901P  | Lamp Philips TUV 36T5 40 W 4P-SE Base C                        |
|   | E800902P  | Lamp Philips TUV 36T5 75 W HO 4P-SE Base C AM                  |
| B | QG015     | Quartz Glass VSC 933 x 25 mm 40/75/80 W AM                     |
| C | E800912   | Set (3pcs) O-ring for quartz glass                             |
| D | EP040008  | Electrics for BL UV-C Timer Saltwater 40 W                     |
|   | EP075016  | Electrics for BL UV-C Timer 75 W                               |
| E | B910003ZW | Housing Blue Lagoon Saltwater Timer UV-C 40/75 W               |
| F | B915000   | Set (2pcs) 3-way connection blue 63 mm                         |
|   | E800944   | Set (2pcs) 3-way connection USA / UK 60½ mm                    |
| G | E800941   | Set (2pcs) O-rings 3-way connection                            |
| H | F990115   | Reduction piece 1.5" female threaded x 63 mm out/ 50 mm in ABS |
| I | B290006   | Mounting bracket 75 mm PP Blue                                 |



# COPPER IONIZER

## Blue Lagoon Copper Ionizer UV-C



### Operation

This revolutionary combination of UV-C and copper electrolysis means you can have a pool with a minimum use of chlorine!\* Electrically charged copper ions ( $\text{Cu}^{2+}$ ) in the water search for particles of opposite polarity, such as bacteria, viruses and fungi. Positively charged copper ions form electrostatic compounds with negatively charged cell walls of microorganisms. These compounds disturb cell wall permeability and cause nutrient uptake to fail. As a result, bacteria are no longer able to multiply and eventually die. The ions remain active until they are absorbed by a microorganism.

*\*Additional chlorine needed, depends on the frequency of use and general condition of the pool water.*

*Pending EU regulations or conditional approval, national regulations apply to the trade and use of copper-containing products. The copper used in these units complies with the REACH registration. It is the sole responsibility of the buyer to inform himself/herself about applicable local regulations regarding the use of (and trade in) copper for water disinfection.*

### Advantages of the Blue Lagoon Copper Ionizer UV-C

- Up to 35% more UV-C yield as a result of reflection by the stainless steel reactor
- Easy installation and maintenance
- Comes with  $\text{Ø}63\text{mm}$  to  $\text{Ø}50\text{mm}$  fittings, 1½" female threaded
- Made in the Netherlands

# Blue Lagoon Copper Ionizer UV-C Technical



|                                     | 40 W                        | 75 W                        |
|-------------------------------------|-----------------------------|-----------------------------|
| Art. number                         | BH04402                     | BH04752                     |
| Type                                | 40 W                        | 75 W                        |
| EAN                                 | 8714404034241               | 8714404036689               |
| Rec. flow for 30 mJ/cm <sup>2</sup> | 11 m <sup>3</sup> /h        | 16 m <sup>3</sup> /h        |
| Max. pressure                       | 2 bar                       | 2 bar                       |
| Max. flow                           | 23 m <sup>3</sup> /h        | 23 m <sup>3</sup> /h        |
| Diameter unit Ø                     | 70 mm                       | 70 mm                       |
| Length unit                         | 100 cm                      | 100 cm                      |
| Diameter in-outlet Ø                | 63 mm / 50 mm / 1½"         | 63 mm / 50 mm / 1½"         |
| Housing material                    | 316L                        | 316L                        |
| Electronic ballast                  | 230 V AC 50 Hz              | 230 V AC 50 Hz              |
| Lamp power                          | 40 W                        | 75 W                        |
| Lamp                                | Blue Lagoon T5 40 W Ionizer | Blue Lagoon T5 75 W Ionizer |
| Lifespan lamp                       | 9.000 hours                 | 9.000 hours                 |
| Copper ionizer                      | 0,7 ppm                     | 0,7 ppm                     |
| Replace lamp alert                  | √                           | √                           |
| Weight                              | 5,0 Kg                      | 5,2 Kg                      |
| Quantity full pallet                | 24 pcs                      | 24 pcs                      |

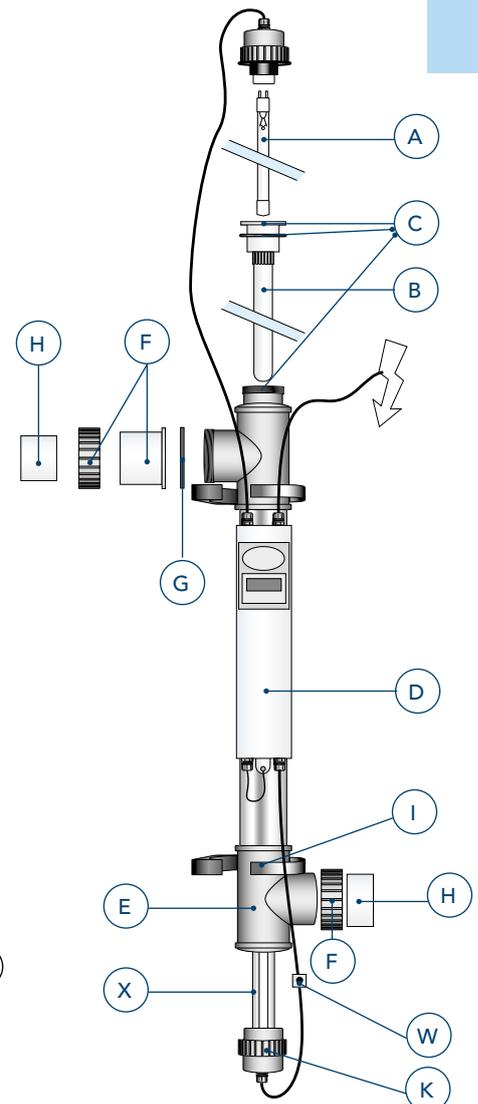


## Spare parts

|   |          |  |
|---|----------|--|
| A | B280002  | Lamp Blue Lagoon T5 40 W Ionizer Base K                        |
|   | B280001  | Lamp Blue Lagoon T5 75 W Ionizer Base K                        |
| B | QG017    | Quartz Glass VSC 695 x 25 mm 40/75 W AM                        |
| C | E800912  | Set (3pcs) O-ring for quartz glass                             |
| D | EP040007 | Electrics for BL UV-C Ionizer 40 W                             |
|   | EP075011 | Electrics for BL UV-C Ionizer 75 W                             |
| E | B220002  | Housing Blue Lagoon Ionizer UV-C 40/75 W                       |
| F | B915000  | Set (2pcs) 3-way connection blue 63 mm                         |
|   | E800944  | Set (2pcs) 3-way connection USA / UK 60½ mm                    |
| G | E800941  | Set (2pcs) O-rings 3-way connection                            |
| H | F990115  | Reduction piece 1.5" female threaded x 63 mm out/ 50 mm in ABS |
| I | B290006  | Mounting bracket 75 mm PP Blue                                 |
| K | B290010  | Cable connector  |
| W | E801215  | Nut 70 mm x 33.5 mm for end cap ABS Blue                       |
| X | B290029  | Copper set base + cable connector                              |
| Y | B200020  | Test strips for Ionizer (50 strips)                            |



Y



# XPOSE

## Blue Lagoon Xpose UV-C



The Blue Lagoon Xpose UV-C is a stand-up pool-UV-C especially made for above ground and basic inground pools. A plug and play concept that is powerful, affordable, and easy to install. Now literally all pool owners can enjoy safe and healthy swimming water sustained by our uv-c technology

### Advantages of the by Blue Lagoon Xpose UV-C

- Made for above ground and basic inground pools
- Affordable
- Easy to install no wall mount needed• Padlock prepared
- Compatible with all pool brands
- Automatic airbleed
- 4 ground secure mounting holes
- Made in the Netherlands

# Blue Lagoon Xpose UV-C Technical



| <b>Xpose 42 W</b>                   |   |
|-------------------------------------|---|
| Art. number                         | BE09422                                       |
| Type                                | 42 W  |
| EAN                                 | 8714404040693                                 |
| Rec. flow for 30 mJ/cm <sup>2</sup> | 14 m <sup>3</sup> /h - 230 L/min              |
| Max. pressure                       | 1 bar - 14.5 psi                              |
| Max. flow                           | 15 m <sup>3</sup> /h - 250L/min               |
| Diameter unit Ø                     | 200 mm  |
| Length unit                         | 55 cm   |
| Diameter in-outlet Ø                | 32 mm / 38 mm flexible tube / 50 mm hard tube |
| Housing material                    | High quality copolymer                        |
| Electronic ballast                  | 230 V AC 50 Hz                                |
| Lamp power                          | 42 W  |
| Lamp                                | VGE T5 42 W Base Y                            |
| Lifespan lamp                       | 9.000 h                                       |
| Indicator                           | √   |
| Weight                              | 6,0 Kg  |
| Quantity full pallet                | 36 pcs  |

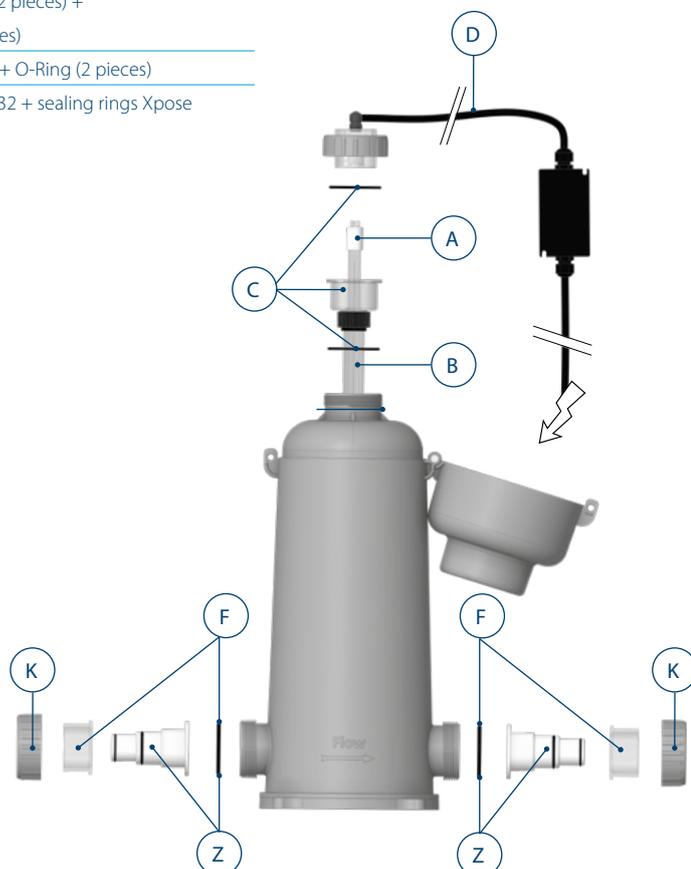
## Spare parts

|   |           |  |
|---|-----------|--|
| A | 3903114AM | Lamp VGE T5 42W Base Y AM Packed   |
| B | QG129     | Quartz Glass VSC 478 x 25 mm AM  |
| C | E800912   | O-Ring for quartz sleeve (3 pieces)  |
| D | SP0080    | Electrics for Blue Lagoon Xpose 42 W   |
| F | SP0078    | Reduction piece 63mm out 50mm (2 pieces) +<br>O-Ring for 3-way connection (2 pieces) |
| K | SP0079    | Nut for end cap Blue Lagoon Xpose + O-Ring (2 pieces)                                |
| Z | SP0077    | 2 x hose adaptor flanged 65mm 38/32 + sealing rings Xpose                            |

hose adaptor flanged 38/32



Reduction piece 63mm out 50mm





## SPA T5 21W

## Blue Lagoon Spa UV-C T5 21 W



This UV-lamp is specially designed for high-temperatures ( $\pm 40^{\circ}\text{C}/\pm 104^{\circ}\text{F}$ ). The Blue Lagoon Spa UV-C T5 21 W has an electronic ballast with a LED indicator or a 0-5 V output signal which makes it easy to integrate and work within every Spa installation and control system.

### LED indication

The LED will turn green or red. Green means the lamp is lit, red means the lamp must be replaced as quickly as possible. If the device is switched on, the system will check itself.

### 0-5 V signal

The signal cable plus/minus will output 0 or 5V DC. 5V DC means the lamp is lit, 0V DC means the lamp must be replaced as quickly as possible.

### Operation

Additionally the Blue Lagoon Spa UV-C 21 W can be fitted with an N-Lok connector making it possible to connect to most Spa control boards. Thanks to the Blue Lagoon Spa UV-C, your spa water will be disinfected efficiently and safely and the quality of your water will remain excellent. The UV-C radiation inactivates bacteria, viruses and other microorganisms and stops them from multiplying. This can reduce your chlorine concentration up to 50%! Max. pressure: 1 bar. 50mm connections included.

### Advantages of the Blue Lagoon Spa UV-C T5 21 W

- Includes a ballast with a LED indicator or 0-5V signal
- UV-C lamp specially designed for high-temperatures ( $\pm 40^{\circ}\text{C} / \pm 104^{\circ}\text{F}$ )
- Compact in size
- Easy installation and maintenance
- Made in the Netherlands

# Blue Lagoon Spa T5 21 W Technical

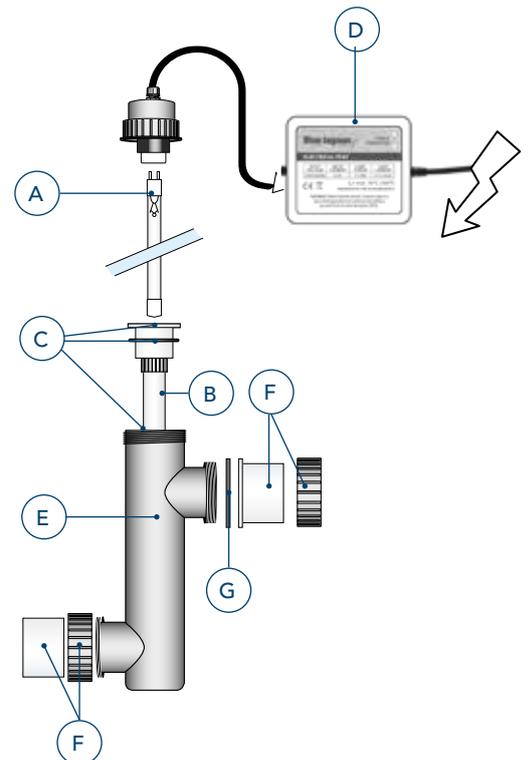


|                                     | <b>21 W</b>          | <b>U20 - 21 W NEW</b> |
|-------------------------------------|----------------------|-----------------------|
| Art. number                         | BE01212              | BE01213               |
| Type                                | 21 W                 | 21 W                  |
| EAN                                 | 8714404045742        | 8714404040228         |
| Rec. flow for 30 mJ/cm <sup>2</sup> | 3 m <sup>3</sup> /h  | 3 m <sup>3</sup> /h   |
| Max. pressure                       | 1 bar                | 1 bar                 |
| Max. flow                           | 13 m <sup>3</sup> /h | 13 m <sup>3</sup> /h  |
| Diameter unit Ø                     | 58 mm                | 58 mm                 |
| Length unit                         | 35 cm                | 35 cm                 |
| Diameter in-outlet Ø                | 50 mm / 1½           | 20 mm                 |
| Housing material                    | PC ASA               | PC ASA                |
| Electronic ballast                  | 230 V AC 50 Hz       | 230 V AC 50 Hz        |
| Lamp power                          | 21 W                 | 21 W                  |
| Lamp                                | VGE T5 21 W HO 4P    | VGE T5 21 W HO 4P     |
| Lifespan lamp                       | 9.000 hours          | 9.000 hours           |
| Weight                              | 1,9 Kg               | 1,9 Kg                |
| Quantity full pallet                | 60 pcs               | 60 pcs                |



## Spare parts

|            |           |  |
|------------|-----------|--|
| <b>A</b>   | F980120AM | Lamp VGE T5 21 W 4P Base G AM Packed               |
| <b>B</b>   | QG089     | Quartz Glass VSC 281 x 25 mm 21 W AM               |
| <b>C</b>   | E800912   | Set (3pcs) O-ring for quartz glass                 |
| <b>D</b>   | EP021001  | Electrics for BL UV-C Spa 21 W LED                 |
| <b>E</b>   | B212013   | Housing Blue Lagoon Spa UV-C / Copper Electrolyzer |
| <b>F</b>   | B212014   | Set (2pcs) 3-way connection 50 mm                  |
|            | B212015   | Set (2pcs) 3-way connection 48 mm                  |
| <b>NEW</b> |           | Blue Lagoon Spa UV-C U20 21W 230V                  |





## Blue Lagoon Spa UV-C PLS 12 - 15 W



The Blue Lagoon Spa UV-C PLS 12-15 W is specially designed for water with high-temperatures ( $\pm 40^{\circ}\text{C}/\pm 104^{\circ}\text{F}$ ), such as spas and hot tubs. The Blue Lagoon Spa UV-C PLS 12-15 W is also ideal for filter installations where space is limited and a high disinfection efficiency is required.

### Operation

This UV-lamp is specially designed by Philips for high-temperatures ( $\pm 40^{\circ}\text{C}/\pm 104^{\circ}\text{F}$ ). The Blue Lagoon Spa UV-C PLS 12-15 W has a built-in electronic ballast to ensure an efficient and stable power supply. Thanks to the Blue Lagoon Spa UV-C PLS 12-15 W, your spa water will be disinfected efficiently and safely and the quality of your water will remain excellent. The UV-C radiation inactivates bacteria, viruses and other microorganisms and stops them from multiplying.

This can reduce your chlorine concentration up to 50%!  
Max. pressure: 1 bar. 50mm connections included.

### Advantages of the Blue Lagoon Spa UV-C PLS 12 - 15 W

- Includes a special Philips UV-C lamp with integrated electronic ballast
- UV-C lamp specially designed for high-temperatures ( $\pm 40^{\circ}\text{C} / \pm 104^{\circ}\text{F}$ )
- Compact in size
- Easy installation and maintenance
- Made in the Netherlands

# Blue Lagoon Spa UV-C PLS 12 - 15 W Technical

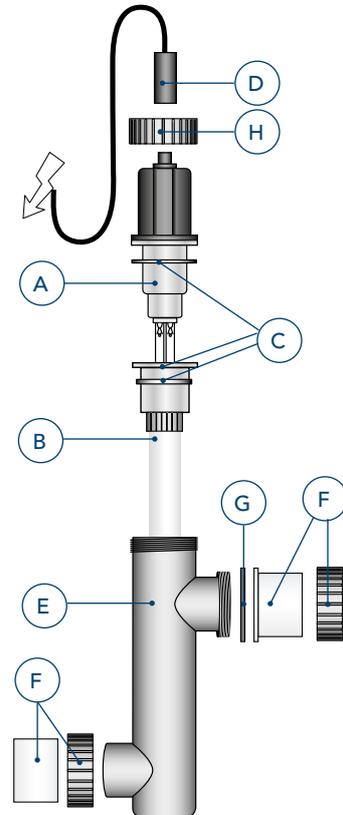


|                                     | 12 W (230 V)                  | U20 - 12 W (230 V) <b>NEW</b> | 15 W (120 V)                  |
|-------------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Art. number                         | BE01122                       | BE01123                       | BE01151                       |
| Type                                | 12 W                          | 12 W                          | 15 W                          |
| EAN                                 | 8714404038966                 | 8714404040150                 | 8714404039642                 |
| Rec. flow for 30 mJ/cm <sup>2</sup> | 3 m <sup>3</sup> /h           | 3 m <sup>3</sup> /h           | 3 m <sup>3</sup> /h           |
| Max. pressure                       | 1 bar                         | 1 bar                         | 1 bar                         |
| Max. flow                           | 13 m <sup>3</sup> /h          | 13 m <sup>3</sup> /h          | 13 m <sup>3</sup> /h          |
| Diameter unit Ø                     | 59 mm                         | 59 mm                         | 59 mm                         |
| Length unit                         | 40,5 cm                       | 40,5 cm                       | 40,5 cm                       |
| Diameter in-outlet Ø                | 50 mm                         | 20 mm                         | 50 mm                         |
| Housing material                    | PC ASA                        | PC ASA                        | PC ASA                        |
| Electronic ballast                  | 230 V AC 50 Hz                | 230 V AC 50 Hz                | 120 V AC 60 Hz                |
| Lamp power                          | 12 W                          | 12 W                          | 15 W                          |
| Lamp                                | Philips PLS module 12 W 230 V | Philips PLS module 12 W 230 V | Philips PLS module 15 W 120 V |
| Lifespan lamp                       | 9.000 hours                   | 9.000 hours                   | 9.000 hours                   |
| Replace lamp alert                  | √                             | √                             | √                             |
| Weight                              | 1,6 Kg                        | 1,6 Kg                        | 1,6 Kg                        |
| Quantity full pallet                | 60 pcs                        | 60 pcs                        | 60 pcs                        |



## Spare parts

|            |             |  |
|------------|-------------|--|
| A          | B212012     | Lamp Philips Replacement module 12 W 230 V Base J  |
|            | B212012 USA | Lamp Philips Replacement module 15 W 120 V Base J  |
| B          | QG026       | Quartz Glass VSC 277 x 40 mm 11/12/15 W AM         |
| C          | E800912     | Set (3pcs) O-ring for quartz glass                 |
| D          | E801205     | Cable for Blue Lagoon Spa UV-C PL-S                |
| E          | B212013     | Housing Blue Lagoon Spa UV-C / Copper Electrolyzer |
| F          | B212014     | Set (2pcs) 3-way connection 50 mm                  |
|            | B212015     | Set (2pcs) 3-way connection 48 mm                  |
| G          | E801509     | O-ring 3-way connection NBR 53x4,5                 |
| H          | 3901045     | Nut 70 mm x 33.5 mm ABS black                      |
| <b>NEW</b> |             | Blue Lagoon Spa UV-C U20 21W 230V                  |



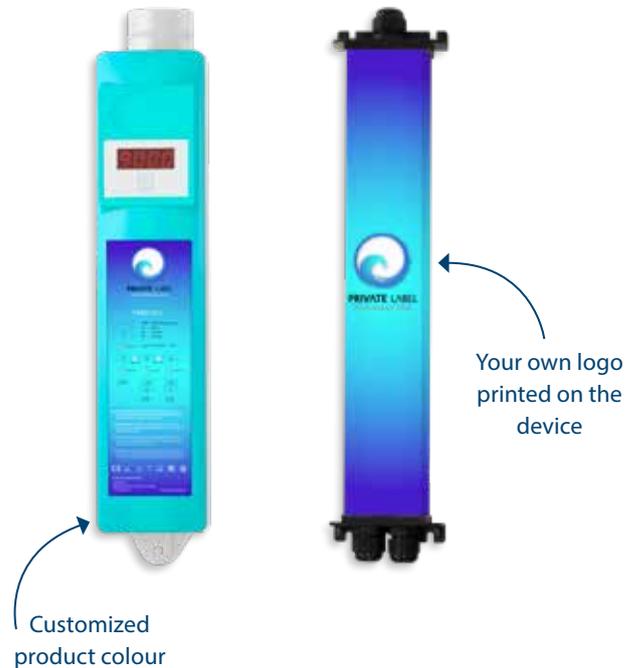


## Add value to your UV-C units: Your own brand



### THE POWER OF PRIVATE LABEL

Unlock your brand's potential with Private Label Solutions! Distinguish your business in a crowded market with our premium Private Label services. Tailor high-quality products to your unique vision and enjoy exclusive branding that sets you apart. Our expert team ensures a top-tier product and packaging, while you focus on building customer loyalty. Private Label isn't just about products; it's about building a brand that resonates. Elevate your business today and watch your sales soar. Your success story begins here, with Private Label.



### Advantages of our private label program

- Stand out from your competitors with your exclusive brand
- Your brand will be associated with the proven quality of VGE B.V.
- Personalize the commercial appearance of your products
- Gain more flexibility in crafting promotional campaigns for your brand
- Available in low quantities as well (inquire about the possibilities)



## Add value to your UV-C units: Your own brand

### What We Provide:

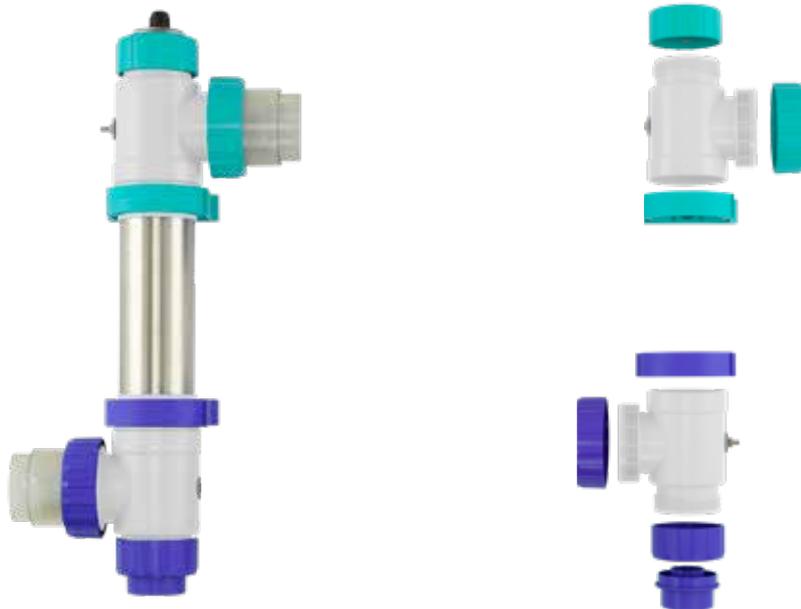
Our Private Label Basic Package:

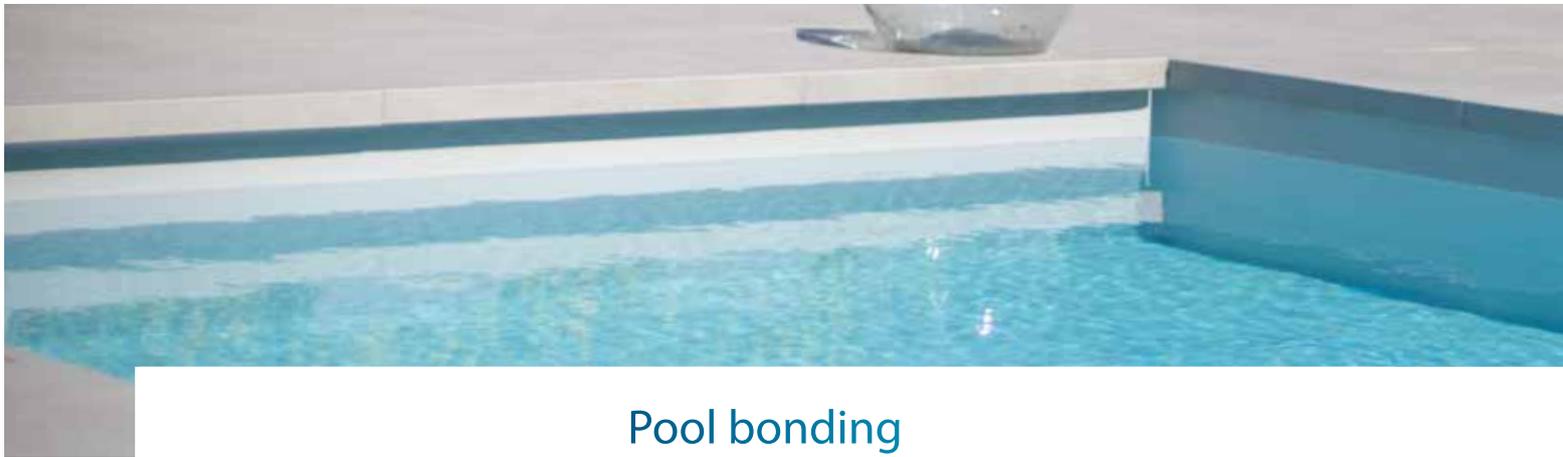
- Neutral packaging with your custom-designed product stickers
- Neutral manual
- Your own product labels
- Standard lamp and spare parts

### Optional Additions:

- Full-colour packaging
- Customized product colours
- Your own tailored manual
- Private label UV-C lamp (matching colour/logo)
- Private label UV-C lamp (with custom fitting)

Other requests can be discussed. Please get in touch with our sales department.





## Pool bonding

Although most devices, ladders, etc. in swimming-pools are made of stainless steel, oxidation is still possible. There are two important causes for corrosion:

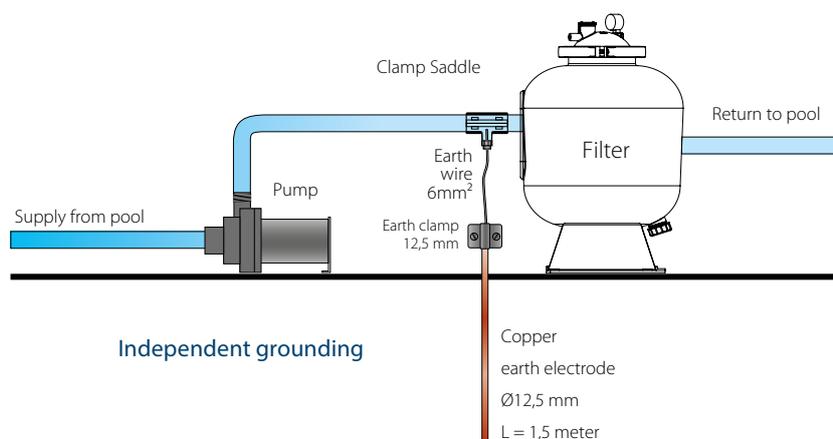
1. Insufficient grounding of pool water (pool bonding)
2. Corrosive water

### Grounding

Every pool must be grounded independently (i.e. not to the electricity network). This in particular for fibreglass/ polyester pools, pools with salt electrolysis and pools with stainless steel parts (pool ladders, UV-C units, etc.). A special grounding set ensures that potential differences created by static electricity, will be lead away. This will prevent depositing and/or oxidation to the pool, parts or technical equipment.

### Salt

For Stainless steel 316 devices (such as UV-C lamps) the **maximum salt concentration is 5 grams/liter** for salt electrolysis systems.



### Corrosive water

The tap water that is used to (re)fill up the pools normally has a constant and known composition. By adding chemical products for disinfection, pH regulation and by heating and moving the water, this composition changes. Pool water might turn corrosive (calcium dissolving) and can slowly dissolve the existing lime (in concrete and in joints between the tiles). Metals (ladders, heaters, UV-C devices, etc.) can also be affected.

Reversely, the water can also have calcium precipitating characteristics that can turn the water cloudy and the walls and floors can be covered by lime scale deposits.



To determine, whether the water is neutral, corrosive or calcium precipitating, you can use the so-called "Langelier Saturation Index". The Langelier saturation index (LSI) is a calculated number used to predict the calcium carbonate stability of water. It indicates whether the water will precipitate, dissolve or be in equilibrium with calcium carbonate. The LSI is expressed as the difference between the actual system pH and the saturation pH.

Examples of stainless steel 316L devices, which are damaged by corrosive water and/or grounding problems. These are no manufacturing or material faults, so they are not covered under warranty.

# Corrosion of metal parts and devices in swimming pools

## Correction in case of a too low saturation index

In case of a negative saturation index, below -0.3, a correction is recommended. The saturation index must be increased. This can be realised by increasing the sum of factors, by increasing one or more parameter values.

### The measuring values are

- pH-value up to max. 7,6
- Alkalinity up to max. 300 mg CaCO<sub>3</sub>/l
- Calcium hardness up to max. 200 mg CaCO<sub>3</sub>/l

### pH-value

An increase of the pH value with caustic soda or soda can be used as a short-time solution. For a good disinfection result a pH value between 7.1 and 7.3 is the best.

### Alkalinity

The increase of alkalinity can be achieved by increasing the hydrogen carbonate content of the water with the help of sodium bicarbonate. If a too low hydrogen carbonate content is the case, it might be caused by a low HCO<sub>3</sub> content or by regular loss of the carbonic acid compounds as consequence of water movement or air geysers, you should add a solution of sodium bicarbonate with a dosing system.

### The formula is as follows: pH + TF + AF + CF - 12,1

**pH** The measured pH-value of the pool water

**TF** The influence of the water temperature in the formula

**AF** The influence of the alkalinity in the formula (measured as hydrogen carbonate HCO<sub>3</sub> - or as calcium carbonate CaCO<sub>3</sub>)

**CF** The influence of the hardness of calcium (measured as calcium carbonate)

| °C   | TF  | CACO3 MG/L | TF  | CF  |
|------|-----|------------|-----|-----|
| 0    | 0,0 | 25         | 1,4 | 1,0 |
| 3    | 0,1 | 50         | 1,7 | 1,3 |
| 8    | 0,2 | 75         | 1,9 | 1,5 |
| 12   | 0,3 | 100        | 2,0 | 1,6 |
| 16   | 0,4 | 150        | 2,2 | 1,8 |
| 19   | 0,5 | 200        | 2,3 | 1,9 |
| 24,5 | 0,6 | 300        | 2,5 | 2,1 |
| 29   | 0,7 | 400        | 2,6 | 2,2 |
| 34,5 | 0,8 | 800        | 2,9 | 2,5 |
| 40,5 | 0,9 | 1000       | 3,0 | 2,6 |

Según este cálculo, el agua en equilibrio debería estar dentro del rango de 0,0 a 0,3. Valores inferiores indican agua corrosiva. Valores superiores a 0,3 indican agua que precipita cal.

| PARAMETER        | MEASURING VALUE           | FACTOR | PARAMETER        | MEASURING VALUE | FACTOR | PARAMETER        | MEASURING VALUE | FACTOR |
|------------------|---------------------------|--------|------------------|-----------------|--------|------------------|-----------------|--------|
| pH-value         | 7,4                       | 7,4    | pH-value         | 7,8             | 7,8    | pH-value         | 7,1             | 7,1    |
| Temperature      | 28                        | 0,7    | Temperature      | 29              | 0,7    | Temperature      | 30              | 0,7    |
| Total alkalinity | 150mg/l CaCO <sub>3</sub> | 2,2    | Total alkalinity | 195mg/l         | 2,3    | Total alkalinity | 100mg/l         | 2      |
| Calcium hardness | 150mg/l CaCO <sub>3</sub> | 1,8    | Calcium hardness | 127mg/l         | 1,7    | Calcium hardness | 150mg/l         | 1,8    |
|                  | Sum of factors            | 12,1   |                  | Sum of factors  | 12,5   |                  | Sum of factors  | 11,6   |

$$\text{pH} + \text{TF} + \text{AF} + \text{CF} - 12,1$$

$$(7,4 + 0,7 + 2,2 + 1,8) - 12,1 = 0,0$$

Water is in balance,

**no correction necessary**

$$\text{pH} + \text{TF} + \text{AF} + \text{CF} - 12,1$$

$$(7,8 + 0,7 + 2,3 + 1,7) - 12,1 = 0,4$$

Water is lime precipitating, **correction is necessary**

$$\text{pH} + \text{TF} + \text{AF} + \text{CF} - 12,1$$

$$(7,1 + 0,7 + 2 + 1,8) - 12,1 = -0,5$$

Water is corrosive,

**correction is necessary**



## VGE PRO FOR PROFESSIONAL UV DISINFECTION SOLUTIONS

### What makes the VGE Pro UV-C systems unique?

- VGE Pro UV-C systems have a stainless steel 316L or a HDPE treatment chamber
- Lamp (re)placement while unit is pressurised
- Visual lamp function indication on each lamp head
- VGE Pro UV units have Smart Pin Technology (SPT) or Single-end Bayonet Technology (SBT) for low-pressure and medium-pressure UV lamps, respectively, so that the lamps can be easily and safely replaced without removing connectors or shields
- Low pressure amalgam lamps for high performance levels, irrespective of the temperature of the water
- High quality lamps with a lifetime up to 16.000 and 9.000 hours for low-pressure and medium-pressure UV lamps, respectively
- Single systems can handle flows ranging from 0.5 m<sup>3</sup>/h up to 550 m<sup>3</sup>/h
- Customization of the device to your own specifications possible

### VGE Pro UV control units



The VGE Pro Medium Pressure lamp UV systems can be controlled by two different systems: the Compact and Comfort controller.

The Compact controller is suitable for the Multimax and 600-85 medium pressure units and is a basic controller with a LED lamp life indicator.

The Comfort controller is suitable for the 600-85 up to 3000-326 medium pressure lamp units.

Optionally, a digital INOX UV-C sensor and/or a bolt-on treatment chamber temperature sensor can be connected.



## INOX MEDIUM PRESSURE UV LAMP SYSTEMS

### Benefits Medium Pressure lamp UV

The VGE Pro product range has low pressure and medium pressure UV lamp based systems. The medium pressure UV lamps emit a wide spectrum of Ultraviolet (UV) radiation which not only gives very good disinfection results but is also excellent for photolysis applications like the reduction of chloramine in pool applications. The single-ended lamp in combination with the S.B.T. (Single-end Bayonet Technology) and the on-chamber visual lamp status indication makes the systems extremely user friendly. We offer different systems with medium pressure lamps ranging from 400 W up to 3.5 kW.

- Compact design
- Cross flow treatment chamber design with low pressure loss
- Easy to (re)place single ended lamp
- Effective chloramine reduction

### Single-end Bayonet Technology (SBT)

The lamp base is equipped with a bayonet technology closure. The lamp itself is single-ended which not only makes it easy to install and replace but also requires service space at only one side of the treatment chamber.



### Benefits SBT

- Easy to (re)place
- Visual lamp indication in the lamp head
- Fast lamp (re)placement without tools
- Long lamp life



## INOX LOW PRESSURE UV LAMP SYSTEMS

### Benefits INOX UV

The high quality 316L stainless steel reactor of the VGE Pro INOX series have been designed to perform. After the high quality welding process the units are leak tested. After this process they get a pickling and passivation treatment which drastically improves the corrosion resistance and lifetime of the unit. Another last treatment with glass pearls (shot peening) gives the units a nice, matt grey surface.



- High corrosion resistance
- Easy to install
- UV radiation reflection
- Optional digital INOX UV-C sensor and bolt-on temperature sensor

### VGE Pro UV control units



For the VGE pro UV systems based on low pressure UV lamps four different types of control units are available:

- Basic, high frequency and high efficiency lamp driver functionality;
- Control Timer, as Basic with LED display for lamplife indication;
- Control Monitor, as Control Timer with 2 line multicolour LCD display for lamplife indication, on/off counter and for UV intensity monitoring;
- Control Monitor Plus, as Control Monitor with 4 line display and full process control include water/chamber temperature measuring and control.



## HDPE LOW PRESSURE UV LAMP SYSTEMS

### Benefits HDPE UV

The high quality HDPE treatment chamber. of VGE Pro HDPE series have been designed to treat highly corrosive water. Besides that, HDPE is resistant to UV radiation. They are suited for all kinds of disinfection and UV-C treatment applications and can even be used for the production of ultrapure water, semiconductor-, pharmaceutical- and cosmetic industry.



- UV radiation resistant
- Suitable for corrosive water
- Easy to install
- Optional digital teflon UV-C sensor and HDPE water temperature sensor

### Smart Pin Technology (SPT)



The VGE Pro UV-C Disinfection systems are equipped with the unique Smart Pin Technology (SPT). This innovative system is a reliable way to integrate the UV-C lamp(s) in a safe, efficient and smart way in a reactor. The SPT makes it possible to replace the lamp safely, although the system is filled with water and pressurized.

- Prevents the release of harmful UV-C radiation
- Changing the UV-C lamp with water in the system
- Splash proof
- Visual inspection for operation of the lamp
- Clamping system for optimal seal function
- Lamp replacement without tools



# Clean and safe pool water

Swimming pools and spas are the perfect places to stay fit, have fun and relax. Unfortunately, they're also the perfect breeding ground for unwelcome guests: bacteria, viruses and other primitive organisms. The good news is there's a better way to clean water than with high doses of harsh chlorine: UV treatment. The brightest solution for safe, clean and healthy swimming water.

#### The clear choice

Our UV-C lamps significantly reduce the required concentration of chemicals needed to keep the pool clean. Saving swimmers from red eyes and skin irritations, not to mention unpleasant chlorine aromas in their hair and skin – making UV-C treated pools the preferred choice of swimmers.

#### Pure innovation

Philips UV-C lamps provide up to 12,000 hours of clean pool water. With a long and reliable lifetime, low energy and maintenance costs, and high end-of-life output. Containing very low levels of mercury, they're clearly better for the environment when they're disposed of.

#### You're safe with us

Philips has been at the forefront of innovation for over 100 years. Our comprehensive range of UV-C solutions covers water, air and surface disinfection, using low and medium pressure mercury lamps.

To find out more dive into our website at [www.philips.com/uvpurification](http://www.philips.com/uvpurification)

innovation  you



**PHILIPS**



## VGE UV-C Lamps

Besides the lamps used in Blue Lagoon products, VGE offers different replacement lamps. Below you find the different lamp types that VGE B.V. uses in her products. Furthermore you can find an overview of the lamps that can be bought for replacement next to the Blue Lagoon replacement lamps. For the professional market it is also possible to

deliver special high quality lamps with a higher wattage. For example lamps of 325 and 400 W. Please contact us by e-mail: [info@vgebv.nl](mailto:info@vgebv.nl) for the actual prices and delivery times.



**PL-S lamps** are compact UV-C (germicidal) lamps used in residential water and air disinfection units. The compact size of the lamp allows for a small system design and design flexibility.



**PL-L lamps** are compact UV-C (germicidal) lamps used in water and air disinfection units. The compact size of the lamp allows for a small system design and design flexibility.



**TL Mini lamps** are slim double-ended UV-C (germicidal) lamps used in residential water and air disinfection units. The small 16 mm diameter of the lamp allows for a small system design and design flexibility.



**TL lamps (T8)** are double-ended UV-C (germicidal) lamps used in professional air disinfection units. Moreover, they have a long and reliable lifetime, which allows maintenance to be planned for in advance.



**T5 lamps** are single ended UV-C (germicidal) lamps used in professional water and air disinfection units. The small 16 mm diameter of the lamp allows for a small system design and design flexibility.



The **Philips Smart Cap** technology is an innovative development for optimal safety! The lamp base and the fitting, that goes into the housing of the lamp, are both provided with a safety switch. As soon as the lamp is taken out of the housing, the power supply is interrupted causing the lamp to switch off.



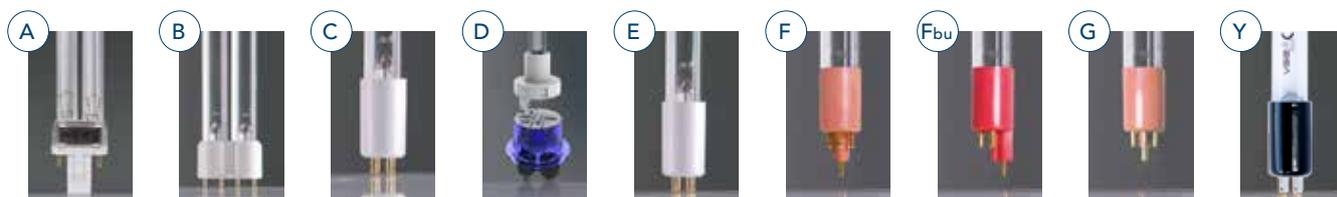
**T6** are single-sided UV-C (germicidal) lamps that are used in professional water and air disinfection devices. The diameter of the lamp of 19 mm allows a small system design and flexibility in design. The T6 is mainly used in the amalgam version.



**VGE Smart Pin Technology (S.P.T.)** makes it possible to replace the lamp safely, while the system remains filled with water. If the lamp is not turned off during the replacement, it will switch off automatically as soon as it is removed from the socket.



**SBT lamps** The lamp base is equipped with a bayonet technology closure. The lamp itself is single-ended which not only makes it easy to install and replace but also requires service space at only one side of the irradiation chamber.



### Blue Lagoon UV lamps

Each Blue Lagoon unit is equipped with a UV lamp. Depending on the system the choice of lamp has been made.

To make sure a UV-C disinfection system keeps protecting bathers against pathogens such as moulds, viruses and bacteria, it is important to replace a UV-C lamp in time. The

average effective lifespan of a UV-C lamp is 9.000 hours.

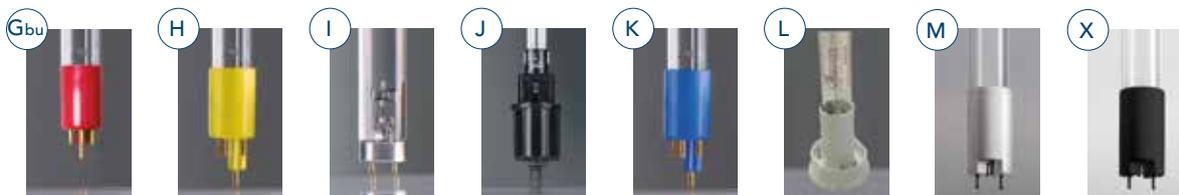
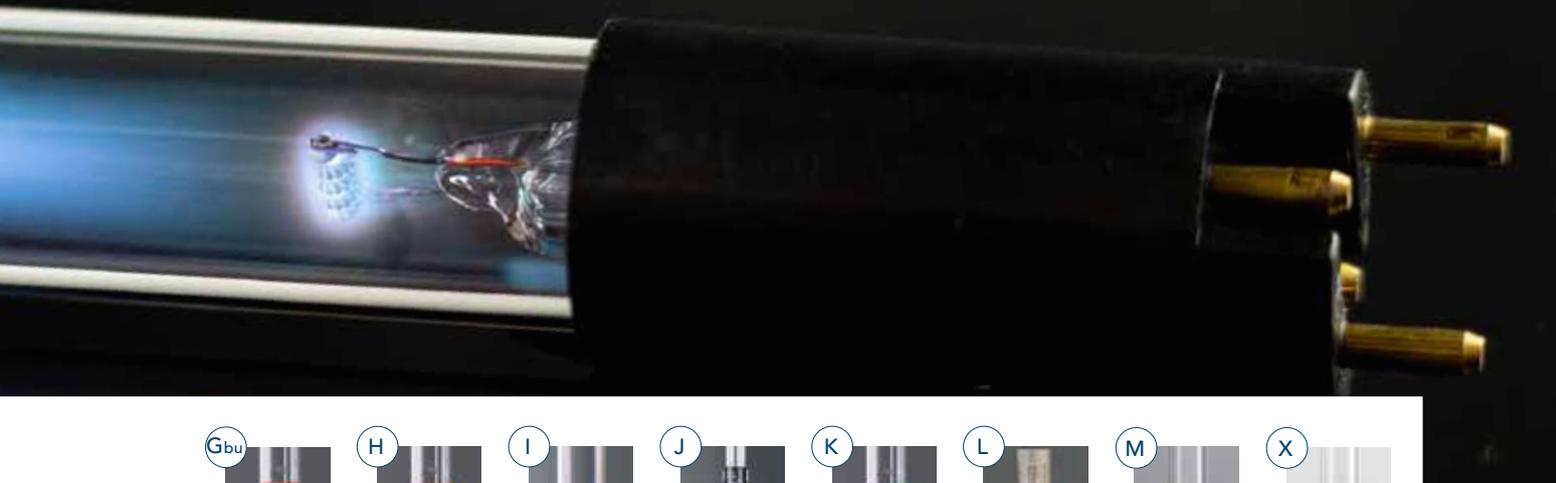
An amalgam lamp has a longer lifespan of approximately 16.000 hours. Although the lamp will still continue to work after this period, its disinfecting value will rapidly decline from then on. To still guarantee the health of the bathers, it is important to replace the UV-C lamp in time.

### T5 & T6 bulbs

| Item. Nr. | Brand           | Model                       | Box | Type | Base |
|-----------|-----------------|-----------------------------|-----|------|------|
| E800900   | Philips         | TUV 16 W 4P-SE UNP          | 1   | T5   | C    |
| E800901P  | Philips         | TUV 36T5 40 W 4P-SE         | 1   | T5   | C    |
| E800902P  | Philips         | TUV 36T5 HO 75 W 4P-SE      | 1   | T5   | C    |
| 3903567   | Philips         | TUV 64T5 75 W 4P-SE (1.56m) | 1   | T5   | C    |
| B280005   | Philips         | TUV Smart Cap 75 W          | 1   | T5   | D    |
| B280006   | Philips         | TUV Smart Cap 40 W          | 1   | T5   | D    |
| E800904   | Philips         | TUV XPT 130 W 4P-SE Amalgam | 1   | T6   | E    |
| E800901L  | LightTech       | T5 40 W 4P-SE               | 1   | T5   | C    |
| E800902L  | LightTech       | T5 75 W 4P-SE               | 1   | T5   | C    |
| F980005   | LightTech       | T6 130 W 4P Amalgam         | 1   | T6   | E    |
| 3903025   | VGE - LightTech | T6 325 W 4P-SE Amalgam      | 1   | T6   | E    |
| F980115   | LightTech       | T6 200 W 4P Amalgam         | 1   | T6   | E    |
| 4800070AM | VGE - LightTech | T5 40 W 4P Amalgam          | 1   | T5   | C    |
| 4800082AM | VGE - LightTech | T5 80 W 4P Amalgam          | 1   | T5   | C    |
| 3903073   | VGE             | 4P-SE 40 W T5               | 25  | T5   | C    |
| 3903074   | VGE             | 4P-SE 75 W T5               | 25  | T5   | C    |
| F980122   | VGE - LightTech | T5 21 W 4P HO               | 1   | T5   | X    |

### Unit specific lamps

| Item. Nr. | Brand           | Model                                 | Box | Type | Base  |
|-----------|-----------------|---------------------------------------|-----|------|-------|
| F980065   | VGE - LightTech | T5 16 W 4P-SE                         | 1   | T5   | G     |
| F980068   | VGE - LightTech | T5 40 W 4P-SE, length 365mm (short)   | 1   | T5   | F     |
| F980002   | VGE - LightTech | T5 40 W 4P-SE                         | 1   | T5   | F     |
| F980004   | VGE - LightTech | T5 75 W 4P-SE                         | 1   | T5   | F     |
| F980078BU | VGE - LightTech | T5 40 W 4P-SE                         | 1   | T5   | F(bu) |
| F980079BU | VGE - LightTech | T5 75 W 4P-SE                         | 1   | T5   | G(bu) |
| 4800033   | VGE - LightTech | T5 75 W 4P-SE Ozone                   | 1   | T5   | H     |
| F980008   | VGE - LightTech | T6 130 W Amalgam 4P                   | 1   | T6   | M     |
| F980010   | VGE - LightTech | T5 80 W 4P                            | 1   | T5   | X     |
| F980020   | VGE - LightTech | T6 140 W Amalgam 4P                   | 1   | T6   | X     |
| F980120   | VGE - LightTech | T5 21 W 4P                            | 1   | T5   | G     |
| F980122   | VGE - LightTech | T5 20 W 4P HO                         | 1   | T5   | X     |
| F980124   | VGE - LightTech | T5 40 W 4P HO                         | 1   | T5   | X     |
| B280002   | VGE - LightTech | T5 40 W Ionizer, length 635mm (short) | 1   | T5   | K     |
| B280001   | VGE - LightTech | T5 75W Ionizer, length 645mm (short)  | 1   | T5   | K     |
| 3903114AM | VGE             | T5 42W                                | 1   | T5   | Y     |



#### PL bulbs

| Item. Nr.   | Brand   | Model                         | Box | Type  | Base |
|-------------|---------|-------------------------------|-----|-------|------|
| 3903005     | Philips | TUV PL-S 5 W /2P              | 10  | PLS-S | A    |
| 3903009     | Philips | TUV PL-S 7 W /2P              | 10  | PLS-S | A    |
| 3903010     | Philips | TUV PL-S 9 W /2P              | 10  | PLS-S | A    |
| 3903013     | Philips | TUV PL-S 9 W /4P              | 10  | PLS-S | -    |
| 3903020     | Philips | TUV PL-S 11 W /2P             | 25  | PLS-S | A    |
| 3903030     | Philips | TUV PL-L 18 W /4P             | 25  | PL-L  | B    |
| 3903033     | Philips | TUV PL-L 24 W /4P             | 25  | PL-L  | B    |
| 3903040     | Philips | TUV PL-L 36 W /4P             | 1   | PL-L  | B    |
| 3903050     | Philips | TUV PL-L 55 W /4P             | 1   | PL-L  | B    |
| B212012     | Philips | Replacement module 12 W 230 V | 1   | PL-S  | J    |
| B212012 USA | Philips | Replacement module 15 W 120 V | 1   | PL-S  | J    |
| 4600003     | Philips | Replacement lamp Aetaire      | 1   | PL-L  | -    |
| 4610007     | Philips | TUV PL-L 60 W /4P             | 1   | PL-L  | B    |
| 3903095     | Philips | TUV PL-L 95 W /4P             | 1   | PL-L  | B    |

#### TL bulbs

| Item. Nr. | Brand   | Model                 | Box | Type | Base |
|-----------|---------|-----------------------|-----|------|------|
| 3903557   | Philips | TUV TL-MINI 6 W FAM   | 25  | TL   | I    |
| 3903558   | Philips | TUV TL-MINI 8 W FAM   | 25  | TL   | I    |
| 3903559   | Philips | TUV TL 10W 1SL T8     | 25  | TL   | I    |
| 3903563   | Philips | TUV TL-MINI 11 W FAM  | 25  | TL   | I    |
| 3903560   | Philips | TUV TL 15 W 1SL T8    | 25  | TL   | I    |
| 3903574   | Philips | TUV TL-MINI 16W       | 25  | TL   | I    |
| 3903561   | Philips | TUV TL 25 W 1SL T8    | 25  | TL   | I    |
| 3903564   | Philips | TUV TL 30 W 1SL T8    | 25  | TL   | I    |
| 3903565   | Philips | TUV TL 36 W SLV       | 6   | TL   | I    |
| 3903562   | Philips | TUV TL 55 W 1SL HO T8 | 6   | TL   | I    |
| 3903570   | Philips | TUV TL 75 W HO T8     | 6   | TL   | I    |
| 3903071   | VGE     | TL 30 W T8            | 25  | TL   | I    |
| 3903072   | VGE     | TL 55 W T8            | 25  | TL   | I    |

#### Unit specific lamps

| Item. Nr. | Brand               | Model                                    | Box | Type | Base |
|-----------|---------------------|--|-----|------|------|
| F980086   | VGE                 | Replacement lamp Delta EA-3H-5 / 35 W    | 50  | T5   | C    |
| F980080   | VGE                 | Replacement lamp Delta EA-3/4H-10 / 45 W | 50  | T5   | C    |
| F980082   | VGE                 | Replacement lamp Delta EA-4/4H-20 / 90 W | 50  | T5   | C    |
| F980084   | VGE                 | Replacement lamp Delta EA-4H-40 / 110 W  | 60  | T5   | C    |
| F980088   | VGE                 | Replacement lamp BIO-UV 10 / 38W         | 50  | T5   | C    |
| F980090   | VGE                 | Replacement lamp BIO-UV 20 / 59W         | 50  | T5   | C    |
| F980092   | VGE                 | Replacement lamp BIO-UV 30 / 87W         | 50  | T5   | C    |
| F980094   | VGE                 | Replacement lamp BIO-UV 40 / 102W        | 60  | T5   | C    |
| F980102   | VGE Pro - LightTech | SPT 140W 867mm                           | 1   | T6   | L    |
| F980103   | VGE Pro - LightTech | SPT 200W 1115mm                          | 1   | T6   | L    |
| F980107   | VGE Pro - LightTech | SPT 40W 389mm                            | 1   | T5   | L    |
| F980108   | VGE Pro - LightTech | SPT 75W 867mm                            | 1   | T5   | L    |
| F980104   | VGE Pro - LightTech | SPT 325W 1588mm                          | 1   | T6   | L    |
| F980112   | VGE Pro - LightTech | SPT 400W 2000mm                          | 1   | T6   | L    |

# UVC Germicidal Lamps

## Global Leaders

Light Sources and Lighttech, global leaders in UVC Germicidal Lamps, offer unmatched innovation in the design and manufacture of our lamp products. With both of our state of the art manufacturing facilities, we can supply the world market with high-quality standard lamp designs as well as custom designed lamp solutions for your specific applications.



- Amalgam Lamps
- Soft Glass
- U Shaped
- Cell Lamps
- Compact Lamps
- Standard Output
- High Output
- Ozone Producing
- Medium Pressure (MPUV/MPHO)
- OEM - Proprietary Base Solutions
- Custom Lamp Configurations



## Blue Lagoon promotional activities support

New and improved technologies emerge at a high pace. It can be difficult to stay up-to-date with the latest innovations of UV-C pool disinfection systems and pool supplies – let alone convince customers why they should buy them. In order to help our wholesalers to convince (potential) customers of new technologies and the latest products they have in stock, we have composed an extensive marketing pack. Be fully prepared for the upcoming pool season and make use of the promotional services, Blue Lagoon provides you!

### The marketing pack consists of:

- The latest brochure
- Catalogue text and pictures in order to update the catalogue/website content
- Product flyers to share with the public
- Product sheets to understand the technology
- The 6 benefits of UV-C disinfection systems for pools
- Spare part overviews
- Link to instruction videos



Blue Lagoon  
Youtube playlist



# COPPER ELECTROLYZER



## Blue Lagoon Copper Electrolyzer



The Blue Lagoon Copper Electrolyzer ensures clean and healthy pool water through copper electrolysis. It is recommended to use the Copper Electrolyzer in combination with a UV-C disinfection system for optimal results.

### Operation

The Blue Lagoon Copper Electrolyzer will disinfect the water in your swimming pool through copper electrolysis. We recommend to use this device in combination with a UV-C device for the best result. The Blue Lagoon Copper Electrolyzer will, before the water goes back to the pool, be mounted between the pipes. The swimming pool water then flows through the housing of the Blue Lagoon Copper Electrolyzer. A copper unit, or Electrolyzer, is positioned within the housing, and the copper unit discharges a minimal amount of copper into the water flowing through the housing.

These copper ions ( $\text{Cu}^{2+}$ ) in the water have a positive charge and destroy the cell walls of algae, bacteria, viruses and other microorganisms. As the cell wall is thereby damaged, these organisms are no longer able to take up any nutrients and are therefore unable to multiply. The process of applying a positive charge to copper is called copper electrolysis. The copper in the water acts as a disinfecting buffer in your swimming pool. Thanks to the Blue Lagoon Copper Electrolyzer, your swimming pool water will be disinfected efficiently and safely and the quality of your water will remain excellent.

*Pending EU regulations or conditional approval, national regulations apply to the trade and use of copper-containing products. The copper used in these units complies with the REACH registration. It is the sole responsibility of the buyer to inform himself/herself about applicable local regulations regarding the use of (and trade in) copper for water disinfection.*

### Advantages of the Blue Lagoon Copper Electrolyzer

- The copper unit will last for two swimming seasons
- Easy installation and maintenance
- Ideal for use in combination with UV-C
- Made in the Netherlands

# Blue Lagoon Copper Electrolyzer Technical



## COPPER ELECTROLYZER

|                      |                |
|----------------------|----------------|
| Art. number          | BE05752        |
| EAN                  | 8714404039017  |
| Max. pressure        | 1 bar          |
| Max. flow            | 13.000 L/h     |
| Diameter unit Ø      | 59 mm          |
| Copper Ionizer       | 0,7 ppm        |
| Length unit          | 34 cm          |
| Diameter in-outlet Ø | 48/50 mm       |
| Housing material     | PCASA          |
| Electronic ballast   | 230 V AC 50 Hz |
| Weight               | 2,32 Kg        |
| Quantity full pallet | 60 pcs         |

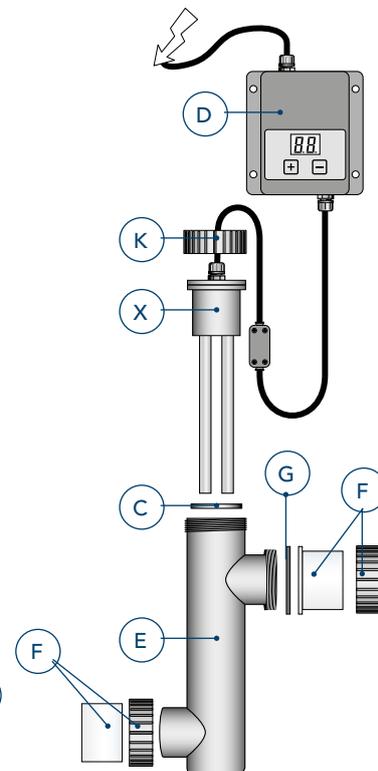


### What is the disinfection mechanism of copper ionization?

Electrically charged copper ions ( $\text{Cu}^{2+}$ ) in the water search for particles of opposite polarity, such as bacteria, viruses and fungi. Positively charged copper ions form electrostatic compounds with negatively charged cell walls of microorganisms. These compounds disturb the cell wall permeability and cause nutrient uptake to fail. As a result, bacteria are no longer able to multiply and eventually die. The ions remain active until they are absorbed by a microorganism.

## Spare parts

|   |         |  |
|---|---------|--|
| C | B290076 | Control Box for Copper Electrolyzer                |
| D | 3902041 | O-ring NBR 56x3                                    |
| E | B212013 | Housing Blue Lagoon Spa UV-C / Copper Electrolyzer |
| F | B212014 | Set (2pcs) 3-way connection 50 mm                  |
|   | B212015 | Set (2pcs) 3-way connection 48 mm                  |
| G | E801509 | O-ring 3-way connection NBR 53x4,5                 |
| K | B290010 | Nut 70 mm x 33.5 mm for end cap ABS Blue           |
| X | B290029 | Copper set base + cable connector                  |
| Y | B200020 | Test strips for Ionizer (50 strips)                |





## Blue Lagoon Profiheater 3 kW



The Blue Lagoon ProfiHeater is very suitable for warming water. The heater is very easy to install in and around filter installations and applicable for various pools.

### Operation

The Profiheater can be used for warming your swimming pool water as it is equipped with an adjustable thermostat. Both the heating element with temperature sensor and the interior of the casing are manufactured from high-quality 316L stainless steel. The Profiheater can be connected using a flexible hose (Ø25, 32 and 40 mm) or PVC tubing (Ø50 and 63 mm). The Profiheater is available in 3kW. Max. pressure: 2 bar. It is advised to use a Flow Switch Plus to prevent overheating of the unit at insufficient water flow.



### Advantages of the Blue Lagoon Profiheater 3 kW

- Built-in heating element with thermostat
- 316L stainless steel body
- Universal fittings included
- Made in the Netherlands

# Blue Lagoon Profiheater 3 kW Technical

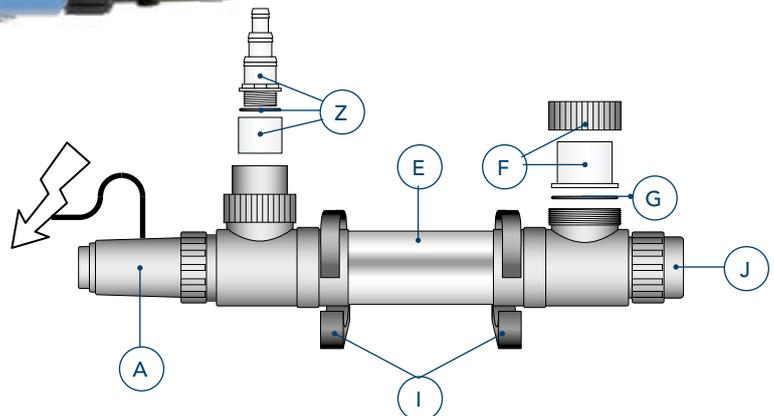
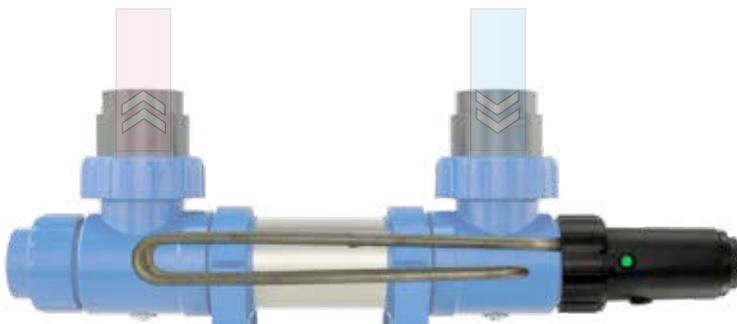


|                      | <b>3 kW</b>               |
|----------------------|---------------------------|
| Art. number          | E830010                   |
| Type                 | 75 W                      |
| EAN                  | 8714404034173             |
| Max. pressure        | 2 bar                     |
| Max. flow            | 10,000 L/h                |
| Length unit          | 56 cm                     |
| Diameter in-outlet Ø | 63 - 50 - 40 - 32 - 25 mm |
| Housing material     | 316L                      |
| Weight               | 3,5 Kg                    |
| Quantity full pallet | 40 pcs                    |



## Spare parts

|   |         |   |
|---|---------|---|
| A | 6900393 | Heater element for ProfiHeater 3kW                              |
| E | E830011 | Housing Blue Lagoon ProfiHeater 1/2/3 kW                        |
| F | E800940 | Set (2pcs) 3-way coupling black                                 |
| G | E800941 | Set (2pcs) O-rings 3-way connection                             |
| I | B290006 | Mounting bracket 75 mm PP Blue                                  |
| J | F990113 | End cap 32 mm ABS Blue  |
| Z | 7201142 | Reduction set (2pcs) 63 mm glue/screw hose connect. 40-32-25 mm |



# DOSATECH



## Blue Lagoon Dosatech



The Blue Lagoon Dosatech is the ideal peristaltic pump for dosing of liquids (flocculant, natrium bicarbonate) into the piping system of your swimming pool. Due to its 3-button controller, the Dosatech is very easy to program and operate.

### Operation

The Blue Lagoon Dosatech is the ideal peristaltic pump for dosing a liquid solution (flocculant, natrium bicarbonate) into the piping system of your swimming pool. The neoprene hose makes it possible to add various types of chemical solutions to the water of your swimming pool.

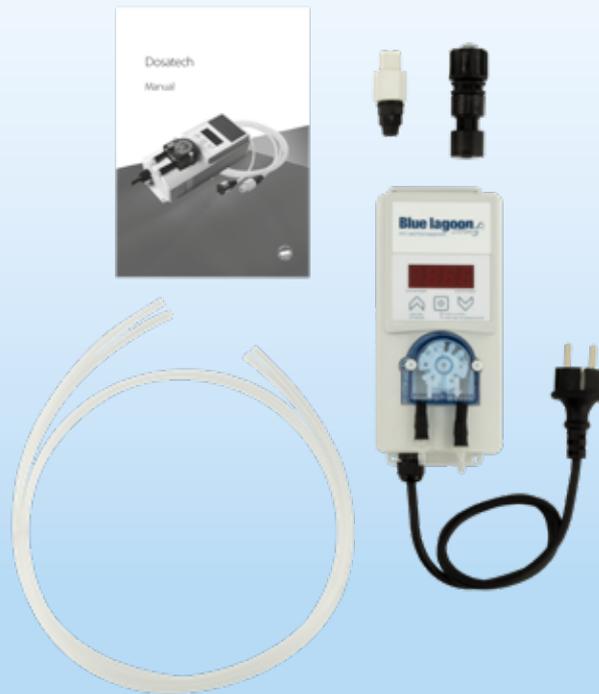
Due to its 3-button controller, the Dosatech is very easy to program and operate. The Blue Lagoon Dosatech makes a dosage up to 600 seconds per dosing, up to 24 times a day, possible. In addition, the Blue Lagoon Dosatech is easy to install thanks to the compact design and the supplied suction and injection nipples. Installation is also possible in combination with a (existing) Blue Lagoon UV-C system.

### Advantages of the Blue Lagoon Dosatech

- Very easy 3-button operation and programming
- External automation possible for one or more dosage pumps
- Dosage up to max. 600 seconds per turn. Maximum 24 runs per day.
- The possibility to change the dosage every hour
- Neoprene hose
- Easy to install and easy to maintain
- Compact design
- Easy to combine with a Blue Lagoon UV-C unit
- Suction and injection nipples supplied
- Made in the Netherlands

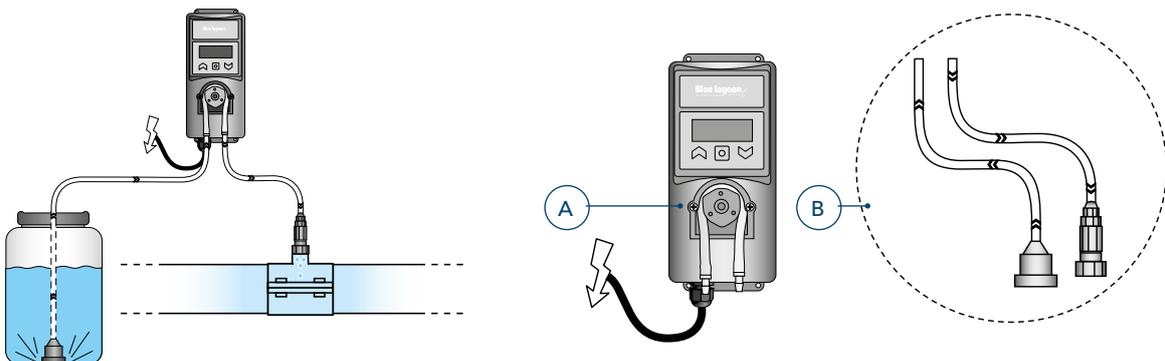


| <b>DOSATECH</b>      |                |
|----------------------|----------------|
| Art. number          | B210010N       |
| EAN                  | 8714404987417  |
| Rotation             | 30 rpm         |
| Dimensions LxWxH     | 80x90x215mm    |
| Electronic ballast   | 230 V AC 50 Hz |
| Power                | 5 W            |
| Weight               | 1,5 Kg         |
| Quantity full pallet | 120 pcs        |



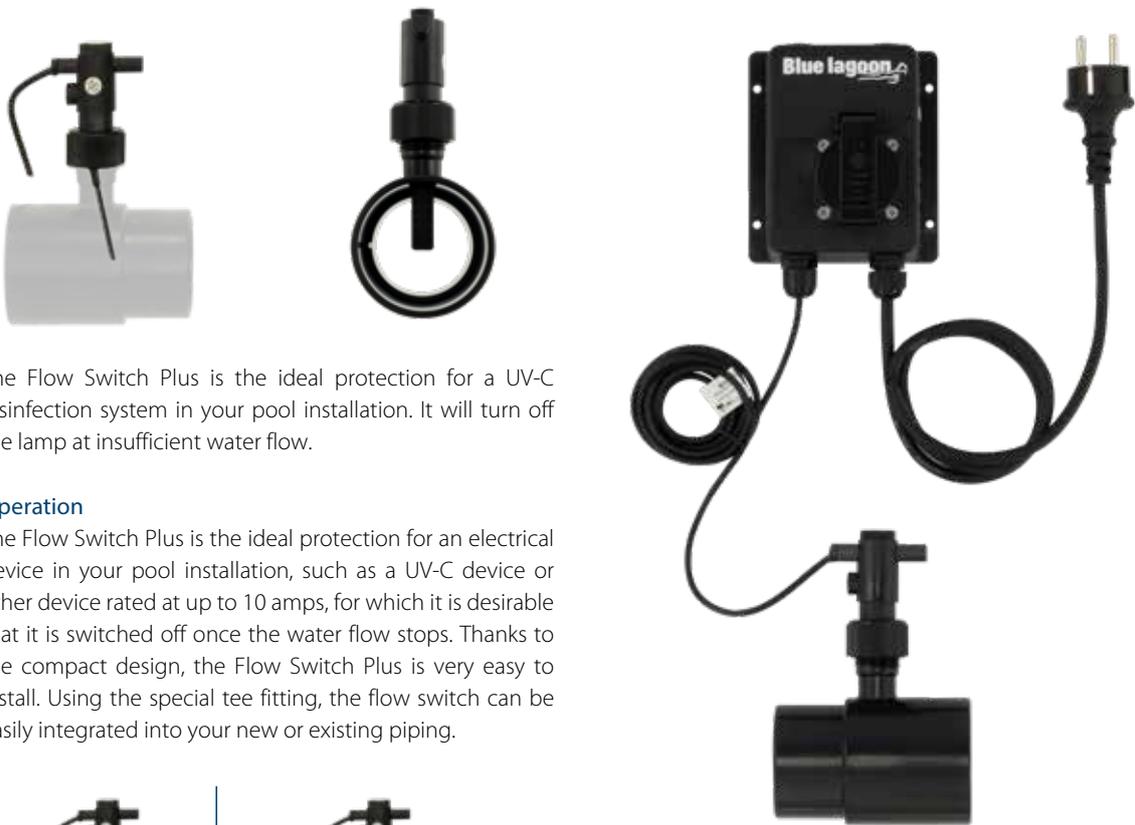
## Spare parts

|          |         |   |
|----------|---------|---|
| <b>A</b> | B290065 | Replacement pump head for Dosatech                    |
| <b>B</b> | B200030 | Replacement kit for dosing pump pool (hose + nipples) |





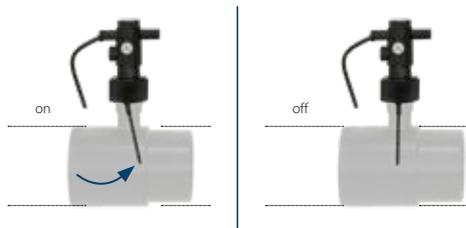
## Blue Lagoon Flow Switch Plus



The Flow Switch Plus is the ideal protection for a UV-C disinfection system in your pool installation. It will turn off the lamp at insufficient water flow.

### Operation

The Flow Switch Plus is the ideal protection for an electrical device in your pool installation, such as a UV-C device or other device rated at up to 10 amps, for which it is desirable that it is switched off once the water flow stops. Thanks to the compact design, the Flow Switch Plus is very easy to install. Using the special tee fitting, the flow switch can be easily integrated into your new or existing piping.



### Advantages of the Blue Lagoon Flow Switch Plus

- Prevents systems from running without flow
- Easy installation thanks to the compact design
- Easy to combine
- Also suitable for salt-water systems

# Blue Lagoon Flow Switch Plus Technical



## 120 V (Type B)

|                              |               |
|------------------------------|---------------|
| Art. number                  | 5056584       |
| Type                         | Type B        |
| EAN                          | 8714404044622 |
| Voltage                      | 120 V AC      |
| Frequency                    | 60 Hz         |
| IP Class                     | 54            |
| Connection size, tee fitting | 2"            |
| Minimum flow                 | 5,8 gpm       |
| Maximum flow                 | 100 gpm       |



## 230 V (Type E)

|                              |                       |
|------------------------------|-----------------------|
| Art. number                  | 5056586               |
| Type                         | Type E                |
| EAN                          | 8714404044554         |
| Voltage                      | 230 V AC              |
| Frequency                    | 50 Hz                 |
| IP Class                     | 54                    |
| Connection size, tee fitting | 63 mm                 |
| Minimum flow                 | 1,5 m <sup>3</sup> /h |
| Maximum flow                 | 23 m <sup>3</sup> /h  |



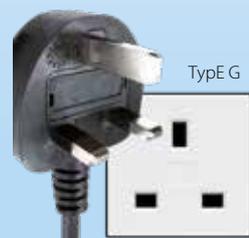
## 230 V (Type F)

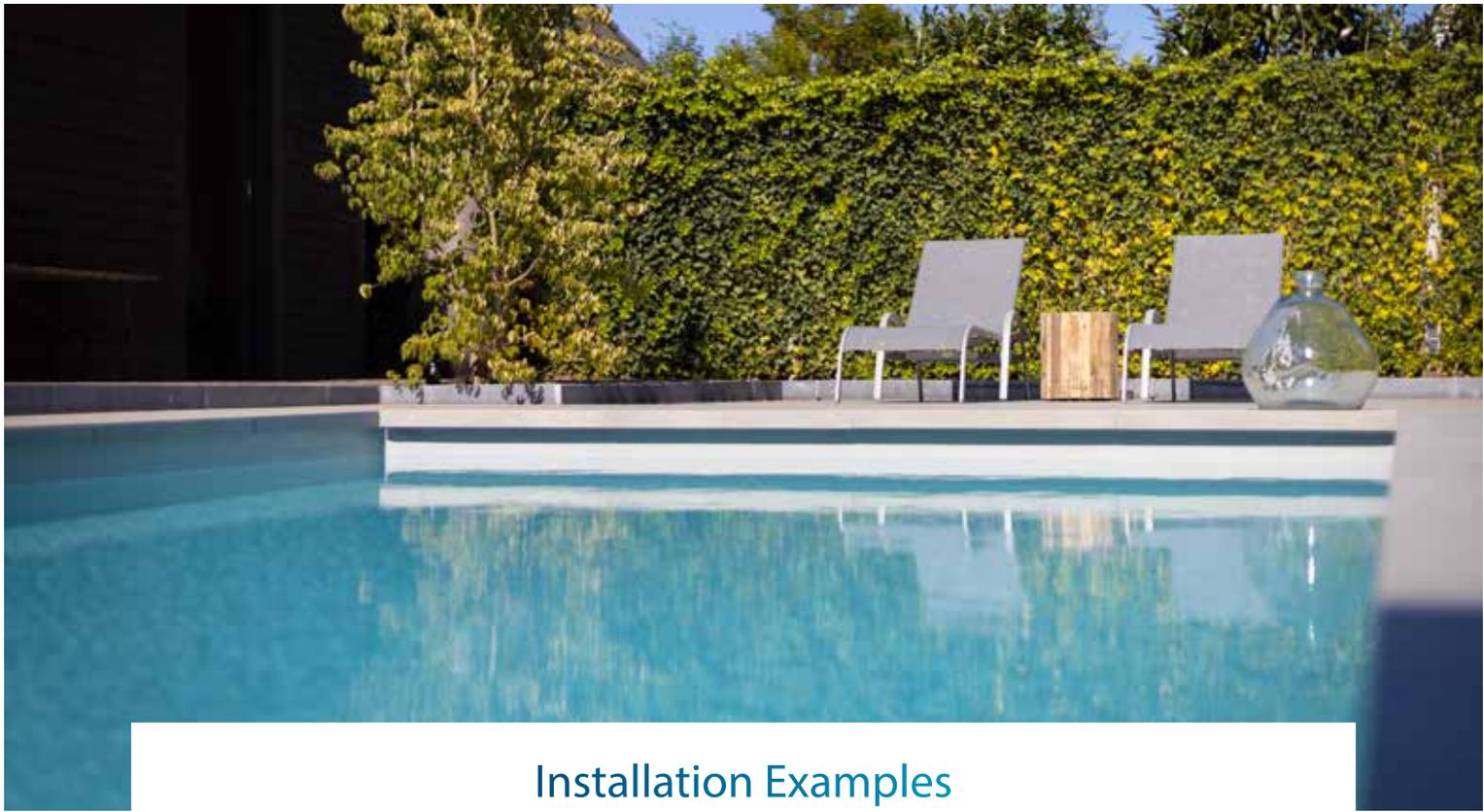
|                              |                       |
|------------------------------|-----------------------|
| Art. number                  | 5056579               |
| Type                         | Type F                |
| EAN                          | 8714404044486         |
| Voltage                      | 230 V AC              |
| Frequency                    | 50 Hz                 |
| IP Class                     | 54                    |
| Connection size, tee fitting | 63 mm                 |
| Minimum flow                 | 1,5 m <sup>3</sup> /h |
| Maximum flow                 | 23 m <sup>3</sup> /h  |



## 230 V (Type G)

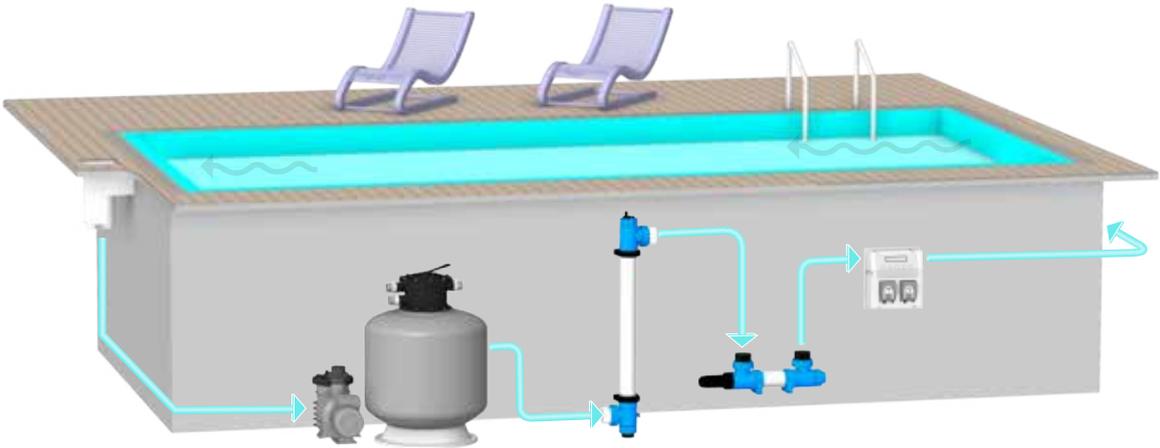
|                              |                       |
|------------------------------|-----------------------|
| Art. number                  | 5056587               |
| Type                         | Type G                |
| EAN                          | 8714404044936         |
| Voltage                      | 230 V AC              |
| Frequency                    | 50 Hz                 |
| IP Class                     | 54                    |
| Connection size, tee fitting | 63 mm                 |
| Minimum flow                 | 1,5 m <sup>3</sup> /h |
| Maximum flow                 | 23 m <sup>3</sup> /h  |



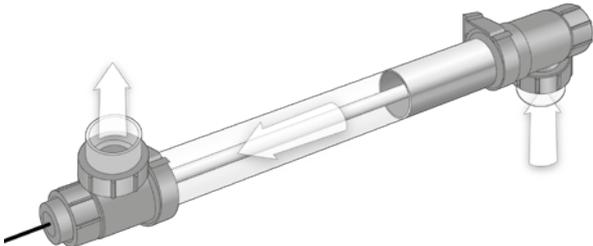


## Installation Examples

Possible installation



Possible installation and flow direction



**Warning!** Make sure the flow always goes from bottom to top, to prevent air inclusion.

# General terms and conditions of sale VGE B.V

## **1. Orders**

- 1.1 VGE B.V. ("VGE") is allowed to accept and reject orders of Buyer at its sole discretion. An agreement will be deemed to have been concluded after VGE has confirmed an order placed by the Buyer, or has commenced the execution of that order.
- 1.2 All offers of VGE are valid for a maximum of 30 calendar days.
- 1.3 In the event that an agreement is concluded by e-mail, an agreement may be concluded without VGE having to fulfill any conditions provided by law pertaining to electronic communication and/or electronic conclusion of agreements.
- 1.4 The Buyer will be entitled to cancel an order only after receiving written consent from VGE, which consent may be made subject to conditions as deemed appropriate by VGE.

## **2. Delivery**

- 2.1 Unless otherwise agreed in writing, the goods will be delivered Ex Works, Incoterms 2010 or, if any, a more recent version of the Incoterms. The Buyer will be obliged to take delivery of the goods upon VGE's request.
- 2.2 Any delivery times quoted or agreed on by VGE may not be considered to be firm deadlines, unless explicitly agreed otherwise in writing between the parties. In the event of late delivery, VGE must be declared to be in default in writing, in which connection VGE will be granted a reasonable term of at least 14 calendar days as of the date of the receipt of notification to fulfill its obligations. In the event that such extended term is exceeded, the Buyer will be entitled to dissolve the agreement or part of the agreement only with respect to the goods not delivered. In such an event, VGE will not be liable to pay damages, unless such damages are the consequence of gross negligence or willful misconduct of VGE's executive management.
- 2.3 VGE is entitled to deliver and invoice the goods in installments, unless the goods in question do not have any stand-alone value in VGE's opinion.
- 2.4 If at the request of Buyer VGE holds a specified stock of goods that the Buyer can order on demand, the Buyer will order such goods within 6 months from the date of the Buyer's request to keep such goods in stock. If the Buyer fails to do so, he will nevertheless be liable to pay the purchase price. Unless agreed otherwise the delivery time for goods that are available on demand is 15 working days from the day of the order.
- 2.5 The Buyer is obliged to accept delivery of the goods upon VGE's request. If Buyer fails to accept delivery, the Buyer will be liable for all costs and damages resulting therefrom, including but not limited to the costs of storing and re-delivering the goods.
- 2.6 VGE will be entitled to charge the costs of any packaging separately. The packaging will not be taken back. Should VGE, however, be obliged by law or any regulations to take packaging back, any costs related to taking back or processing packaging will be borne by the Buyer.

## **3. Price and Payment**

- 3.1 Unless explicitly agreed otherwise in writing, all prices are quoted exclusive of VAT, transport and insurance costs and all other costs. A quoted or agreed price is valid for one order only, unless the parties have explicitly agreed otherwise in writing.
- 3.2 VGE will be entitled to adjust prices agreed upon before delivery in the event of increases in cost- determining factors such as fluctuations in exchange rates, raw materials, labor costs or in the event of government measures, provided that such increases or measures occurred after the conclusion of the agreement but before delivery.
- 3.3 Unless explicitly agreed otherwise in writing, the Buyer will pay the entire purchase price in advance upon placement of an order, in euros and by transfer to or deposit into an account indicated by VGE, without any deduction, discount or set-off. Submission of a complaint will not suspend the Buyer's obligation to pay.
- 3.4 If the Buyer fails to timely make a payment in accordance with article 3.3, the Buyer will be in default and all claims of VGE will become fully due and payable immediately, without prejudice to any other rights that VGE may have by under these terms and conditions or the law.
- 3.5 If at any time VGE International B.V. has doubts as to the Buyer's creditworthiness, VGE International B.V. will have the right, before commencing or continuing its obligations, to require the Buyer to provide adequate security in the amount of the sums which are or will be owed to VGE International B.V. by the Buyer, whether or not immediately payable, under the agreement, all at VGE International B.V.'s discretion.
- 3.6 In the event of untimely payment, VGE will be entitled to compensation of all extra-judicial costs, including but not limited to costs involved in sending reminders, one or more notices of default or demand notices, which extra-judicial costs will amount to at least 15% of the total amount payable, subject to a minimum of EUR 500, without prejudice to any other rights that VGE may have by virtue of these terms and conditions or the law.
- 3.7 In the event that VGE is fully or largely successful in legal proceedings against the Buyer, the Buyer will be obliged to compensate all costs incurred by VGE in connection with such proceedings, even to the extent that such costs exceed the cost award made by the court. VGE may invoke this clause irrespective of whether the Buyer has appealed against the relevant judgment at the court of appeal or the Supreme Court.

## **4. Retention of title**

- 4.1 VGE will retain title to all goods delivered and to be delivered to the Buyer until full payment of all purchase amounts has been received, as well as any amounts owed by the Buyer pertaining to work performed by VGE in connection with such purchase agreements and any claims pursuant to any failure in the performance of such agreements on the part of the Buyer.
- 4.2 The Buyer will be obliged to store the goods delivered under retention of title with due care, ensuring that they are recognizable as the property of VGE. In addition, it will be obliged to insure such goods against, inter alia, fire and water damage and theft. The Buyer will pledge to VGE any claims it has pursuant to such insurance policies upon VGE's first request, as additional security with respect to VGE's claims against the Buyer.
- 4.3 In the event that the Buyer fails in the performance of any obligation vis-à-vis VGE, or in the event that VGE has good reason to fear that the Buyer will fail in the performance of its obligations, VGE will be entitled to recover the goods delivered under retention of title or to have such recovered, even when the goods have to be detached. The Buyer will cooperate accordingly. The Buyer will bear the costs of recovery, without prejudice to VGE's right to further damages.

## **5. Characteristics of Goods**

- 5.1 The goods will comply with any specifications explicitly agreed upon in writing and be free from defects in material and workmanship under normal use consistent with VGE's instructions for a period of 12 months from delivery to the Buyer.
- 5.2 Any and all images and specifications of goods in catalogues, price lists, advertisements, etc. and any samples of the goods must be deemed to be representations by approximation only, unless VGE has explicitly indicated the contrary in writing with regard to a specific delivery.
- 5.3 If the goods are intended to be used in a country outside the Netherlands, VGE is not responsible to ensure that the goods comply within any laws and other requirements

applicable in such other country, unless the parties have (i) explicitly agreed otherwise in writing and (ii) the Buyer has correctly informed VGE on the exact content of such requirements.

- 5.4 VGE is at all times entitled to effect adjustments in the goods to be delivered, in order to improve them or comply with government regulations.
- 5.5 VGE has no obligation and Buyer shall have no rights in relation to any characteristics and/or performance of the goods other than the characteristics and the performance that are applicable or agreed pursuant to this article 5.

## **6. Complaints and Inspection**

- 6.1 The goods delivered must be checked by or for the Buyer upon delivery with respect to numbers and visible defects and any shortages or visible defects must be reported to VGE within 3 working days after delivery. The Buyer must report defects not visible upon delivery within 3 working days of their discovery, though in any event within 3 working days after the time that the Buyer should reasonably have discovered them.
- 6.2 The Buyer will be obliged to perform the inspection or to have the inspection performed with due care, upon receipt of the goods. The Buyer will bear the risk for inspecting the goods by means of random checks and may not rely on the fact that it did not observe a defect that was visible and could have been discovered upon delivery because it—or a third party engaged by it—did not inspect the entire shipment.
- 6.3 In the event that a good does not comply with article 5 of these conditions, VGE will only be obliged—to be decided at the VGE's discretion—to repair the defect, to replace the relevant good or to credit or refund the amount charged in connection with the defective good in whole or in part, according to its own reasonable judgment and to the exclusion of any other rights of the Buyer by law.
- 6.4 The Buyer will not be entitled to any claim if the non-compliance with article 5 cannot be attributed to VGE, e.g. results from any transport, incorrect operation, installation, storage or maintenance by the Buyer or a third party.
- 6.5 Any and all claims for payment of an amount of money and/or repair of the relevant good and/or replacement of the good and/or supply of any missing part, on whatever basis, as well as any right to dissolve the agreement will lapse at the earliest of the following times: a) upon late reporting pursuant to article 6.1 or b) 12 months after the delivery date.

## **7. Liability**

- 7.1 Without prejudice to article 2.2, any liability on the part of VGE on the basis of an attributable failure with respect to an agreement concluded with the Buyer will be restricted to the provisions laid down in article 6.3.
- 7.2 VGE will assume no liability with respect to damage as a consequence of or related to any errors or omissions in advice rendered by it, nor will it assume any liability with respect to damage as a consequence of or related to errors or omissions in the processing instructions recommended by it.
- 7.3 Without prejudice to article 7.1, VGE will not—irrespective of the legal basis of the Buyer's claim—be liable for any consequential damages, including but not limited to losses due to delays or loss of data, lost profits and penalties forfeited by the Buyer.
- 7.4 The above-mentioned restrictions with respect to liability will not apply in the event that the damage is the consequence of gross negligence or willful misconduct on the part of VGE's executive management.
- 7.5 The Buyer will indemnify VGE against any damage resulting from claims by third parties in connection with goods supplied by VGE.

## **8. Force majeure**

- 8.1 If VGE fails in the performance of its obligations due to an event of force majeure, it will not be liable. To the extent that the circumstance making performance impossible is not of a permanent nature, VGE's obligations will be suspended. In the event that the period during which performance is not possible due to force majeure exceeds 2 months or is expected exceed 2 months, both parties will be entitled to cancel the agreement, without any obligation to pay the damages that may arise as a result.
- 8.2 In the event that VGE has already partially fulfilled its obligations upon the occurrence of the situation of force majeure, or is only able to fulfill its obligations in part, it will be entitled to separately invoice the part already supplied or the part that can still be supplied and the Buyer will be obliged to pay that invoice as if it pertained to a separate agreement.
- 8.3 A situation of force majeure affecting VGE within the meaning of this article will be deemed to have occurred in the event of, inter alia, strikes, a shortage of raw materials, delay, transport problems, war or threat of war, full or partial mobilization, riots, sabotage, floods, fire or other forms of destruction within VGE's company, lockouts and industrial actions, breakdowns of machines or tools or other breakdowns within VGE's company. A situation of force majeure must also be deemed to have occurred on the part of VGE in the event that one or more of the above-mentioned circumstances occurs within the companies of VGE's suppliers and as a consequence VGE cannot or could not perform its obligations, or cannot or could not perform such in good time.

## **9. Suspension and dissolution**

Without prejudice to VGE's rights under these terms and conditions or under the law, VGE will at any event be entitled to suspend (further) performance or to dissolve any agreement concluded with the Buyer, in whole or in part, if (i) any goods made available by VGE to the Buyer become subject to attachment, (ii) the Buyer is granted a suspension of payments or is declared bankrupt, (iii) any permits or licenses required for the performance of the agreement are withdrawn, (iv) the Buyer fails to fulfill one or more of its obligations ensuing from any agreement with VGE, (v) VGE has sound reasons to believe that the Buyer is or will be unable to fulfill its obligations under any agreement, or (vi) the Buyer ceases its business or if a change occurs in the control of that business. Any right of the Buyer to suspend performance is hereby excluded.

## **10. Applicable law and dispute resolution**

10.1 These terms and conditions and all quotations from and agreements with VGE will be governed by Dutch law. The UN Convention on Contracts for the International Sale of Goods ("CISG") does not apply.

10.2 In the event that the Buyer is domiciled in a Member State of the European Union or in Norway, Switzerland or Iceland at the time that proceedings are commenced, any and all disputes relating to these terms and conditions and/or any quotations or agreements to which these terms and conditions are applicable will exclusively be settled by the competent court in Amsterdam, the Netherlands. The above will not affect VGE's right to submit a dispute to the court that would be competent in the absence of this provision.

In the event that the Buyer is not domiciled in a Member State of the European Union or in Norway, Switzerland or Iceland upon the commencement of proceedings, any and all disputes relating to these terms and conditions and/or any quotations or agreements to which these terms and conditions are applicable will exclusively be settled in accordance with the rules of the Netherlands Arbitration Institute [Nederlands Arbitrage Instituut, or NAI]. Arbitration will take place in Amsterdam, the Netherlands. The case will be submitted to three arbitrators and the arbitration proceedings will be conducted in Dutch.

# Blue Lagoon

UV-C and Pool equipment



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• [www.bluelagoonuvc.com](http://www.bluelagoonuvc.com)