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aquagalf nanobubble generator: clean water | acniti

aquaGaLF is a nanobubble generator for clean water applications including drinking water treatment, aquaculture, and industrial process water. Its hybrid technology produces ultrafine bubbles that raise dissolved oxygen levels and improve water quality. Available in 1.5, 6, and 12 m³/h. Requires particle-free water.



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aquagalf nanobubble generator for clean water applications

- ✓ Hybrid design increases both dissolved oxygen levels and generates ultrafine bubbles.
- ✓ Optimized control suppresses the rise in temperature and reducing power consumption.
- ✓ Improve performance of plant factories, urban farming or city farming operations.
- ✓ Larger units available for industrial clean water use
- ✓ Suitable for aeration of RAS and fish-tanks (Recirculating aquaculture system).
- ✓ aquaGaLF requires a compressor or for better results an oxygen concentrator.

The aquaGaLF uses a hybrid technology for optimization of dissolved oxygen and ultrafine bubble production. High dissolved oxygen levels in irrigation water accelerates the growth of plant roots and activates micro-organisms in the rootzone.

The aquaGaLF is available in various sizes, the smallest unit is 1.5 m³/h, 6 m³/h and the largest is 12 m³/h. There is an option to buy the aquaGaLF pumpless, in this case the user needs to add the pump locally. The best way to operate the aquaGaLF is to recirculate the water in the day storage tank, it's not recommended to use the aquaGaLF inline with the dosing unit. The aquaGaLF is equipped with a PLC for standalone operation but the PLC can be easily connected to any climate computer in a greenhouse.

The aquaGaLF works best in combination with an oxygen concentrator. Alternatively, a compressor can be used to provide gas to the unit. A compressor supplies a little less than 20% oxygen, while an oxygen concentrator supplies 95% oxygen. This makes the unit 5 times more efficient. From an electricity usage point of view it's more economical to run the unit on an oxygen concentrator. The smaller aquaGaLF units have a compressor on board the larger units need to have the compressor added locally when opting for a compressor instead of an oxygen concentrator.

aquagalf 15: nanobubble generator specs 25 lpm | acniti

General			
1	Model name	aquaGaLF Nanobubble Generator for Clean Water Applications	
2	Model number	UFB_FZ1G-15	
Liquid	Metric	Imperial	
3	Flow / minute	25 Liter	6.6 Gallon
4	Flow / hour	1.5 M3	53.0 CF
5	water temperature minimum	0 °C	32 °F
6	water temperature maximum	50 °C	122 °F
7	Strainer availability and size	Yes 400 µm	
Ambient	Metric	Imperial	
8	Ambient temperature minimum	0 °C	32 °F
9	Ambient temperature maximum	40 °C	104 °F
10	Relative humidity minimum	45 %	
11	Relative humidity maximum	85 %	
Gas	Metric	Imperial	
12	Flow / minute	1.0 Liter	0.3 Gallon
13	Flow / hour	60 Liter	16 Gallon
14	Pressure	130 kPa	19 PSI
15	Gas quality	Do not use corrosive gases. Use of Oxygen, Carbon Dioxide, Nitrogen or Ambient Air is allowed.	
16	Gas remark	Gas intake time 3 seconds / 2 minutes.	

	Electrical	Metric	Imperial
17	Unit phase Ø voltage	1 Ø 110 ~ 120 VAC	
18	Unit power consumption	1000 watts	
19	Wetted parts	PP	
20	Pump model		
21	Pump phase Ø voltage	1 Ø 100 VAC / 1 Ø 200 VAC	
22	Pump motor 50Hz	170 Watt	0.2 hp
23	Pump motor 60Hz	265 Watt	0.4 hp
24	Pump head 50Hz	15 Meter	49 ft
25	Pump head 60Hz	21 Meter	69 ft
26	Pump phase Ø voltage 60Hz	1 Ø 100 VAC / 1 Ø 200 VAC	
27	Pump suction method	Spiral magnetic drive pump	
28	Pump pressure setting	Manual via valve	
29	Control	PLC-control	
Connections			
30	Water inlet		
31	Water outlet		
32	Gas inlet		
	Dimensions & weight	Metric	Imperial
33	Dim. (w) x (d) x (h)	550 x 420 x 610 mm	21.7 x 16.5 x 24.0 inch
34	weight	69 Kg	152.1 lbs.
35	HS code	8543.70-001	
36	Shipping dim. (w)x(d)x(h)	104 x 96 x 104 cm	41 x 38 x 41 inch
37	Shipping weight	107 Kg	236 lbs.

aquagalf 60: nanobubble generator specs 100 lpm | acniti

General			
1	Model name	aquaGaLF Nanobubble Generator for Clean Water Applications	
2	Model number	UFB_FZ1G-60	
Liquid	Metric	Imperial	
3	Flow / minute	100 Liter	26 Gallon
4	Flow / hour	6.0 M3	211.9 CF
5	water temperature minimum	0 °C	32 °F
6	water temperature maximum	50 °C	122 °F
7	Strainer availability and size	Yes 400 µm	
Ambient	Metric	Imperial	
8	Ambient temperature minimum	0 °C	32 °F
9	Ambient temperature maximum	40 °C	104 °F
10	Relative humidity minimum	45 %	
11	Relative humidity maximum	85 %	
Gas	Metric	Imperial	
12	Flow / minute	4.0 Liter	1.1 Gallon
13	Flow / hour	240 Liter	63 Gallon
14	Pressure	130 kPa	19 PSI
15	Gas quality	No corrosive gases. Can use Oxygen, Carbon Dioxide, Nitrogen or Ambient Air	
16	Gas remark	Gas intake time 3 seconds / 2 minutes.	

	Electrical	Metric	Imperial
17	Unit phase Ø voltage	3 Ø 200 ~ 240 VAC	
18	Unit power consumption	2000 watts	
19	Wetted parts		
20	Pump model		
21	Pump phase Ø voltage		
22	Pump phase Ø voltage 60Hz		
23	Pump pressure setting		
24	Control		
Connections			
25	Water inlet		
26	Water outlet		
27	Gas inlet		
	Dimensions & weight	Metric	Imperial
28	HS code	8543.70-001	

aquagalf 120: nanobubble generator specs

200 lpm | acniti

General			
1	Model name	aquaGalF Nanobubble Generator for Clean Water Applications	
2	Model number	UFB_FZ1G-120	
Liquid	Metric	Imperial	
3	Flow / minute	200 Liter	53 Gallon
4	Flow / hour	12 M3	424 CF
5	water temperature minimum	0 °C	32 °F
6	water temperature maximum	45 °C	113 °F
7	Strainer availability and size	Yes 400 µm	
Ambient	Metric	Imperial	
8	Ambient temperature minimum	0 °C	32 °F
9	Ambient temperature maximum	40 °C	104 °F
10	Relative humidity minimum	45 %	
11	Relative humidity maximum	85 %	
Gas	Metric	Imperial	
12	Flow / minute	8.0 Liter	2.1 Gallon
13	Flow / hour	480 Liter	127 Gallon
14	Pressure	130 kPa	19 PSI
15	Gas quality	Do not use corrosive gases. Use of Oxygen, Carbon Dioxide, Nitrogen or Ambient Air is allowed.	
16	Gas remark	Gas intake time 3 seconds / 2 minutes.	

Electrical		Metric	Imperial
17	Unit phase Ø voltage	3 Ø 200 ~ 240 VAC	
18	Unit power consumption	3000 watts	
19	Wetted parts		
20	Pump model		
21	Pump phase Ø voltage		
22	Pump phase Ø voltage 60Hz		
23	Pump pressure setting		
24	Control		
Connections			
25	Water inlet		
26	Water outlet		
27	Gas inlet		
Dimensions & weight		Metric	Imperial
28	Dim. (w) x (d) x (h)	1200 x 550 x 1600 mm	47.2 x 21.7 x 63.0 inch
29	weight	210 Kg	463.0 lbs.
30	HS code	8543.70-001	
31	Shipping dim. (w)x(d)x(h)	160 x 90 x 200 cm	63 x 35 x 79 inch