



ALTYM
DIRECT FLOW

USER MANUAL

REVERSE OSMOSIS EQUIPMENT

ALT Y VM
D I R E C T F L O W

ÍNDICE		P
1	User manual	4
2	Technical manual	8
3	Sanitization procedure	14
4	Data sheet	19

USER MANUAL

FOR REVERSE OSMOSIS EQUIPMENT

0. MAIN FEATURES



CLICK

QUICK CONNECTIONS
AND MAXIMUM SECURITY



ELECTRONIC ADAPTER

GREATER SECURITY
AND EFFICIENCY



FILTER CONTROL

AUTOMATIC
MAINTENANCE
NOTICE



DOUBLE FLOW

HIGHER FLOW
OF WATER DISPENSED



SOLENOID VALVE

IMMEDIATE CONTROL
SECURITY MESH



DIRECT ACCESS

EASE ACCESS AND
MAINTENANCE



AQUASTOP

AUTOMATIC SYSTEM
LEAK DETECTION



QUALITY CONTROL

CONDUCTIVITY
CONTROL



DIRECT FLOW

DIRECT PRODUCTION OF
OSMOTIZED WATER



SOUND WARNINGS

SOUND
WARNINGS



LED STATUS

STATUS
INDICATIONS



HIGH EFFICIENCY

RECOVERY
IN THE PRODUCTION



HIGH PERFORMANCE MOTOR

HIGH ENGINE
PERFORMANCE



EXCLUSIVE MEMBRANE

WITH POST FILTER
INCORPORATED



**SMART
FAUCET**
ELECTRONIC
TAP



CAPSULATED MEMBRANE

MAXIMUM HYGIENE
EASY MAINTENANCE



Please keep this manual, which includes the warranty and service book sections, in order to provide you with better after-sales service.

1. INTRODUCTION

Congratulations. You have acquired an excellent domestic water treatment equipment.

This kit will help you improve the characteristics of the water.

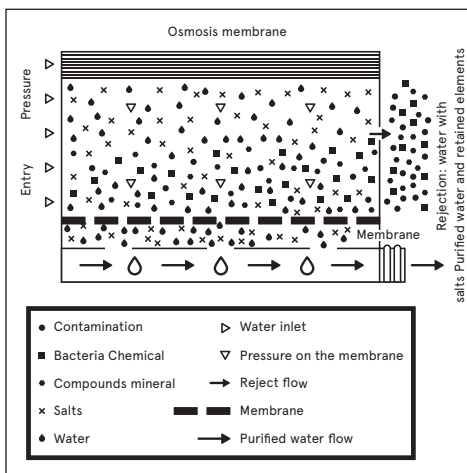
2. WHAT IS OSMOSIS?

Natural or direct osmosis is the most common in nature, since semipermeable membranes are part of the vast majority of organisms (for example, plant roots, organs of our own body, cell membranes, etc ...)

When two solutions of different salt concentration are separated by a separate membrane Mypermeable, naturally, there is a flow of water from the solution with the lowest concentration to the one with the highest concentration. This flow continues until the concentrations on both sides of the membrane equalize.

When it comes to reversing this process and achieving a flow of water with a lower concentration of salts from of one with a higher concentration, a sufficient pressure of the water with a higher concentration must be applied to the membrane to overcome the tendency and natural flow of the system. This process is what we call reverse osmosis. At present, reverse osmosis is one of the best methods to improve the characteristics of water, through a physical system (without the use of chemical products).

The water to be purified exerts pressure on the semi-permeable membrane, so that part of it will pass through the pores of the membrane (osmotic water), while the rest of the water (rejected or with a high concentration of salts) will be diverted towards the drain (Fig. 1).



3. PRIOR WARNINGS

! ATTENTION: Read carefully the warnings described in the corresponding section of the Technical Manual.

! ATTENTION: These equipments ARE NOT POTABLE-RES of water. In the event that the water to be treated comes from a public supply (and therefore complies with current legislation), these equipments will they will substantially improve the quality of the water.

Water treatment equipment requires periodic maintenance carried out by qualified technical personnel, in order to guarantee the quality of the water produced and supplied.

3.1. USE OF TEAM

· After a few days (less than a week) in the that the equipment has been at rest without being used, before consuming the dispensed water, open the tap and discard the dispensed water for 5 minutes.

· When you are going to be absent for more than a week, close the water inlet tap to the equipment, drain it and disconnect it from the power supply. Once the equipment is depressurized, remove the filter cartridges and place them in a clean plastic bag and leave them in the refrigerator (not freezer) to limit bacterial growth. Place a blotting paper inside the cartridge housings to absorb any drops that may have escaped. When you return, connect the electrical supply of the same, open the inlet valve and the tap. Let the water run out for at least 15 minutes prior to your water consumption.

! ATTENTION: After a prolonged period (more than a month) in which the equipment has been without working or producing water, contact with your dealer in order to to perform proper sanitation and maintenance.

· Remove entire jugs or bottles and avoid occasional removal of glasses to improve equipment performance.

! ATTENTION: You must pay special attention to the cleaning and hygiene of the osmosis tap, as usual and especially at the time of performance of regular maintenance and sanitation. To do this, use the sanitizing spray and disposable kitchen paper for single use. In no case should you use the cloth to dry your hands or the multipurpose basket used for cleaning the kitchen.

· This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

3.2. RECOMMENDATIONS FOR THE CORRECT USE OF OSMOTIZED WATER

· If you wish to feed any other point of consumption with osmosis water (such as a refrigerator with an ice cube dispenser, another tap, etc ...), the canalization should not be carried out with a metal tube, as this would give the water a bad taste. Always use plastic tubing.

! **ATTENTION: The water provided by the domestic osmosis equipment is LOW MINERALIZATION. The mineral salts that the body needs. Human resources are mainly provided by food, especially dairy products and to a lesser extent by drinking water.**

· It is recommended not to use cooking utensils aluminum for cooking with osmotic water.

4. BASIC OPERATION

The mains water to be treated enters the equipment through the sediment and carbon filter. In this filtration stage, suspended particles, chlorine, its derivatives and other organic substances are retained.

The passage of water into the equipment is controlled by a cut-off solenoid valve.

The water, after being treated in the filtration stage, is driven towards the reverse osmosis membranes. The equipment incorporates a pump to increase the pressure, since the pressure of the water on the membrane makes the reverse osmosis process possible.

The osmotized water comes out of the equipment through the tap for consumption. Reject water or water with excess salts and other dissolved substances is directed to the drain for disposal.

When you stop requesting water through the tap, the equipment stops its operation by means of a maximum pressure switch.

5. SER INTERFACE

! **ATTENTION: This equipment incorporates an electronic controller that will efficiently manage the functionality and status indications in which it's found, as well as the different security systems.**

The equipment's technical data sheet describes the states in which the system can be found and the information provided by it (pages 20-22 of this manual).

6. MAINTENANCE

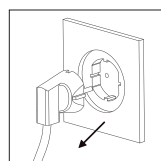
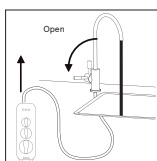
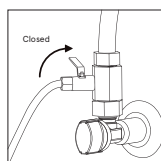
In order to guarantee the quality of the water supplied by your equipment, regular maintenance should be carried out.

The team will report by means of the front LED panel and tap (depending on the model) the state in which it is find their filter elements and need to replace them.

Read the corresponding section of the Technical Manual to see the recommended maintenance frequency (page 11 of this manual).

7. IDENTIFICATION AND RESOLUTION OF PROBLEMS

TROUBLE	POSSIBLE CAUSE	SOLUTION
1. Leak to the outside the equipment.	Several possible	Call for service.
2. Production null.	1. There is no water supply. 2. There is no power supply. 3. Leak sensor activated.	1. Wait for the supply to return. 2. Check the electrical supply of the house. If the problem is not solved, call for service. 3. Leak sensor activated. If the leak is not detected, dry the bottom of the equipment together with the leak sensor. If it recurs, call the technical service.
3. Production limited.	1. Fuel tap partially closed. 2. Filters / membrane in poor condition or exhausted.	1. Open it completely. 2. Call for service.
4. Excessive production.	Several possible causes.	Call for service.
5. Unpleasant taste and unpleasant.	Several possible	Call for service.
6. Color of the off-white water.	Air in the system. Microbubbles of air that disappear after a few seconds.	It is not a problem. The appearance will disappear as the air inside the equipment is eliminated.
7. Continuous dripping noise in drain.	Several possible	Call for service.
8. The team does not start up.	1. There is no power supply. 2. Leak sensor activated.	1. Check the general power supply. If the problem is not solved, call the technical service. 2. If the leak is not detected, dry the bottom of the equipment together with the leak sensor. If it repeats, call for service.
9. The team for and starts constantly.	Several possible causes.	Call for service.
10. The equipment never stops rejecting water down the drain.	1. Inlet solenoid valve damaged. 2. Deteriorated production anti-return.	1. Check and replace. 2. Check and replace.
11. The bomb it continues to run, but the tap does not dispense water or the dispensed flow is low.	Absence of water supply at the entrance of the equipment. Insufficient pressure or flow.	Check the condition from the general stopcock to the equipment's water inlet. Check the bypass valve or if there is an obstructed section or a pinched tube.



Read the INTERFACE section of the Technical Data Sheet. In the event of an anomaly, contact the SAT and proceed as indicated: Close the inlet valve. Open the tap to depressurize the system and disconnect the power.

TECHNICAL MANUAL

FOR REVERSE OSMOSIS EQUIPMENT

1. MAIN FEATURES

APPLICATION

Water treatment
Inverse osmosis

Use
Improvement of the characteristics of drinking water (which complies with the requirements of the European Directive on water for human consumption 98/83 or its national transpositions in the different member states of the European Community).

Modifications for reduction or contribution

· Water treatment by reverse osmosis is capable of reducing concentrations of salts and other substances in high percentages.

· Minimal reduction * of certain compounds and parameters:

Sodium: 90%.

Calcium: 90%.

Sulfate: 90%.

Chloride: 90%.

Total hardness: 90%.

Conductivity: 90%.

* Depending on the characteristics of the water to be treated (at the membrane outlet). These values may vary in depending on the type of post-filter that the equipment incorporates and / or regulation of the mixing valve (if it is included).

OPERATING LIMITS

	EQUIPMENT WITH PUMP
Pressure (max/min):	4 bar - 1 bar (400kPa-100kPa) .
TDS (max):	1500ppm.
Temperature (max/min):	38 °C - 5 °C.
Hardness (max):	15 °HF. **

! **ATTENTION:** If you have any questions about the installation, use or maintenance of this equipment, contact the technical assistance service (SAT) of your distributor.

2. PRIOR WARNINGS

! **ATENCIÓN:** los equipos **NO SON POTABILIZADORES de agua**. En el caso de que el agua a tratar proceda de un abastecimiento público (y por lo tanto cumpla con la legislación vigente), estos equipos mejorarán substancialmente la calidad del agua.

! **ATTENTION:** If the water to be treated does not come from a public supply network or is of unknown origin, it will be necessary to carrying out a physical-chemical and bacteriological analysis of the water to ensure its correct purification applying the techniques and equipment suitable for each need, **PRIOR TO THE INSTALLATION** of the equipment. Please contact your dealer for advice on the most appropriate treatment for your case.

2.1 CONDITIONS FOR CORRECT EQUIPMENT OPERATION

- The equipment should not be fed with hot water (> 38°C).
- The ambient temperature must be between 4° and 45°C.
- For waters with salinities higher than 1500 ppm, consult your distributor.
- It is recommended that the water to be treated be de-calcified or with a maximum hardness of 15°HF in order to obtain optimum performance from the equipment.
- In the event that the water to be treated has a hardness greater than 15 °HF, a reduction in membrane life and equipment performance.
- If the make-up water contains a concentration greater than 1.2 ppm of total chlorine, it is recommended to Recommend the installation of an activated carbon de-

chlorination filter to reduce the concentration of chlorine in the water and thus protect and extend the life of the equipment components.

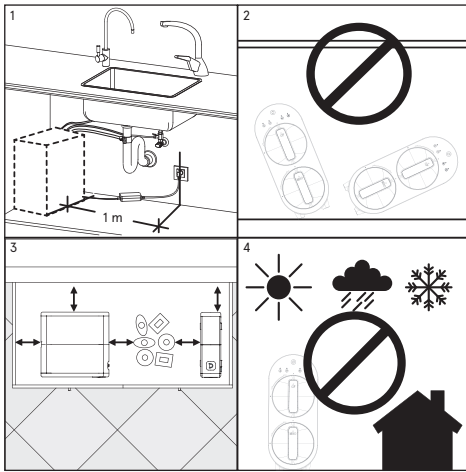
In case the water to be treated contains:

High concentrations iron and man- Ganese (Greater than 1ppm measured in the rejection of the machine). Prolonged hyperchlorination in time. Sludge or turbidity greater than 3 NTUs.

A nitrate concentration greater than 100 ppm.

A concentration of sulfates greater than 250 ppm.

· Contact your distributor to recommend the most appropriate pretreatment for your case, thus ensuring the correct operation of the equipment, avoiding damage to components and guaranteeing the quality of the water supplied.



3. 3. LOCATION OF THE EQUIPMENT

· In case of having to condition the installation of the housing to install the equipment on site forecast to, it must be carried out in accordance with national regulations for indoor water supply and electrical installations.

· These equipments need an electrical outlet less than 1 meter away (1).

· This equipment should not be installed or lying down or tilted down (2), as the leak sensor would be disabled.

· The equipment filled with water weighs more, the distribution of weights in an unexpected position could cause some connection element to be forced, which could cause a malfunction, damage to equipment components or loss of water.

· The place planned for its installation must have sufficient space for the appliance itself, its accessories, connections and for carrying out convenient maintenance (3).

· Under no circumstances will the equipment be installed

lled outdoors. perie (4).

· The appliance is only to be used with the power supply unit provided with the appliance

· The appliance must only be supplied at safety extra low voltage

· The environment and environment where equipment and faucet are installed must keep hygienic-sanitary conditions adequate.

· Avoid external drips on the equipment, from pipes, drains, etc.

· Use the original accessories for installation. The water inlet feed tube to be treated and the bypass valve must have a 3/8 "cross section for the equipment to function optimally.

! ATTENTION: The equipment must not be installed next to a heat source or directly receiving a flow of hot air over it (drying- ra, refrigerator, etc.).

3.1. COMMISSIONING AND MAINTENANCE

! ATTENTION: The water treatment equipment needs periodic maintenance carried out by qualified technical personnel, in order to guarantee the quality of water produced and supplied.

· The new hose-sets supplied with the appliance are to be used and that old hose-sets should not be reused.

· The consumable elements must be replaced with the frequency indicated by the manufacturer.

· The equipment must be periodically sanitized and vialy to its commissioning.

· After commissioning, you must discard the water produced during the first 30 minutes of use.

· Maintenance must be carried out by qualified technical personnel, with adequate hygienic conditions and attitude, in order to reduce the risk of internal contamination of the appliance and its hydraulic system. (For more information contact the service your dealer's technician).

4. UNPACKING

It is important that before installation and start-up, you check the box and the condition of the equipment, in order to guarantee that it has not been damaged during transport.

! ATTENTION: Claims for damage during transport must be presented together with the delivery note or invoice to your distributor, attaching the name of the carrier within a maximum period of 24 hours after receipt of the merchandise.

Remove the equipment and accessories of its cardboard packaging, removing the corresponding protections.

! ATTENTION: *Dispose of properly and keep out of the reach of children plastic bags, as they can be a danger to them.*

Inside you will find: Water treatment equipment, installation accessories and documentation. The materials used in the packaging are recyclable and must be disposed of in the appropriate separate collection containers or in the



specific local center for the recovery of waste materials. This product cannot be disposed of together with the usual urban waste. When the useful life of the equipment has ended, it must be delivered to the company or center where the device was purchased, or to a Clean Point or specific local center for the recovery of materials, indicating that it has components. Electrical and electronic parts. The correct collection and treatment of useless appliances contributes to preserving natural resources and also to avoiding potential risks to public health.

5. INSTALLATION

The installation of your osmosis equipment must be carried out by personnel who are sufficiently qualified to do so. Read this manual beforehand and consult your dealer if in doubt.

! ATTENTION: *Since the appliance to be installed improves the quality of the water to be consumed, all the tools to be used for assembly and installation must be clean and in no case may they be contaminated or impregnated with greases, oils or oxides. Use exclusive tools for tube cutting, membrane handling, etc. Keep them clean and disinfect them periodically.*

! ATTENTION: *The work must be carried out with an attitude and adequate hygienic conditions, taking extreme precautions in everything related to materials and components that are to be found in contact with the water to be treated or consumed.*

(For more information contact your distributor).

! ATTENTION: *Avoid the risks of external contamination of the equipment due to improper handling, using gloves, hand sanitizing gel or washing your hands as many times as necessary throughout the installation, start-up and maintenance. to the team.*

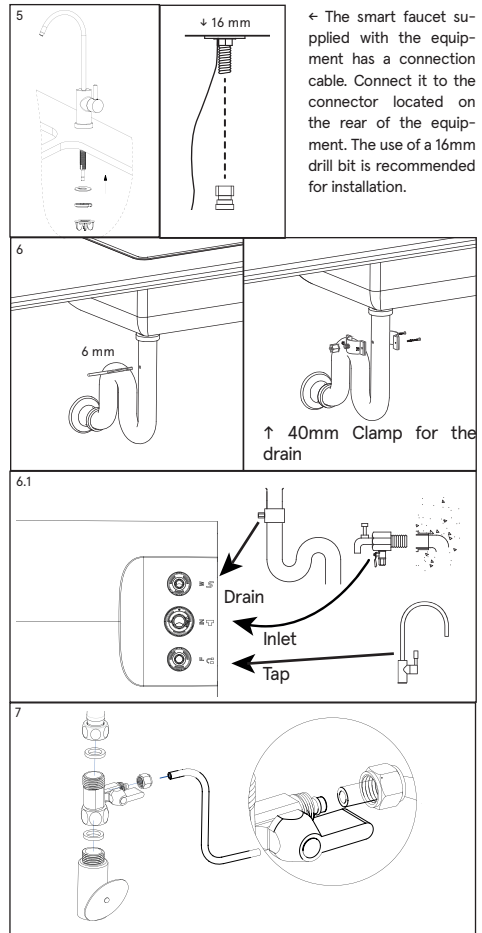
The most frequent place for installing the equipment is It will be under the kitchen sink or in an attached cabinet.

Install the faucet, hydraulically and electrically (depending on the model), to the equipment drain collar and tap adapter input and connect them to the respective connectors of the equipment (5, 6, 6.1 and 7). Note that for the cable to pass through, the hole must be at least 16 mm (for the model with electronic tap).

! ATTENTION: *Some of the installation accessories may vary depending on the model and the region in which the equipment is distributed.*

Do not handle, connect or disconnect the transformer from the equipment with wet hands as there is a risk of electrocution.

Do not leave or support heavy objects on the equipment, as they may damage it.



See hydraulic diagram on page 13.

5.1. MIXING KIT

· In case you want to increase the pH, conductivity and chlorine concentration at the outlet, you must carry out the installation according to the following diagram and using the corresponding components included in the mixing kit (consult your distributor). See the schematic on page 13.

· After starting up, open the tap and with the corresponding meter for the parameter of interest, measure in the water dispensed from the tap and slowly and progressively open the mixing valve until the desired parameter is achieved.

· The water dispensed must meet the requirements of potability established by the European Directive 98/83 or corresponding national legislation that transposes it.

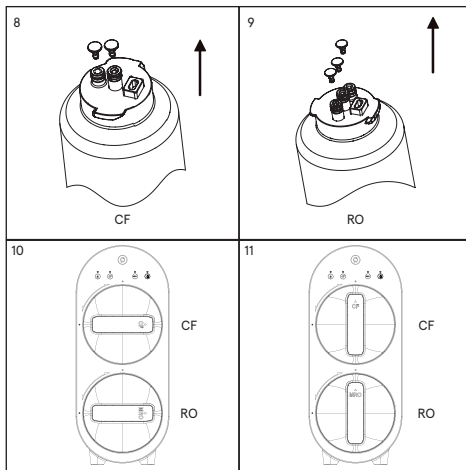
5.2. FILTER INSTALLATION

· Remove the rubber plugs from the pre-filter (CF) and membrane (RO) water intakes as shown in figures 8 and 9.

· Install the CF filter in the first stage of the equipment (lower position), the RO membrane in the second stage of the equipment (upper position) and the post-filter CB in the third stage of the equipment (middle position).

· To install the filters, present each filter in its respective housing with the handle in a horizontal position, as shown in figure 10.

· Insert firmly all the way and turn the handle 90 degrees clockwise. After installation, the three filters should be as shown in figure 11.



After installing the filters, open the inlet water valve for the water to be treated, connect the equipment electrically and keep the dispenser tap open until the flow of water dispensed is uniform, the air inside has been expelled and the water comes out clean and clear.

6. START UP

6.1. FILTER RINSING

· It is necessary to eliminate the dust that the filter carbon generates during the transport and handling of the equipment and corresponding. This dust must be eliminated since it could partially or completely obstruct the membrane as well as cause a malfunction of the equipment. The equipment will automatically perform a wash when replacing the filters.

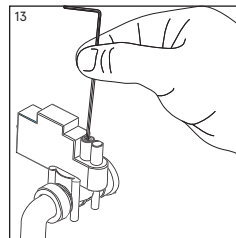
· The membrane cartridge also needs to be rinsed, the membrane must fill the cavities inside it completely with water and rinse its surface as well as the post-filter that it incorporates must rinse to remove carbon dust in the same way as the pre-filter. After connecting the equipment for the first time and before consuming water, the equipment will automatically rinse the filters for 5 minutes. Open the dispenser tap and discard the dispensed water for 30 minutes.

6.2. EQUIPMENT SANITIZATION

· Carry out a sanitization of the equipment, depending on the model and procedure indicated by the manufacturer (see Pro- sanitation release. Page 14). If in doubt, consult your dealer.

6.3. TIGHTNESS CHECK

· Close the faucet of the equipment on the countertop



and keep the equipment hydraulically or electrically powered by performing a visual inspection of the system to ensure that there is no leak (for approx.).

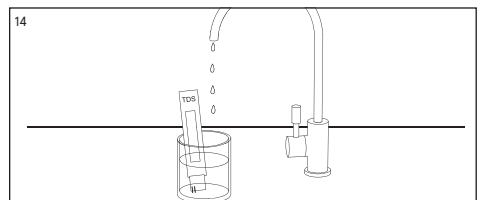
· In case the pump the team did not stop Adjust the maximum pressure switch tare with an

Allen key size 2, until the pump (13) is stopped.

· Open the dispensing tap. The equipment should activate and supply water. Close the tap again and check that the equipment stops working.

6.4. RINSE AND CLEAN

Open the tap of the equipment and measure the quality of the water that is being produced. With a conductivity or TDS meter, check that the reduction of salts obtained is adequate with respect to the water to be treated (14).



! **ATTENTION:** *if it detects that the water dispensed does not comply with the current national legislation, carry out the measurement again. If the deviation persists, close the equipment inlet valve, drain it through the tap, disconnect it electrically and contact your technical service.*

· Finally, clean the inside and the bottom of the equipment with single-use blotting paper, in order to remove any water that could have fallen into it, as it could cause a false alarm and blockage of the system.

7. MAINTENANCE

! **ATTENTION:** *Some components of your equipment, such as the pre-filters and the membrane, are consumables that have a limited life.*

The duration will depend on the quality of the local water, consumption, type of use and specific aspects of the water to be treated such as extreme turbidity, high chlorinations, excess iron, etc.

! **ATTENTION:** *In order to guarantee the quality of the water supplied by your equipment, periodic maintenance must be carried out.*

RECOMMENDED MAINTENANCE

CF pre-filter: 12 months or 4,000 liters

RO osmosis membrane: 36 months or 20,000 l *.

* For soft waters to be treated. (hardness < 15 ° HF).
Sanitization: At start-up. At least every 12 months depending on use. Every time components in contact with water in the equipment are accessed or no water has been consumed for more than a month.

** Depending on the intended use and characteristics of the water to be treated.*

Maintenance must be carried out by trained personnel, who must handle the equipment properly, as well as use original spare parts to maintain the characteristics, guarantee, certifications and performance of the equipment and thus preserve the quality of the water dispensed.

! **ATTENTION:** *The use of non-original spare parts, installation outside the limits of operation and commissioning, maintenance or inappropriate use may lead to the loss of the warranty, as well as the invalidation of the certifications that the equipment has undergone.*

An excess of any compound (total chlorine, turbidity, hardness, etc...) can cause a reduction in the life of filters and certain components. These maintenance are indicative.

Your dealer will anticipate the life of the consumables depending on the characteristics of the water to be treated and the expected consumption in each case.

! **ATTENTION:** *All consumables are supplied with individual packaging specially designed for guarantee hygienic storage and transport conditions. Exercise extreme precautions after removing the consumables from their packaging and while handling the*

various connectors and components.

! **ATTENTION:** *Before disassembling the equipment, provide all the material that you will need to carry out maintenance operations (read the Table 5 Installation) and the space required for it. Work in a well-lit place, in adequate hygienic conditions and with enough space to carry out operations comfortably.*

! **ATTENTION:** *To change the filter cartridges, the equipment must be depressurized beforehand. To do this, close the inlet valve water to the equipment and open the dispensing tap for a few seconds until water hardly comes out and then cuts off the power supply to the equipment. Once the equipment has been depressurized, you can change the cartridges.*

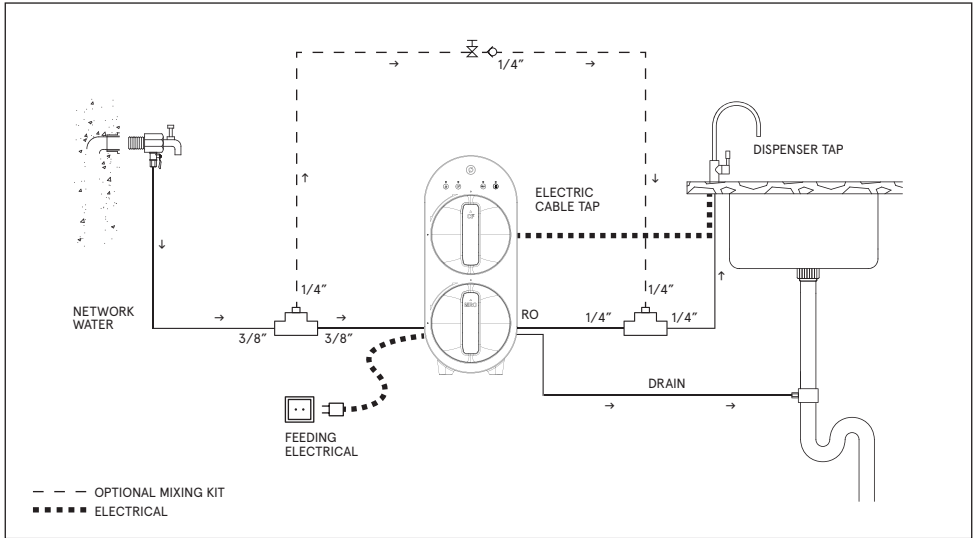
· Perform filter change properly. Ensure the tightness of the joints and the original hydraulic configuration of the system as recommended by the manufacturer.

· Sanitize the equipment following the instructions described in the Sanitation Procedure.

· For more information, consult the technical data sheet of the equipment. If you have any other questions, consult your dealer.

! **ATTENTION:** *Use gloves or appropriate personal protection measures, if you use chemicals during sanitization.*

Hydraulic connection diagram



SANITATION PROCEDURE

1. HYGIENIZATION

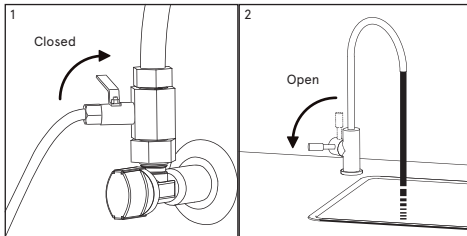
Necessary material:

- Manual valve.
- Measuring cup and connectors.
- Hydrogen peroxide 3% (0.5 l).
- Single use vinyl gloves.
- Hydrogen peroxide detector strips.
- Sanitizing spray.
- Single-use blotting paper napkin.

Perform a sanitization of the equipment during start-up in operation, when appropriate (whenever there is a risk of contamination of the equipment by handling components in contact with water) or with the indicated period of time. To do this, follow the steps below:

! ATTENTION: The water used during sanitation must be drinking water (from the public distribution network, complying with the corresponding potability requirements of RD 140/2003, European directive 98/83 or current local legislation).

- Open the tap and let water circulate in order to renew the water inside the equipment.
- Close the inlet valve (1) and open the dispenser tap (2) to decrease the pressure in the equipment.

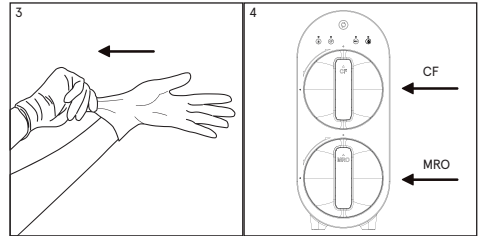


• Change the filters and wash them as indicated in the corresponding section of the Equipment Technical Manual. Sanitization must be carried out with the new pre-filters installed and previously rinsed in an adequate way (carbon dust removed from them correctly).

- Make sure the equipment has performed the scheduled automatic rinses and flushings.
- Use single (3) use vinyl gloves to handle sanitizing products.

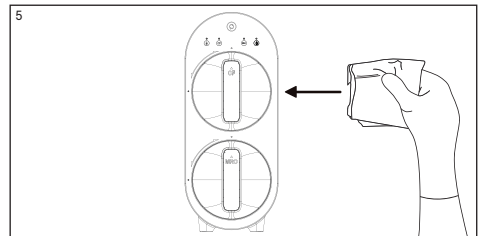
! ATTENTION: Exercise extreme hygiene measures when handling the filters, the membrane and

equipment components in contact with water. Use disposable gloves or wash your hands as many times as necessary to avoid risks of contamination of the equipment.



• To sanitize the equipment, the filters must be inside their housings (4).

• If you replace a deteriorated membrane or filter at the end of its useful life, remove the deteriorated one for disposal and clean the inside of the housing and connections. To do this, use single-use kitchen paper impregnated with hydrogen peroxide. Clean in the same way or using a hydrogen peroxide spray, the connections of the new filter cartridges before inserting them (5).



2. TREATMENT OF THE PRE-FILTER, THE MEMBRANE AND THE POSTFILTER

• Disconnect the inlet hose to the equipment marked "feed-in", and insert the measuring cup between the stopcock and the equipment's water inlet (6). For greater comfort and ease of access during sanitization and the inlet valve opening and closing operations, you can insert, together with the sanitizing dosing cup, a manual valve in the closed position, which will perform the same functions as the manual inlet shut-off valve to the equipment.

- Once the new cartridges are installed, keep the new manual inlet valve closed and open the inlet valve plugged into wall adapter (7). The measuring cup must be empty.

- Pour 0.25 liters of hydrogen peroxide into the glass dispenser inserted in the equipment inlet (8). Screw the glass correctly to its head.

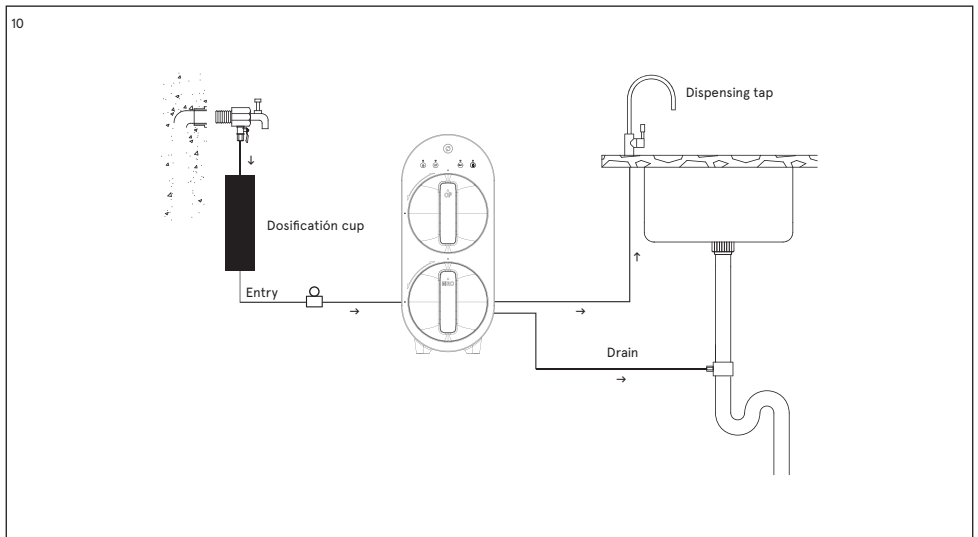
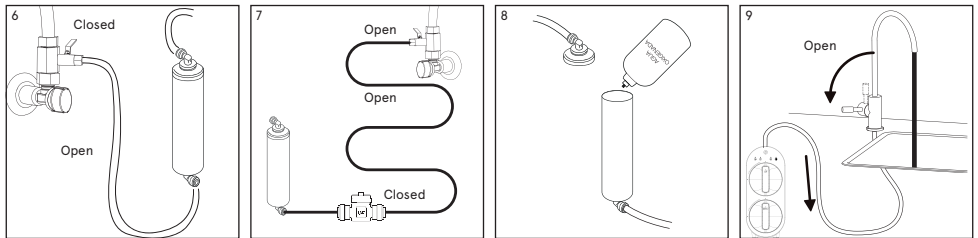
- The manual inlet valve and the tap must be closed. Connect the equipment to the electrical supply.

- Open the water inlet stopcock to the equipment and to the tap, allowing its operation to start and allowing the sanitizing product to suck into it. Fill a 0.5 liter jug with the water from the faucet. Before closing the tap, close the inlet valve again to reduce the pressure. Refill the dispenser with 0.25l of hydrogen peroxide and empty another 0.5 liter of water. Close the tap. At this time, the entire circuit contains sanitizing liquid.

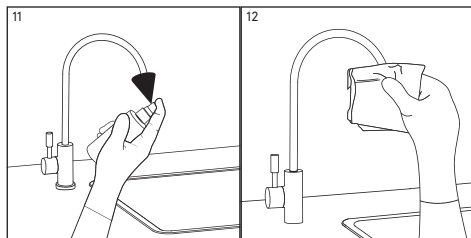
- After 15 mins. open the dispenser tap (9) and let the tap water circulate for 15 minutes to remove the remains of the sanitizing product.

- Depressurize the system, empty and disassemble the glass sifier, reconnecting the inlet pipe of water to equipment.

- Empty the measuring cup. Before opening it, have at hand a container where it can be completely emptied, as it may be partially full of water.



Pay special attention to sanitizing the tap spout. Use the sanitizing spray (or, failing that, hydrogen peroxide, dosing it in such a way that it penetrates the faucet spout) and single-use blotting paper. Spray the spray on the tap nozzle (11), rub the spout and tap nozzle with the disposable paper and do not touch it directly with your hands (12).



3. RINSE

- Since sanitization and rinsing do not ensure complete removal of carbon dust from new filters or sanitation residues, rinse the osmosis equipment with plenty of water, after each sanitization, circulating potable water for at least 15 minutes.
- Check, using hydrogen peroxide detector strips, that no significant residues remain in the dispensed water. If not, continue rinsing.
- If you do not have hydrogen peroxide test strips, it is recommended to rinse for at least an additional 15 minutes.
- At the end, take a blotting paper, dry all the parts that may have gotten wet and especially the Aquastop leak detection probe (if the equipment incorporates it).

TECHNICAL DATA SHEET

FOR REVERSE OSMOSIS EQUIPMENT

1. TECHNICAL CHARACTERISTICS

APP

Water treatment

Inverse osmosis

Use

Improvement of the characteristics of drinking water (which complies with the requirements of the European Directive on water for human consumption 98/83 or its national transpositions in the different member states of the European Community).

Modifications for reduction or contribution

· Water treatment by reverse osmosis is capable of reducing concentrations of salts and other substances in high percentages.

· Minimal reduction * of certain compounds and parameters:

Sodium: 90%.

Calcium: 90%.

Sulfate: 90%.

Chloride: 90%.

Total hardness: 90%.

Conductivity: 90%.

* Depending on the characteristics of the water to be treated (at the membrane outlet). These values may vary in depending on the type of post-filter that the equipment incorporates and / or regulation of the mixing valve (if it is included).

OPERATING LIMITS

EQUIPMENT WITH PUMP

Pressure (max / min):

4 bar - 1 bar (400kPa-100kPa).

TDS (max):

1500ppm.

Temperature (max/min):

38 °C - 5 °C.

Hardness (max):

15 °HF. **

Control type:

Maximum pressure switch. Inlet control bypass solenoid valve. Flushing solenoid valve.

Security system:

Electronic leak sensor.
Water quality control.
Maintenance notice.

Dimensions (A x B x C en mm):

Weight (en kg, including all accessories):

355 x 150 x 440

10,7.

Intel connection:

Drain connection:

Tap connection:

Wall adapter:

Drain collar:

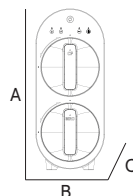
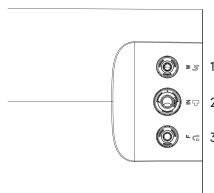
3/8".

1/4".

1/4".

3/8" M-F. *****

Pipe clamp



1. Drain
2. Entrance
3. Faucet

Technical specifications

CF Pre filter

1 x sediment / carbon combo.



Membrane+ Carbon Posfilter

1 x 600 GPD. membrane



Caudal de agua osmotizada: 1,7 lpm.
Volumen de agua osmotizada: 4.000 l.
Presión de trabajo óptima: 2bar.

Power supply: Power

24 VDC 5A.

Adapter:

100-240 Vac 50 / 60 Hz: 24 Vdc.

Tap type: Maximum

1-way smart tap. 2,3 lpm.

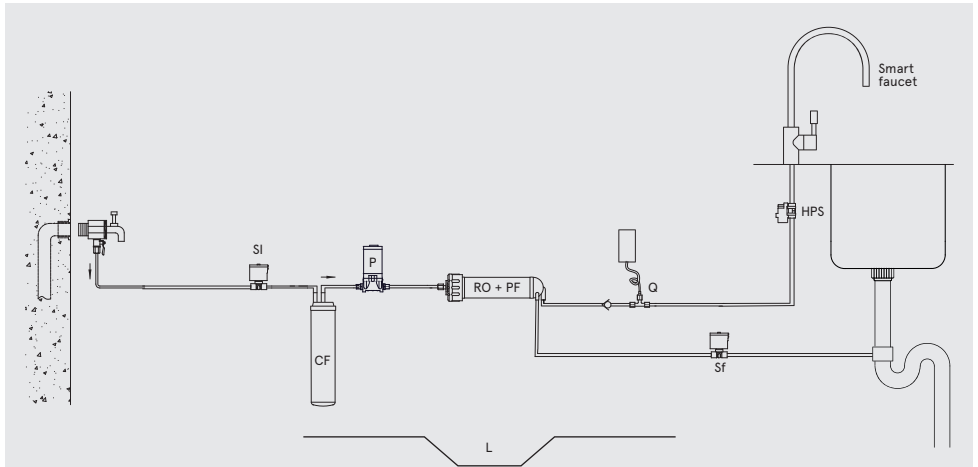
Production:

≥ 60%

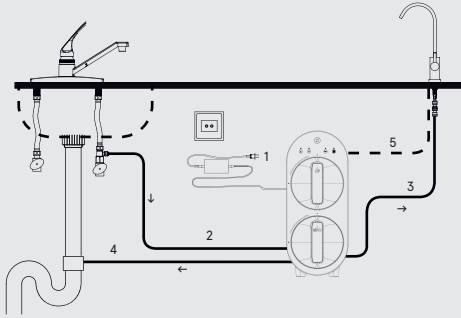
Membrane cleaning system:

Automatic autoflushing

HYDRAULIC SCHEME



HYDRAULIC CONNECTION DIAGRAM



- 1- Power supply
- 2- Inlet tube
- 3- Outlet pipe
- 4- Drain
- 5- Tap power cable

- * For salinities higher than 1500ppm consult your distributor.
- ** Higher hardnesses may reduce the life and performance of certain components.
- *** Maximum accumulation as a function of inlet pressure.
- **** Flow rates may vary by 20% depending on the temperature, pressure and specific composition of the water to be treated.
- ***** May vary depending on the model.

DISTRIBUTED BY:

WLG (B-60326279)
 Aiguafreda, 8
 Pol. Ind. L'Ametlla Park
 08480, L'Ametlla del Vallès
 Barcelona - Spain
 T. 902 305 310 F. +34 936 934 329

2. OPERATION OF THE EQUIPMENT

· The mains water to be treated enters the equipment through the pre-filtration stage that incorporates a turbidity and carbon filter (CF). In this filtration stage, suspended particles, chlorine, its derivatives and other organic substances are retained.

· The passage of water into the equipment is controlled by a cut-off solenoid valve (Si).

· The water, after being treated in the filtration stage, is driven towards the reverse osmosis (RO) membrane. The equipment incorporates a pump (P) to increase the pressure. The pressure of the water on the membrane makes reverse osmosis process possible.

· Before leaving through the tap, the water passes through the carbon post-filter, which improves the flavor and is incorporated inside the membrane cartridge itself.

· Reject water or water with excess salts and other dissolved substances is directed to the drain for disposal.

· Direct flow equipment controls start and stop by means of a pressure switch (HPS)

· The equipment incorporates different functional systems and / or security, managed by a state-of-the-art electronic module:

· Electronic detection system leakage (L). How-When the system detects this situation, it blocks the equipment by emitting an acoustic and light signal informing about it. The equipment will remain locked until the detection probe is dry.

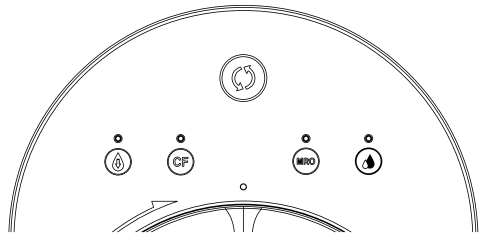
· Probe for estimating the temperature and conductivity of the water produced to evaluate the state of the membrane and its components (Q). When dispensing water through the tap, the system will estimate the conductivity of the produced water.

· Automatic filter change notice, in order to inform the user that adequate maintenance must be carried out to guarantee the quality of the water dispensed.

· The electronic controller of the equipment will manage membrane washes (Sf) necessary to take care of the membrane and achieve optimum performance of the equipment.

3. INTERFACE. STATE OF THE SYSTEM

Display:








3.1. INFORMATION AT THE TAP

The smart tap (depending on the model of the equipment), will transfer the information and color code that is displayed on the equipment panel. It will inform about the most restrictive state in which the filters are.

STATUS OF THE FILTER NEAREST THE END OF ITS USEFUL LIFE

- Blue: Good condition.
- Violet: Near end of shelf life.
- Red: End Of life.










Technical specifications

STATUS	DISPLAY	ACOUSTIC	COMMENT
Dispensing water	 Blue	-	The LED remains lit while the equipment is filtering and dispensing water.
Membrane condition	 Blue / Violet / Red	- 2 beeps while dispenses water Continuous beeps while dispenses water	Blue: good condition. Violet: end of life near. Red: end of life.
Pre-filter status	 Blue / Violet / Red	- 2 beeps while dispenses water Continuous beeps while dispenses water	Blue: good condition. Violet: end of life near. Red: end of life.
Water quality dispensed	 Blue / Violet / Red	-	Blue: Adequate dispensed conductivity. Violet: Moderately high dispensed conductivity. Red: Conductivity dispensed elevated. The indicator will be on while after water is dispensed.
Flushing	 Blink blue	-	The team is currently rinsing the membrane.

3.2. FUNCTIONALITIES

FUNCTION	ACTIONS	STATUS OF THE INDICATORS
1. Functional wash for the first use.	The machine will wash the RO membrane for 5 minutes. Next, it is recommended to open the tap for 30 minutes.	During washing, the quality light of the water is shown flashing red at 1Hz. After 6 minutes, the water quality light will return to the live measurement state.
2. Wash at turning on the machine.	Whenever the system is started it will wash the RO membrane for 20 seconds. If the user opens the tap, the machine will stop washing and dispense water normally.	When the washing, the water quality light shows previous power-on status.
3. Washed when accumulating operating time.	Every time the accumulated working time reaches 2 hours, the system will wash the membrane for 20 seconds. If the user turns on the tap, the machine will stop washing and dispense water normally.	When washing is in progress, the water quality light shows the previous washing status.
4. Daily wash.	When the machine has been 24 h. without running, the system will flush the membrane for 20 seconds. If the user turns on the tap, the machine will stop washing and dispense water normally.	When washing is in progress, the water quality light shows the previous washing status.
5. Wash after change of filters.	CF: By changing the CF pre-filter and resetting its usage counter, the system will initiate a wash of the CF filter and RO membrane for 5 minutes. RO: By changing the RO membrane and resetting its counter, the equipment will wash the membrane for 5 minutes. Next, the tap must be turned on for 30 minutes to rinse the membrane.	When the membrane is being washed RO, the water quality light shows red and will blink at 1Hz. When any other filter is washed, the water quality light displays real-time water quality data and flashes at 1Hz.
6. Faucet opening.	The system starts up normally.	During the first 30 seconds, the water quality light shows the latest quality status and is always on. For the next 30 seconds, the water quality light displays real-time quality data and is always on.
7. Close the tap.	The system stop producing water and goes into standby.	The water quality lighth turns off.
8. Turning on the system.	The system starts up.	After connecting the power supply, a beep sounds and all the lights turn on and blink at the same time, changing from blue to purple to red. Each color is displayed for 1 second.

3.3. BUG IDENTIFICATION AND RESOLUTION

STATUS	DISPLAY	ACOUSTIC	COMMENT
Leak	 Red	Beeps for 3 minutes	The system has detected a water leak and stop its operation.
	 Red		
	 Blinking Red		
Excessive continuous operating time	 Blinking Red	Beeps for 3 minutes	When the team dis-think water for more than 30 `continuously, it will stop for safety and component protection.
	 Blinking Red		
The rest of indicators off			
Stops and starts continued	 Violet flicker	Beeps for 3 minutes	The system detects continuous stops and starts of less than 1 `for 20`. The system stops working.
	 Violet flicker		
	The rest of indicators off		
Temperature of Water Too low	 Blinking Red	5 beeps	The system detects a temperature of the water to be treated that is too low (<3°C). The system stops working.
	 Blinking Red		
The rest of indicators off			

The malfunction alarms, once the problem has been detected and solved, can be reset by disconnecting the equipment from the electrical supply, waiting for the LEDs on the front to turn off and reconnecting the electrical supply.

3.4. FILTER LIFETIME DISPLAY

PERIOD OF LIFE	TIME OF LIFE REMAINING (DAYS)	LITERS OF CAPACITY REMAINING	TIMER	
			DISPLAY	ACOUSTIC
Normal.	> 30	> 300	Permanent blue.	No alarm.
Remains little.	$0 < X \leq 15$	$0 < Y \leq 150$	Permanent lilac.	Double beep when time is short filter life.
Exhausted.	≤ 0	≤ 0	Permanent red.	Continuous beeps while dispensing water. End of life of the filters.

4. WARRANTY

The distributor guarantees the equipment for a period of two years in the event of any non-compliance detected in the equipment, in accordance with Royal Decree 1/2007 of 16 November (revised text of the General Law for the Defence of Consumers and Users).

- The guarantee includes the repair and replacement of faulty parts by personnel authorised by the distributor or by the official technical assistance service (S.A.T.) at the place of installation or in its workshops. Included in the warranty is labor and shipping costs that may be generated.

- The distributor is exonerated from providing a guarantee in the case of parts subject to natural wear, lack of maintenance, blows or other nonconformities resulting from improper use of the equipment or inadequate according to the conditions and operating limits indicated by the manufacturer of the same. Likewise, the warranty becomes ineffective in cases of improper handling and use of the equipment or in those cases in which they have been modified or repaired by personnel outside the distribution company or official S.A.T..

- The parts replaced under warranty will remain the property of the distributor.

- The distributor is responsible for the lack of conformity of the equipment when it refers to the origin, identity or suitability of the products, according to their nature and purpose. Bearing in mind the characteristics of the equipment it is essential for the warranty to cover the lack of conformity, the fulfillment of the technical conditions of installation and operation. Failure to comply with these conditions may result in the absence of a warranty, taking into account the relevance of the destination of the equipment and the conditions and operating limits in which it must operate.

- The distributor must ensure that the installed equipment is suitable for improving the quality of the water to be treated in particular, according to the characteristics of the equipment and the regulations in force.

- The distributor must ensure the correct installation and start-up of the equipment as indicated by the manufacturer and current regulations and will also be liable for any lack of conformity resulting from incorrect application, installation or start-up of the equipment.

- For any warranty claim it is necessary to present the purchase invoice. The period of two years is calculated from the purchase of the equipment from the distributor.

- If there is a problem with your equipment during the warranty period, please contact your dealer.

The equipment is installed and operating to the customer's satisfaction and for the record:

* Pre-treatment of the equipment:

* Hardness of entry to the equipment (°F):

* TDS input to the equipment (ppm):

* TDS produced water (ppm):

* Pressure of entry to the equipment (bar):

*Result of the installation and commissioning sheet:

Correct:

Others:

The owner of the equipment has been properly and clearly informed of the use, handling and maintenance that the equipment requires to ensure its proper functioning and the quality of the water produced. A maintenance contract is offered for this purpose.

*Ref: Maintenance contract:

ACCEPTS the maintenance contract

DOES NOT ACCEPT the maintenance contract

If you need information, report a malfunction or malfunction, request for maintenance or intervention by a technician, please read the operation, troubleshooting and troubleshooting sections of this manual beforehand and contact the distributor or company that sold you your equipment.

COMPANY AND/OR AUTHORIZED INSTALLER, DATE AND SIGNATURE:

SERIAL NUMBER:



NOTE TO THE COMPANY AND/OR AUTHORIZED TECHNICIAN/INSTALLER: the data marked with the * symbol must be filled in by the installer and transcribed by him/herself from the INSTALLATION REGISTRATION sheet.



5. INSTALLATION REGISTER SHEET



NOTES TO THE TECHNICIAN/INSTALLER: read this manual carefully. If in doubt, contact your dealer's Technical Support Service (T.A.S.). The data marked with the symbol * must be filled in by the technician/installer and transcribed by him/herself to the WARRANTY page. This sheet must be kept by the installer and may be requested by the distributor in order to improve after-sales service and customer service. The technician who performs the installation and commissioning of the equipment must have adequate technical training.

INFORMATION ON THE USE OF THE EQUIPMENT:

Origin of the water to be treated:

PUBLIC SUPPLY NETWORK

OTHER

* Pre-treatment of the equipment:

* Hardness of entry to the equipment (°F):

* TDS of entry to the equipment (ppm):

* TDS produced water (ppm):

Inlet pressure to the equipment (bar):

INSTALLATION STEP CONTROL:

Pre-filter assembly:

Overflow installation:

Start-up according to protocol:

Checking of fittings:

Measurement of inlet hardness:

Output hardness measurement:

Installation of isolation by-pass:

Correct drainage installation:

Brine suction test/tank filling:

Leakage of the pressurised system:

Programming of the equipment:

Adjustment of residual hardness:

COMMENTS

* Result of installation and commissioning:

CORRECT (equipment installed and working correctly. Produced water suitable for the application).

OTHER:

IDENTIFICATION OF THE AUTHORISED TECHNICIAN/INSTALLER: CONFORMITY OF THE OWNER OF THE EQUIPMENT:

COMPANY AND/OR AUTHORIZED INSTALLER, DATE AND SIGNATURE:

I have been clearly informed of the use, operation and maintenance required by the installed equipment, having been offered a maintenance contract and informed of how to contact a customer service in the event of a request for information, communication of a breakdown or malfunction, request for maintenance or intervention by a technician.

Remarks:

*Ref: Maintenance contract:

ACCEPTS the maintenance contract

SERIAL NUMBER

DOES NOT ACCEPT the maintenance contract

Model/Ref:

Owner:

Street

Telephone:

City:

Province:

C.P.:

EQUIPMENT WARRANTY DIRECTED TO THE DISTRIBUTOR:

The distributor will only be responsible for the replacement of parts in the event of non-conformity. The repair of the equipment and the costs involved (labour, shipping costs, travel, etc.) will be borne by the distributor, in accordance with the general conditions of contract and sale, so it can not be passed on later to the manufacturer.



6. MAINTENANCE SERVICE

DATE	TYPE OF SERVICE	NAME, SIGNATURE AND STAMP OF TECHNICIAN	
<input type="text"/>	<input type="radio"/> START-UP		
<input type="text"/>	<input type="radio"/> COMPLETE MAINTENANCE	TECHNICIAN <input type="text"/> STAMP <input type="text"/>	<input type="radio"/> ORDINARY <input type="radio"/> EXTRAORDINARY <input type="radio"/> WARRANTY
<input type="text"/>	<input type="radio"/> PREPARATION		
<input type="text"/>	<input type="radio"/> SANITIZATION		
<input type="text"/>	<input type="radio"/> OTHERS		
<input type="text"/>			
<input type="text"/>	<input type="radio"/> COMPLETE MAINTENANCE	TECHNICIAN <input type="text"/> STAMP <input type="text"/>	<input type="radio"/> ORDINARY <input type="radio"/> EXTRAORDINARY <input type="radio"/> WARRANTY
<input type="text"/>	<input type="radio"/> PREPARATION		
<input type="text"/>	<input type="radio"/> SANITIZATION		
<input type="text"/>	<input type="radio"/> OTHERS		
<input type="text"/>			
<input type="text"/>	<input type="radio"/> COMPLETE MAINTENANCE	TECHNICIAN <input type="text"/> STAMP <input type="text"/>	<input type="radio"/> ORDINARY <input type="radio"/> EXTRAORDINARY <input type="radio"/> WARRANTY
<input type="text"/>	<input type="radio"/> PREPARATION		
<input type="text"/>	<input type="radio"/> SANITIZATION		
<input type="text"/>	<input type="radio"/> OTHERS		
<input type="text"/>			
<input type="text"/>	<input type="radio"/> COMPLETE MAINTENANCE	TECHNICIAN <input type="text"/> STAMP <input type="text"/>	<input type="radio"/> ORDINARY <input type="radio"/> EXTRAORDINARY <input type="radio"/> WARRANTY
<input type="text"/>	<input type="radio"/> PREPARATION		
<input type="text"/>	<input type="radio"/> SANITIZATION		
<input type="text"/>	<input type="radio"/> OTHERS		
<input type="text"/>			
<input type="text"/>	<input type="radio"/> COMPLETE MAINTENANCE	TECHNICIAN <input type="text"/> STAMP <input type="text"/>	<input type="radio"/> ORDINARY <input type="radio"/> EXTRAORDINARY <input type="radio"/> WARRANTY
<input type="text"/>	<input type="radio"/> PREPARATION		
<input type="text"/>	<input type="radio"/> SANITIZATION		
<input type="text"/>	<input type="radio"/> OTHERS		
<input type="text"/>			

Technical specifications

6. MAINTENANCE SERVICE

DATE	TYPE OF SERVICE	NAME, SIGNATURE AND STAMP OF TECHNICIAN	
<input type="text"/>	<input type="radio"/> START-UP		
<input type="text"/>	<input type="radio"/> COMPLETE MAINTENANCE	TECHNICIAN <input type="text"/>	<input type="radio"/> ORDINARY <input type="radio"/> EXTRAORDINARY <input type="radio"/> WARRANTY
<input type="text"/>	<input type="radio"/> PREPARATION	STAMP	
<input type="text"/>	<input type="radio"/> SANITIZATION	<input type="text"/>	
<input type="text"/>	<input type="radio"/> OTHERS		
<input type="text"/>	<input type="radio"/> COMPLETE MAINTENANCE	TECHNICIAN <input type="text"/>	<input type="radio"/> ORDINARY <input type="radio"/> EXTRAORDINARY <input type="radio"/> WARRANTY
<input type="text"/>	<input type="radio"/> PREPARATION	STAMP	
<input type="text"/>	<input type="radio"/> SANITIZATION	<input type="text"/>	
<input type="text"/>	<input type="radio"/> OTHERS		
<input type="text"/>	<input type="radio"/> COMPLETE MAINTENANCE	TECHNICIAN <input type="text"/>	<input type="radio"/> ORDINARY <input type="radio"/> EXTRAORDINARY <input type="radio"/> WARRANTY
<input type="text"/>	<input type="radio"/> PREPARATION	STAMP	
<input type="text"/>	<input type="radio"/> SANITIZATION	<input type="text"/>	
<input type="text"/>	<input type="radio"/> OTHERS		
<input type="text"/>	<input type="radio"/> COMPLETE MAINTENANCE	TECHNICIAN <input type="text"/>	<input type="radio"/> ORDINARY <input type="radio"/> EXTRAORDINARY <input type="radio"/> WARRANTY
<input type="text"/>	<input type="radio"/> PREPARATION	STAMP	
<input type="text"/>	<input type="radio"/> SANITIZATION	<input type="text"/>	
<input type="text"/>	<input type="radio"/> OTHERS		
<input type="text"/>	<input type="radio"/> COMPLETE MAINTENANCE	TECHNICIAN <input type="text"/>	<input type="radio"/> ORDINARY <input type="radio"/> EXTRAORDINARY <input type="radio"/> WARRANTY
<input type="text"/>	<input type="radio"/> PREPARATION	STAMP	
<input type="text"/>	<input type="radio"/> SANITIZATION	<input type="text"/>	
<input type="text"/>	<input type="radio"/> OTHERS		

