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galf high-concentration nanobubble generator | acniti

Discover the ultrafine GaLF, a cutting-edge generator delivering the highest concentration of nanobubbles in the Finebubble industry. Designed for researchers, universities, and labs, it's perfect for fundamental research and product development. With advanced PLC controls and flexible gas options, this compact and robust unit ensures peak performance and easy operation. Read more to see how nanobubbles can boost cleaning, plant growth, and fish health.

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high-concentration galf: 1 billion+ ultrafine nanobubbles/ml

- Two models available "standard" and "high concentration"
- The ultrafine GaLF high concentration model, is equipped with IDEC latest bubble generator technology generating the highest concentration of ultrafine bubbles in the industry.
- The unit can run on all kinds of gases such as oxygen, carbon dioxide and nitrogen.
- Suitable for universities and research stations that require high concentrations of ultrafine bubbles.
- Scale up production easily with the blenderGaLF 100 or 200
- Standard GaLF: Superior features in compact size - can fit under a desk in a laboratory

The high-concentration GaLF is an ultrafine bubbles or nanobubbles generator that is producing the highest concentration of bubbles in the Finebubble industry. This flexible unit can be used with Oxygen, Air, CO2 and Nitrogen gas. The unit can be used by researchers, universities and laboratories that need a high concentration of nanobubbles for fundamental research. The high-concentration GaLF has an on-board PLC which controls pressure settings and flow, resulting in the maximum performance in the generation of ultrafine bubbles. The start and stop times can be set on the PLC also it has the option to connect an external sensor, such as a DO sensor or the ALT-9F17 Ultrafine Bubble Monitoring. That regulates the starts and stops depending on the bubble concentration.

The high-concentration GaLF can be used for general product development and for fundamental research with liquids and gas. The unit is easy to operate, has a compact design and is built from top quality components in a steel cabinet. This robust unit has a flow of 17 liters per minute, around 4.4 gallons. After development, when there is a desire to upgrade to larger volumes for production or large-scale application, acniti supplies the blenderGaLF. The blenderGaLF is available in 3 different sizes 17, 100 and 200 liter per minute.

GaLF stands for Gas Liquid Foam, it’s a pressurized mixing technology, to create ultrafine bubbles. The technology is invented and patented by IDEC. The IDEC GaLF technology succeeds in generating over one billion stable bubbles per milliliter in water that are as tiny as 100 nm or less than 1 micron in diameter. Using this ultrafine bubble water can help biological processes in plants and fish. The fine bubbles are negatively charged, which strengthen water's ability to better clean and remove contaminants.

Contact us for your project, to have nanobubbles implemented

high-concentration galf specs: fz1n-10 nanobubble | acniti

	General		
1	Model name	High-Concentration GaLF: 1 Billion+ Ultrafine Nanobubbles/mL	
2	Model number	UFB_FZ1N-10	
	Liquid	**Metric**	**Imperial**
3	Flow / minute	17 Liter	4.4 Gallon
4	Flow / hour	1.0 M3	35.4 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	45 °C	113 °F
10	Relative humidity minimum	45 %	
11	Relative humidity maximum	85 %	
	Gas	**Metric**	**Imperial**
12	Flow / minute	0.8 Liter	0.2 Gallon
13	Flow / hour	51 Liter	13 Gallon
14	Pressure	0.001 kPa	0 PSI
15	Gas quality	Do not use corrosive gases. Use of Oxygen, Carbon Dioxide, Nitrogen or Ambient Air is allowed.	
16	Gas remark		

	Electrical	Metric	Imperial
17	Unit phase Ø voltage	1 Ø 100 ~ 120 VAC	
18	Unit power consumption	2000 watts	
19	Wetted parts	SUS304, SUS303, SUS316, SCS13, SCS14, SUS630, PP Nylon, PFE, EPDM, SiC, PTFE, NBR	
20	Pump model	Grundfos CRN1-15-A-FGJ-G-V-HQQV	
21	Pump phase Ø voltage	3 Ø 200-240 D/380-415 Y V	
22	Pump motor 50Hz	750 Watt	1.0 hp
23	Pump head 50Hz	69.6 Meter	228 ft
24	Pump phase Ø voltage 60Hz		
25	Pump suction method	Vertical multistage centrifugal pump	
26	Pump pressure setting	Automatic	
27	Control	PLC-control	
	Connections		
28	Water inlet	25A hose connector ~ 1"	
29	Water outlet	20A hose connector ~ 3/4"	
30	Gas inlet	10 mm push to connect fitting or 3/8" on request	
	Dimensions & weight	**Metric**	**Imperial**
31	Dim. (w) x (d) x (h)	600 x 600 x 1100 mm	23.6 x 23.6 x 43.3 inch
32	weight	100 Kg	220.5 lbs.
33	HS code	8543.70-001	
34	Shipping dim. (w)x(d)x(h)	80 x 80 x 130 cm	31 x 31 x 51 inch
35	Shipping weight	120 Kg	265 lbs.
	Remarks		
36	Other remarks	✓ Unit has 3 drain connections ✓ Indoor use only	

ultrafinegalf standard: nanobubble generator specs | acniti

	General		
1	Model name	High-Concentration GaLF: 1 Billion+ Ultrafine Nanobubbles/mL	
2	Model number	UFB_FZ1N-05S	
	Liquid	**Metric**	**Imperial**
3	Flow / minute 50 Hz	8.0 Liter	2.1 Gallon
4	Flow / minute 60 Hz	9.0 Liter	2.4 Gallon
5	Flow / hour 50 Hz	480 Liter	127 Gallon
6	Flow / hour 60 Hz	540 Liter	143 Gallon
7	water temperature minimum	0 °C	32 °F
8	water temperature maximum	50 °C	122 °F
9	Strainer availability and size	Yes 400 µm	
	Ambient	**Metric**	**Imperial**
10	Ambient temperature minimum	0 °C	32 °F
11	Ambient temperature maximum	40 °C	104 °F
12	Relative humidity minimum	45 %	
13	Relative humidity maximum	85 %	
	Gas	**Metric**	**Imperial**
14	Flow / minute	0.5 Liter	0.1 Gallon
15	Flow / minute	0.6 Liter	0.2 Gallon
16	Flow / hour	30 Liter	7.9 Gallon

	Gas	Metric	Imperial
17	Flow / hour	36 Liter	9.5 Gallon
18	Pressure 50 Hz	0.001 kPa	0 PSI
19	Pressure 60 Hz	0.001 kPa	0 PSI
20	Gas quality	Do not use corrosive gases. Use of Oxygen, Carbon Dioxide, Nitrogen or Ambient Air is allowed.	
21	Gas remark		
	Electrical	**Metric**	**Imperial**
22	Unit phase Ø voltage	1Ø 100 VAC	
23	Unit power consumption	1000 watts	
24	Wetted parts	Stainless steel SUS304	
25	Pump model	Asahi Kogyo APH-31-CA	
26	Pump phase Ø voltage	1 Ø 100 VAC 50/60Hz	
27	Pump phase Ø voltage 60Hz		
28	Pump pressure setting		
29	Control	PLC-control	
	Connections		
30	Water inlet	1/2 inch, 15A	
31	Water outlet	1/2 inch, 15A	
32	Gas inlet		
	Dimensions & weight	**Metric**	**Imperial**
33	Dim. (w) x (d) x (h)	300 x 360 x 543 mm	11.8 x 14.2 x 21.4 inch
34	weight	30 Kg	66.1 lbs.
35	HS code	8543.70-001	