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## minigalf nanobubbles

The miniGaLF is an entry level GaLF model designed for companies, universities, research institutes and individuals that want to learn about ultrafine bubble technology.



## minigalf nanobubbles

### ultrafine minigalf nanobubble generator

- ✓ compact design, small footprint
- ✓ Direct connection to faucet
- ✓ miniGaLF Plus: expand the unit with a pump, to recirculate water and generate high concentrated bubble water.
- ✓ efficient gas dissolution
- ✓ 18 liter Plexiglass water tank available.

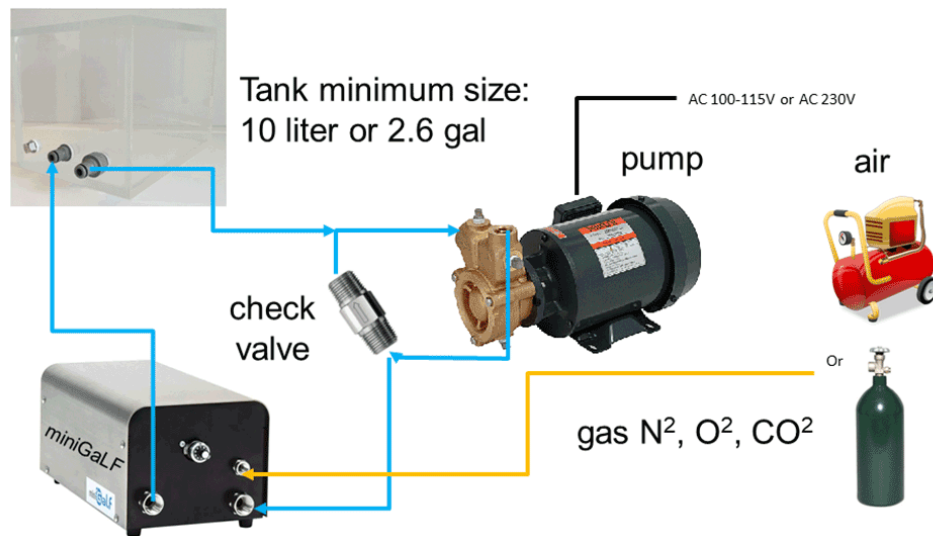
### research

The miniGaLF is an entry-level GaLF model designed for companies, universities, research institutes, and individuals who want to learn about ultrafine bubble technology. The miniGaLF offers numerous possibilities for creating your ultrafine bubble application, as it is easily fitted and retrofitted into existing machines and processes. In the most straightforward setup, just connect the miniGaLF to your water tap and add a gas source, either from a compressor or a gas cylinder, and you are ready to go. In the more advanced setup, you can add a recirculation system to achieve higher concentrations of ultrafine bubble water, which we refer to as Plus as an option. The "-Plus" version has a check valve and a pump. Read the blog post about the miniGaLF -Plus version for more information on how to integrate the unit with a pump.

### easy to install and use

The nanobubble unit is the most popular model. The miniGaLF comes with a power adapter from 115 Volts to 230 Volts, so it always matches the local power in your office or home. When connecting the miniGaLF to a faucet, ensure the water supply is at least 7.5 liters/minute. Test this by running the faucet for 1 minute, collecting the water in a bucket, and measuring the volume.

## acniti miniGaLF -Plus



### more options

When you need to work with ozone or want to avoid turbulence, check out our microStar.

Besides the miniGaLF, Acniti provides other GaLF models such as agriGaLF, high-concentration GaLF, and custom-built units. When larger volumes of liquids are required, consider the agriGaLF as this is our high-volume solution, or the Turbiti UFB Mixers for lake, pond, or seawater treatment. For researchers and product developers who require the highest density of bubbles, Acniti provides the high-concentration GaLF. This top model delivers the smallest bubble size with the highest concentration of ultrafine bubbles in the industry.

## minigalf ufb specs

|    | Description                    | Metric                                                                   | Imperial                                                                 |
|----|--------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------|
| 1  | Model name                     | miniGaLF UFB                                                             | miniGaLF UFB                                                             |
| 2  | Model number                   | FZ1N-04FB                                                                | FZ1N-04FB                                                                |
|    | Liquid                         | Metric                                                                   | Imperial                                                                 |
| 3  | Flow / minute                  | 7.5 Liter                                                                | 2.0 Gallon                                                               |
| 4  | Flow / hour                    | 450 Liter                                                                | 119 Gallon                                                               |
| 5  | water temperature minimum      | 0 °C                                                                     | 32 °F                                                                    |
| 6  | water temperature maximum      | 50 °C                                                                    | 122 °F                                                                   |
| 7  | Strainer availability and size | No strainer (Remark minimum water pressure miniGaLF 300kPa, or 43.5 psi) | No strainer (Remark minimum water pressure miniGaLF 300kPa, or 43.5 psi) |
| 8  | Recommended inlet filter(s)    | Small pump inlet filter series                                           | Small pump inlet filter series                                           |
|    | Ambient                        | Metric                                                                   | Imperial                                                                 |
| 9  | Ambient temperature minimum    | 0 °C                                                                     | 32 °F                                                                    |
| 10 | Ambient temperature maximum    | 40 °C                                                                    | 104 °F                                                                   |
| 11 | Relative humidity minimum      | 45 %                                                                     | 45 %                                                                     |
| 12 | Relative humidity maximum      | 85 %                                                                     | 85 %                                                                     |
|    | Gas                            | Metric                                                                   | Imperial                                                                 |
| 13 | Minimum flow / minute          | 0.3 Liter                                                                | 0.1 Gallon                                                               |
| 14 | Maximum flow / minute          | 0.4 Liter                                                                | 0.1 Gallon                                                               |
| 15 | Minimum flow / hour            | 18 Liter                                                                 | 4.8 Gallon                                                               |
| 16 | Maximum flow / hour            | 24 Liter                                                                 | 6.3 Gallon                                                               |

| Gas         |                           | Metric                                                                                         | Imperial                                                                                       |
|-------------|---------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| 17          | Pressure minimum          | 100 kPa                                                                                        | 15 PSI                                                                                         |
| 18          | Pressure maximum          | 300 kPa                                                                                        | 44 PSI                                                                                         |
| 19          | Gas quality               | Do not use corrosive gases. Use of Oxygen, Carbon Dioxide, Nitrogen or Ambient Air is allowed. | Do not use corrosive gases. Use of Oxygen, Carbon Dioxide, Nitrogen or Ambient Air is allowed. |
| 20          | Gas remark                | Gas intake time 5 seconds. Produce bubbles time 50 seconds.                                    | Gas intake time 5 seconds. Produce bubbles time 50 seconds.                                    |
| Electrical  |                           | Metric                                                                                         | Imperial                                                                                       |
| 21          | Unit phase Ø voltage      | 1 Ø 100 ~ 240 VAC                                                                              | 1 Ø 100 ~ 240 VAC                                                                              |
| 22          | Unit power consumption    | 65 watts                                                                                       | 65 watts                                                                                       |
| 23          | Wetted parts              | SUS304, Nylon, Copper, PVC                                                                     | SUS304, Nylon, Copper, PVC                                                                     |
| 24          | Pump model                |                                                                                                |                                                                                                |
| 25          | Pump phase Ø voltage      |                                                                                                |                                                                                                |
| 26          | Pump phase Ø voltage 60Hz |                                                                                                |                                                                                                |
| 27          | Pump pressure setting     |                                                                                                |                                                                                                |
| 28          | Control                   |                                                                                                |                                                                                                |
| Pump        |                           |                                                                                                |                                                                                                |
| 29          | @option                   | miniGaLF pump option Lowara PM21                                                               |                                                                                                |
| 30          | @option                   | Ebara PRA 0.50                                                                                 |                                                                                                |
| 31          | @option                   | Aquavar e-ABII                                                                                 |                                                                                                |
| 32          | @option                   | Grundfos CM1-4                                                                                 |                                                                                                |
| Connections |                           | Metric                                                                                         | Imperial                                                                                       |
| 33          | Water inlet               | Rc 1/2"                                                                                        | Rc 1/2"                                                                                        |
| 34          | Water outlet              | RC 1/2                                                                                         | RC 1/2                                                                                         |
| 35          | Gas inlet                 | RC 1/4                                                                                         | RC 1/4                                                                                         |

| Dimensions & weight |                              | Metric                                                                                         | Imperial              |
|---------------------|------------------------------|------------------------------------------------------------------------------------------------|-----------------------|
| 36                  | Dim. (w) x (d) x (h)         | 175 x 320 x 142 mm                                                                             | 6.9 x 12.6 x 5.6 inch |
| 37                  | weight                       | 6.9 Kg                                                                                         | 15.2 lbs.             |
| 38                  | Shipping dim.<br>(w)x(d)x(h) | 32 x 34 x 42 cm                                                                                | 13 x 13 x 17 inch     |
| 39                  | Shipping weight              | 8.5 Kg                                                                                         | 19 lbs.               |
| Remarks             |                              |                                                                                                |                       |
| 40                  | Other remarks                | <input checked="" type="checkbox"/> Remark minimum water pressure miniGaLF 300kPa, or 43.5 psi |                       |