NAVA



AQUAbibe Watermaker

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Our mission:
With its seemingly boundless expanse, the ocean appears to offer an inexhaustible source of water. Yet for sailors and yacht owners, obtaining drinking water on longer voyages has always been a major challenge. Carrying large quantities of fresh water requires storage space and adds weight. Relying on external water sources is not always practical or safe.

Responsibility on board starts with drinking water. Given the huge garbage patches in the world's oceans, the AQUAbibe Watermaker is the sustainable alternative to plastic bottles – for maximum comfort and clean oceans.



The solution:
AQUAbibe Watermaker offers state-of-the-art desalination technology with user-friendly components developed specifically for marine environments. Thanks to advanced reverse osmosis, the AQUAbibe system efficiently filters out salt, bacteria and other impurities, turning seawater into perfect drinking water. Its compact design keeps the space required to a minimum, making it a practical solution for smaller vessels too.

About us:
AQUAbibe was founded in 2021 and has stood for fresh drinking water from modern, robust seawater desalination systems ever since. The Latin expression "Aquam bibens" can be loosely translated as "drinking water" and is the origin of our company name.

All AQUAbibe Watermaker desalination systems are built from German and European
AQUAbibe Watermaker bestehen aus deutschen bzw. europäischen Bauteilen und verwenden weltweit verfügbare Standardkomponenten. So lassen sich Wartung und Service auch fernab der Heimat praktisch überall durchführen. Gerade im Hinblick auf die Langfahrt setzen wir

How much water do I need?

As a rough guide, one person on board uses approx. 30 to 50 litres of water per day. This includes drinking water as well as water for showering, cooking, washing up and other uses.
A crew of four on board therefore needs at least 120 litres of water per day.
Experience shows that this crew needs approx. 200 litres per day once a watermaker is on board. The water consumption previously measured on board will inevitably rise, as water is now available without limit.

What size watermaker should I choose?

Several factors play a role here. As a general rule, a seawater desalination system should be operated regularly. At the same time, it consumes power and generates noise during operation. You will therefore want to run the watermaker at regular intervals, but for as short a time as possible.
Ideally, a run time of perhaps 1 to 2 hours every two days is enough to refill the tanks.
So if my crew needs approx. 100 litres a day, a watermaker producing approx. 100 litres of fresh water per hour would be ideal.

Is the fresh water drinkable?

The fresh water produced with the AQUAbibe Watermaker is drinkable. In the reverse osmosis process with its semi-permeable membrane, only pure drinking water with a TDS content* of up to 500 ppm passes through. The WHO states that water of up to 1000 ppm can be drunk safely. Countries such as the UAE and the Bahamas are supplied with desalinated water.
People often ask about the minerals the body needs that are no longer present in RO drinking water. This is not a concern either, as most of the necessary minerals are already absorbed through food.

* TDS: Total Dissolved Solids – a measure of the mineral content in water

Which power supply does my watermaker need – 230 V AC or 12 V DC?

A well-designed watermaker fits into everyday life on board your yacht: it produces the required amount of water within the desired run time while making sensible use of the available power supply.
For small to medium applications, *NAVA* PURE offers particular flexibility. Depending on the model, the high-pressure drive is designed for 230 V AC or 12 V DC, while the separate boost pump on all *NAVA* PURE models always runs on 12 V DC.
NAVA CORE combines high water output for medium to large applications with a complete 230 V AC supply. No additional DC installation is required, which reduces installation effort.
Where the required 230 V AC comes from does not matter to the watermaker: either a sufficiently sized inverter or a generator can be used. What matters is that the required power is reliably available.
The AQUAbibe team will help you to optimally match water output, run time and available power supply.



Why a modular watermaker?

The available installation space is different on every yacht. That is why our AQUAbibe *NAVA* CORE and *NAVA* PURE watermakers have a modular design: the individual assemblies do not have to be installed as one large unit in a single location, but can be positioned within the technical specifications to suit the space available on board.
This set-up and the high degree of pre-assembly of all assemblies make installing your AQUAbibe Watermaker quick and easy.

NAVA PURE



AQUAbibe NAVA PURE offers flexible ways to adapt the freshwater supply to the existing on-board electrical system, the required water demand and the available installation space.

The high-pressure drive runs on 230VAC, while the separate boost pump operates on 12VDC. The 230VAC can come from either a generator or a suitably sized inverter. With a suitable battery bank and solar system, NAVA PURE can thus be flexibly integrated into modern on-board energy systems.

PURE also remains flexible and extremely space-saving when it comes to installation space: thanks to the separate pumps and the modular design, NAVA PURE fits even into tight or awkwardly shaped installation spaces. The standard versions use FilmTec SW30-2540 membranes. COMPACT versions with the shorter FilmTec SW30-2521 membranes are also available for selected models.

This allows you to choose the right combination of power supply, freshwater output and space requirements.

NAVA PURE

Model	Expected Freshwater Output [l/h]	Number of RO Membranes SW30-2540	Min. Electrical Power [W]	Min. Generator Output [kW]
NAVA PURE 05 50	40–55	1	630	2.0
NAVA PURE 07 55	45–60	1	850	2.2
NAVA PURE 07 85	70–95	2	850	2.2
NAVA PURE 07 105	85–110	3	850	2.2
NAVA PURE 11 65	50–70	1	1,250	2.2
NAVA PURE 11 100	85–110	2	1,250	2.2
NAVA PURE 11 140	120–150	3	1,250	2.2
NAVA PURE 15 75	60–80	1	1,700	3.5
NAVA PURE 15 135	115–140	2	1,700	3.5
NAVA PURE 15 180	160–190	3	1,700	3.5

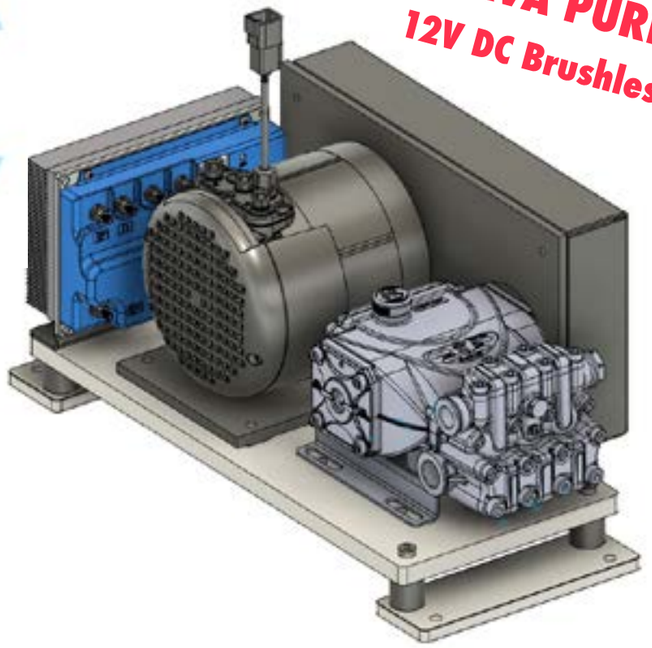
NAVA PURE COMPACT

Model	Expected Freshwater Output [l/h]	Number of RO Membranes SW30-2521	Min. Electrical Power [W]	Min. Generator Output [kW]
NAVA PURE 05 50 COMPACT	40–55	2	630	2.0
NAVA PURE 07 55 COMPACT	45–65	2	850	2.2
NAVA PURE 07 75 COMPACT	60–80	3	850	2.2

General notes and conditions:

- Expected freshwater output depends on operating pressure, salinity, seawater temperature and membrane variation
- Values are based on 55-60 bar operating pressure, 3.5% salinity, 25 °C seawater temperature and new RO membranes
- Electrical power consumption figures are guide values. They largely determine the peak output required from the generator. The starting current of the AC motors is approx. 5 times the operating current (minimum electrical power consumption)

NEW: NAVA PURE DC12
12V DC Brushless Watermaker



On bluewater passages, far from the nearest marina, your own freshwater supply determines how independent you are on board. NAVA PURE DC connects directly to your yacht's 12VDC on-board electrical system. A brushless 12VDC motor drives the high-pressure pump, and as on all PURE models, the separate boost pump runs on 12VDC. No 230VAC supply is required for the watermaker. This means that even smaller yachts without a generator or a large inverter can produce their own fresh water on board.

The brushless motor works without carbon brushes, making it low-wear and virtually maintenance-free – a key advantage on long passages. There is no need to change brushes en route. Like all AQUA-bibe Watermakers, NAVA PURE DC is built from German and European components, providing a solid basis for many years of use on board.

NEW from Jan. 2027 — **NAVA PURE DC12**

Model	Expected Freshwater Output [l/h]	Number of RO Membranes	Min. Electrical Power [W DC]
NAVA PURE DC12 05 50	40–55	1 × SW30-2540	550
NAVA PURE DC12 05 30 COMPACT	20–35	1 × SW30-2521	550
NAVA PURE DC12 05 50 COMPACT	40–55	2 × SW30-2521	550

The modular and extremely space-saving design make it possible to position the individual assemblies within the technical specifications to suit the space available on board. This means that NAVA PURE DC can be installed even on yachts with limited installation space.

NEW in 2027 — **NAVA PURE DC24**

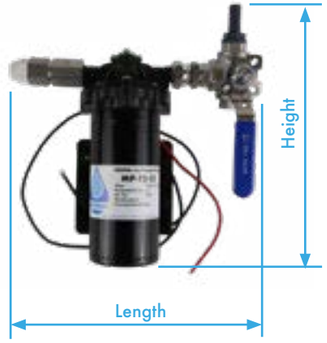
NEW in 2027 — **NAVA PURE DC48**

In future, versions with 24VDC and 48VDC will complement the *NAVA PURE DC* series. Higher voltages allow greater drive power at lower currents, so that larger quantities of fresh water also become possible with DC watermakers. Especially on bluewater yachts with modern hybrid or fully electric propulsion, the 48VDC version opens up further possibilities for producing larger quantities of fresh water directly from the on-board electrical system.

General notes and conditions:
- Expected freshwater output depends on operating pressure, salinity, seawater temperature and membrane variation
- Values are based on 55-60 bar operating pressure, 3.5% salinity, 25°C seawater temperature and new RO membranes
- Electrical power consumption figures are guide values. They largely determine the required DC power for the high pressure pump. Additionally app 100 W are consumed by the DC Boost Pump.
- Picture of DC Pump-Unit is a mock-up and can be changed without further communication.



	Length [mm]	Depth [mm]	Height [mm]
NAVA PURE Series	200	120	90



	Length [mm]	Depth [mm]	Height [mm]
NAVA PURE Series	300	150	200

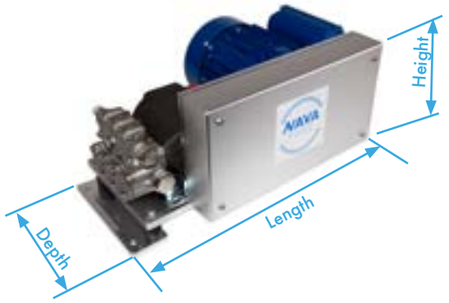


	Length [mm]	Depth [mm]	Height [mm]
NAVA Series	247	130	375



	Length [mm]	Width [mm]	Height [mm]
1 RO Membrane SW30-2540	1,200	120	115
2 RO Membranes SW30-2540	1,200	270	115
3 RO Membranes SW30-2540	1,200	365	115

	Length [mm]	Width [mm]	Height [mm]
1 RO Membrane SW30-2521	700	120	115
2 RO Membranes SW30-2521	700	270	115
3 RO Membranes SW30-2521	700	365	115



	Length [mm]	Depth [mm]	Height [mm]
NAVA PURE 05	505	340	240
NAVA PURE 07	505	350	240
NAVA PURE 11	525	345	245
NAVA PURE 15	525	365	245



	Length [mm]	Depth [mm]	Height [mm]
NAVA PURE Series	250	150	250

Included Components

- HP pump with 230V AC electric motor, or 12V DC motor on NAVA PURE DC12 models
- Boost pump 12V DC, pre-assembled three-way valve for flushing
- Control panel with 12V DC control voltage, one pressure gauge, switch-over between tank and 2nd freshwater outlet
- Electrical control box
- Pre-assembled pressure vessels for RO membranes (1 to 3 membranes depending on model)
- Original FilmTec SW30-2540 reverse osmosis membranes for NAVA PURE or
- Original FilmTec SW30-2521 reverse osmosis membranes for NAVA PURE COMPACT
- Pre-assembled pre-filter unit (20µm and 5µm pre-filters)
- Separate activated carbon filter for flushing
- High-pressure hoses (2m and 2.5m long)
- Installation kit (fittings, hoses for seawater, brine and fresh water, pre-filters, ...)

Is my watermaker ready for bluewater cruising?

AQUAbibe Watermakers are built from German and European components and use standard parts that are available worldwide. This means that maintenance and servicing can be carried out practically anywhere, even far from home. With bluewater cruising in mind, we deliberately keep electronics to a minimum. This reduces potential sources of error and makes maintenance easier en route. For long passages, we recommend carrying the most important wear parts on board. The RO membrane lasts around seven years – or longer if treated well, with regular pre-filter changes and flushing with chlorine-free water.
The AQUAbibe team will gladly help you prepare for your bluewater voyage and can be reached at any time by phone and WhatsApp.

Why doesn't my watermaker always produce the same amount of fresh water?

The freshwater output in our tables is based on 55-60 bar operating pressure, 3.5% salinity and 25 °C seawater temperature. Water temperature has the greatest influence. As a rule of thumb, output changes by about 3% per degree. At a seawater temperature of 15 °C, a watermaker will therefore deliver around 30% less fresh water than specified. Salinity also plays a role: in the saltier Mediterranean, output falls, while in the Baltic Sea, with its much lower salinity, it tends to rise.
The AQUAbibe team will be happy to help you estimate the amount of water you can expect in your cruising area.

Can I run the watermaker in a harbour?

Better not. In harbours, at fuel docks and in busy anchorages, the water can contain traces of diesel, petrol or oil. Alongside chlorine, oil products are among the greatest threats to the RO membrane and also quickly clog the pre-filters. As a rule of thumb: only make water where you would also want to go swimming yourself. Clear, clean seawater protects the membrane and pre-filters and ensures a long life for your watermaker.

What should I do during longer periods of inactivity or winter lay-up?

A watermaker should be run as regularly as possible – the more regularly it runs, the longer it lasts. For shorter breaks, the system is flushed with fresh water after use. If, on the other hand, the watermaker is not used for several weeks or months, for example during winter lay-up, it should be pickled. This involves filling the system with a pickling solution that protects the RO membrane until it is next put into operation.
The appropriate pickling agent is part of the AQUAbibe Service Kit. The AQUAbibe team will be happy to advise you on preparing for winter lay-up.



How much fresh water you need on board does not depend on the size of your yacht alone. Crew, usage profile and comfort expectations also determine the required water output. NAVA CORE delivers up to 240 litres of fresh water per hour, depending on the model.

The boost pump and high-pressure pump are integrated into a compact, pre-assembled Pump Unit and driven by a shared AC motor. This reduces installation effort, eliminates the need for a separate electric boost pump and minimises potential sources of error during installation and operation. The integrated design thus supports reliable freshwater production on board.

NAVA CORE

Model	Expected Freshwater Output [l/h]	Number of RO Membranes SW30-2540	Min. Electrical Power [W]	Min. Generator Output [kW]
NAVA CORE 15 130	115–140	2	1,700	3.5
NAVA CORE 15 170	155–180	3	1,700	3.5
NAVA CORE 22 175	160–185	2	2,500	5.0
NAVA CORE 22 240	230–255	3	2,500	5.0

NAVA CORE TWIN

Model	Expected Freshwater Output [l/h]	Number of RO Membranes SW30-2540	Min. Electrical Power [W]	Min. Generator Output [kW]
NAVA CORE TWIN 15 340	310–360	2 × 3	2 × 1,700	6.0
NAVA CORE TWIN 22 480	460–510	2 × 3	2 × 2,500	8.0

For higher or varying demand, the NAVA CORE TWIN models are available with up to 480 litres per hour. The two watermakers are mounted on a common base and can be operated individually or in parallel: one unit when its output is sufficient, or both systems together for full water output.

If one unit is undergoing maintenance or fails, the second watermaker remains available. NAVA CORE TWIN thus adds important redundancy on board to its high freshwater output.

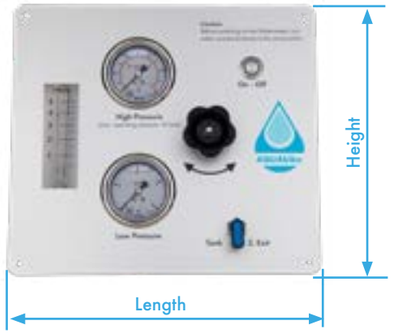
General notes and conditions:
- Expected freshwater output depends on operating pressure, salinity, seawater temperature and membrane variation
- Values are based on 55-60 bar operating pressure, 3.5% salinity, 25°C seawater temperature and new RO membranes
- Electrical power consumption figures are guide values. They largely determine the peak output required from the generator. The starting current of the AC motors is approx. 5 times the operating current (minimum electrical power consumption)



	Length [mm]	Depth [mm]	Height [mm]
NAVA CORE 15	525	365	295
NAVA CORE 22	560	440	305



	Length [mm]	Depth [mm]	Height [mm]
NAVA CORE Series	200	120	90



	Length [mm]	Depth [mm]	Height [mm]
NAVA Series	280	150	250



	Length [mm]	Depth [mm]	Height [mm]
NAVA Series	247	130	375

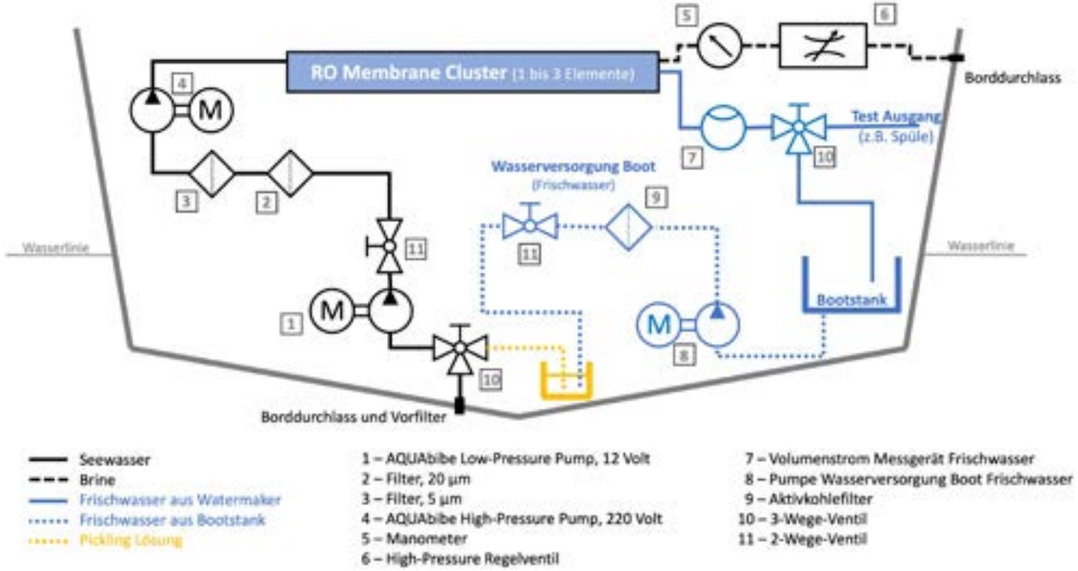


	Length [mm]	Width [mm]	Height [mm]
2 RO Membranes SW30-2540	1,200	270	115
3 RO Membranes SW30-2540	1,200	365	115

Included Components

- Pump Unit with 230V AC electric motor, HP plunger pump and impeller boost pump made of seawater-resistant stainless steel, pre-assembled three-way valve for flushing
- Control panel with 12V DC control voltage, one pressure gauge each for high pressure and feed pressure, switch-over between tank and 2nd freshwater outlet
- Electrical control box
- Pre-assembled pressure vessels for RO membranes (2 to 3 membranes depending on model)
- Original FilmTec SW30-2540 reverse osmosis membranes
- Pre-assembled pre-filter unit (20µm and 5µm pre-filters)
- Separate activated carbon filter for flushing
- High-pressure hoses (2m and 2.5m long)
- Installation kit (fittings, hoses for seawater, brine and fresh water, pre-filters, ...)

Typical watermaker installation on board



Position of the watermaker

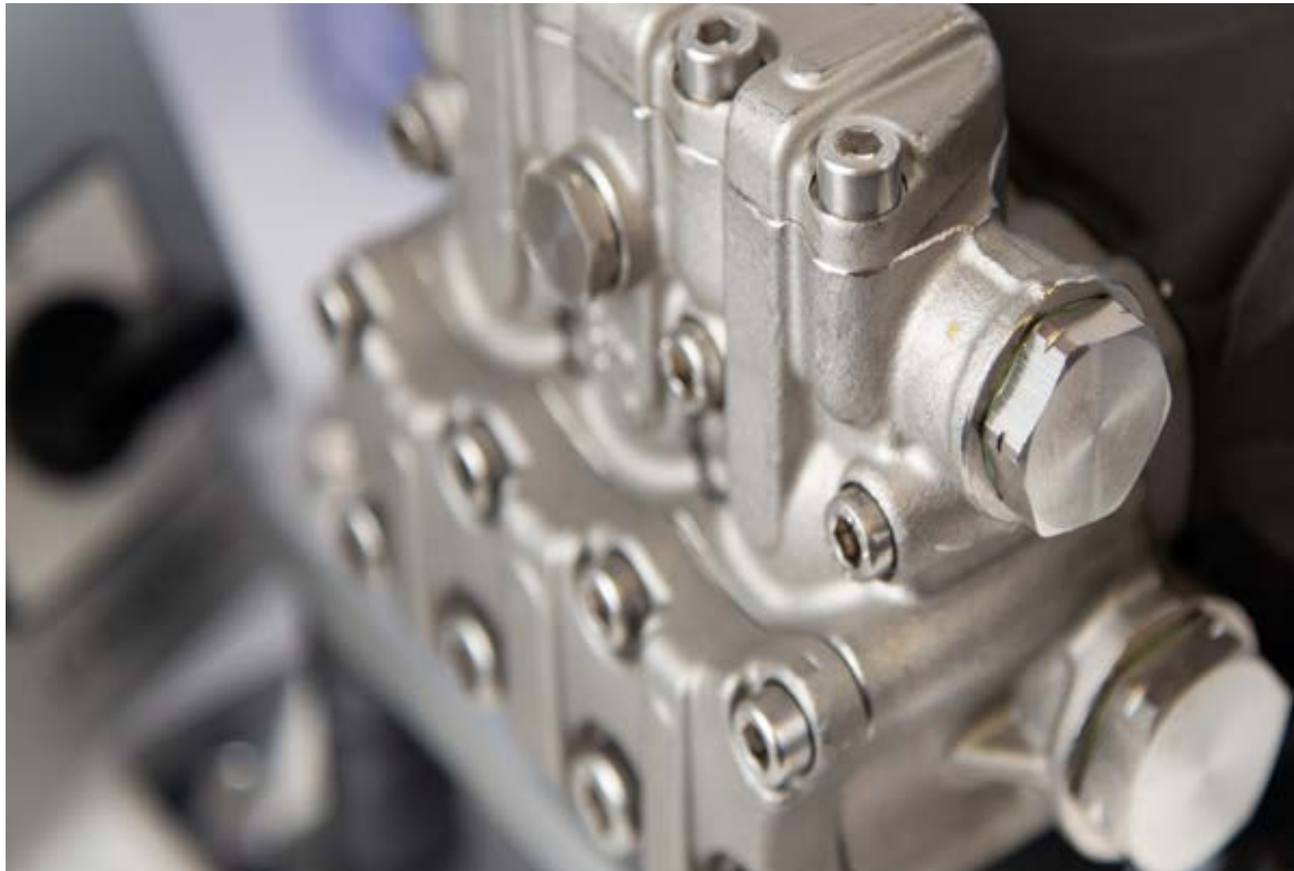
Both the AQUAbibe *NAVA* CORE and the *NAVA* PURE watermakers should be positioned below the waterline wherever possible, so that the boost pumps do not have to self-prime and the intake lines do not run dry when the system is idle.
Our *NAVA* PURE is more flexible here thanks to its separate boost pump, as only this pump needs to be below the waterline. In special cases, the HP pump of the *NAVA* PURE can also be mounted below the waterline, allowing the boost pump to be omitted. Please ask the AQUAbibe Watermaker team about this.

Do I need a new through-hull fitting?

Two through-hull fittings are needed to operate the watermaker: one for the incoming seawater and a second one as an outlet for the brine. In principle, the inlet can be shared with an existing inlet of another consumer, but in this case you must make sure that enough water reaches the watermaker. It is also important that this through-hull is fitted at the lowest possible point of the boat to ensure a constant flow of water.
For the outlet, a through-hull fitting above the waterline is recommended.
For all through-hulls, the diameters should be as large as possible.

Can I install the watermaker myself?

Our AQUAbibe Watermakers come pre-assembled in modules, making installation quick and easy. Thanks to the integration of the high-pressure pump and boost pump in one Pump Unit, installing the AQUAbibe *NAVA* CORE is particularly easy.
For the electrical installation of our watermakers, we recommend calling in a qualified specialist.
For all other questions, our team at AQUAbibe Watermaker is available at any time by phone and WhatsApp.



www.aquabibe-watermaker.com

AQUAbibe Watermaker

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