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INSTRUCTION MANUAL

REVERSE OSMOSIS EQUIPMENTS



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USER MANUAL

FOR REVERSE OSMOSIS EQUIPMENTS

O. PRINCIPAL CHARACTERISTICS



CLICK

QUICK AND HIGHLY SECURE CONNECTIONS



ELECTRONIC

ADAPTER
HIGHER SECURITY AND EFFICIENCY



FILTER CONTROL

AUTOMATIC
MAINTENANCE NOTICE



DOUBLE FLOW

HIGHER FLOW OF DISPENSED WATER



SOLENOID

VALVE IMMEDIATE CONTROL SAFETY NET



DIRECT ACCESS

EASE OF ACCESS AND MAINTENANCE



AQUASTOP

AUTOMATIC LEAKAGE DETECTION SYSTEM



PRESSURE CONTROL

PROTECTION AGAINST PRESSURE DROPS



DIRECT FLOW

DIRECT PRODUCTION OF OSMOTIZED WATER



HIGH EFFICIENCY

EFFICIENCY
RECOVERY IN PRODUCTION



STATUS

STATUS INDICATORS



EXCLUSIVE MEMBRANE

ORIGINAL MEMBRANE



HIGH PERFORMANCE PUMP

PUMP HIGH PERFORMANCE PUM



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

1. INTRODUCTION

Congratulations. You have acquired an excellent equipment for the treatment of water at home.

This equipment will allow you to improve the qualities of water.

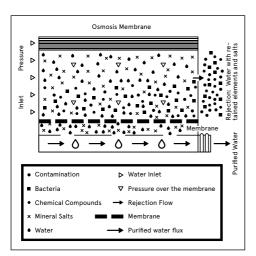
2. WHAT IS OSMOSIS?

Natural or direct osmosis is more common in nature, since semi-permeable membranes are part of the vast majority of organisms (for example, plant roots, the organs of our own body, cellular membranes, etc.).

When two solutions of different concentrations of salt are separated by a semi-permeable membrane, naturally, a flux of water is produced from the solution with a lower concentration toward that with higher concentration. This flux will continue until the concentrations in both sides of the membrane are equal.

When it comes to inverting this process and achieving a flux of water with a lower concentration of salt starting from one with a higher concentration, there needs to be enough pressure from the water with high concentration over the membrane to overcome the natural tendency and flux of the system. This process is what we call reverse osmosis. Currently, reverse osmosis is one of the best methods available for improving the characteristics of water through a physical system (without using chemical products).

The water that is to be purified puts pressure on the semi-permeable membrane so that some of the water is able to pass through the pores of the membrane (osmo-sed water) while the rest of the water (rejected or with a high concentration of salt) is diverted towards the drain.



3. PRIOR WARNINGS

ATTENTION: Please read carefully the warnings described in the corresponding Technical Manual.

ATTENTION: This equipment does not PRODUCE POTABLE water. If the water to be treated comes from a public source (and therefore conforms to all applicable laws), this equipment will substantially improve the quality of the water.

The water treatment equipment requires regular maintenance that needs to be carried out by qualified technical personnel in order to guarantee the quality of water produced and provided.

3.1. OPERATION OF THE EQUIPMENT

· If you are going to be absent for more than one week, close the equipment's water inlet valve, empty it and disconnect it from the power supply (PUMP model). When you return, connect the power supply to the equipment, open the inlet valve and the tap. Let the water flow for 5 minutes before consuming it.

ATTENTION: If the equipment has not worked or has not produced water for a prolonged period of time (more than one month), get in touch with the distributor in order to set up its appropriate sanitization and maintenance.

• Extract full jugs and bottles and avoid extracting occasional glasses to improve the performance of the equipment.

ATTENTION: You must pay particular attention to the cleanliness and hygiene of the osmosis tap on a regular basis and especially when carrying out the periodic minatenance and sanitation procedures. To do so, use sanitizing spray and single use kitchen paper. Under no circumstances should you use towels that you use to dry your hands or kitchen towels.

3.2. RECOMMENDATIONS FOR THE PROPER USE OF OS-MOSIS WATER

· If you wish to supply with osmosis water any consumption point (such as a refrigerator with ice cube dispenser, another rap, etc.), the channelling should not be done with a metalic tube, since this would give a bad flavour to the water. Always use plastic tubes.

ATTENTION: The water supplied by the osmosis equipment is of LOW MINERALIZATION. The mineral salts that the human body needs are largely provided by food, especially by dairy products, and to a lower extent, by drinkable water.

· We recommend that you use aluminium utensils to cook with osmosis water

4. BASIC OPERATION

The network water to be treated enters the equipment by going through the sediment and carbon filter. During this filtration step, suspended partices, chloride, its derivative and other organic substances are retained.

The passage of the water into the interior of the equipment is controlled by a solenoid valve.

The water, after being treated through the filtration steps, is pushed towards the reverse osmosis membrane. The equipment incorporates a pump to increase the pressure, since the pressure of the water over the membrane is what enables reverse osmosis.

The osmosis water exits the equipment through a tap for its consumption. The rejected water or water with an excess of salts or other dissolved substances is directed towards the drain to be eliminated.

Once you stop request water through the tap, the equipment stops its operation through a high pressure switch.

This equipment includes a low pressure switch as a security system which protects the pump from drops in pressure, stopping the equipment and avoiding its empty operation.

5. USER INTERFACE

ATTENTION: This equipment includes an electronic controller that will efficiently manage the operation and indicate the status of the equipment, as well as it various security systems.

In the equipment's technical sheet are described the states that the system may be found in and information supplied on the matter (pages 20-22 of this manual).

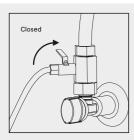
6. MAINTENANCE

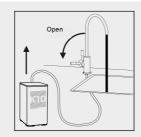
In order to guarantee the quality of the water supplied by your equipment, you must carry out regulard maintenance.

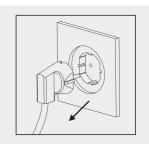
Read the corresponding section in the Technical Manual to check how often maintenance is recommended for (page 11 of this manual).

7. IDENTIFICATION AND RESOLUTION OF PROBLEMS

PROBLEM	POSSIBLE CAUSE	SOLUTION
1. External leakage.	Multiple possible causes.	Call the technical service.
2. No water is produced.	 There is no supply of water. There is no power supply. Leakage sensor is activated. 	1. Wait for the supply to come back. 2. Check the power supply of your residence. If you don't solve the problem, call the technical service. 3. Leakage sensor is activated. If you don't notice any leakage, remove the lower part of the equipment together with the leakage sensor. If this happens again, call technical service.
3. Low production.	Power key is partially closed. Filters/Membrane are in poor condition or worn out.	Open it fully. Call technical service.
4. Excessive production.	Multiple possible causes.	Call technical service.
5. Unpleasant taste or smell.	Multiple possible causes.	Call technical service.
6. Water has an off-white colour.	Air in the system. Microbubbles of air that disappear after some seconds.	This does not represent any problems. The colour will come to disappear if you eliminate the air inside the equipment.
7. Dripping noises heard in the drain.	Multiple possible causes.	Call technical service.
8. The equipment won't start.	There is no supply of water. There is no power supply. Leakage sensor is activated.	1. Wait for the supply to come back. 2. Check the power supply of your residence. If you don't solve the problem, call the technical service. 3. Leakage sensor is activated. If you don't notice any leakage, remove the lower part of the equipment together with the leakage sensor. If this happens again, call technical service.
9. The equipment stops and restarts continuously.	Multiple possible causes.	Call technical service.
10. The equipment never stops rejecting water to the drain.	Intake electrovalve has deteriorated. Production anti-drain has deteriorated.	Check and replace. Check and replace.







Read the INTERFACE section of the Technical Sheet. In the event of anomaly get in touch with the TAS and proceed as follows: Close the input key. Open the tap to depressureize the sytem and disconnect the plug.

TECHNICAL MANUAL FOR INVERSE OSMOSIS EQUIPMENT

1. PRINCIPAL CHARACTERISTICS

APPLICATION

Water treatment

Reverse Osmosis

lise

Improves the characteristics of drinkable water (that complies with the requirements of EU Directive on water for human consumption 98/83 and its national transpositions in the various member states of the European Community).

Modifications for reduction or intake

- The treatment of water through inverse osmosis is able to reduce the concentrations of sal and other substances in high percentages.
- · Minimum reduction* of specific compounds and parameters:

Sodium: 90%.
Calcium: 90%.
Sulphate: 90%.
Chloride: 90%.
Total hardness: 90%.
Conductivity: 90%.

* Based on the characteristics of the water to be treated (at the exit of the membrane). These values may vary depending on the post-filter that is included in the equipment and/or settings of the mixing valve (if one is included).

OPERATIONAL LIMITS

EQUIPMENT WITH PUMP

Pressure (max./min.): 4 bar - 1 bar (400kPa-100kPa) . TDS (max.): 1500ppm.

TDS (max.): 1500ppm. Temperature (max./min.): $38 \,^{\circ}\text{C} - 5 \,^{\circ}\text{C}$. Hardness (max.): $15 \,^{\circ}\text{HF}$.

ATTENTION: If you have any doubts over the installation, use or maintenance of this equipment, get in touch with the Technical Assistance Service (T.A.S) of your distributor.

2. PRIOR WARNINGS

ATTENTION: This equipment does not PRODUCE POTABLE water. If the water to be treated comes from a public source (and therefore conforms to all applicable laws), this equipment will substantially improve the quality of the water.

ATTENTION: If the water to be treated does not come from a public supply network or if its origins are unknown, it will be necessary to carry out a physical, chemical and bacteriological analysis of the water to ensure its proper purification by using the appropriate techniques and equipment, as needed. This needs to be done BEFORE THE INSTALLATION of the equipment. Get in touch with your distributor so that it

can advise you with regards to the appropriate treatment for your situation.

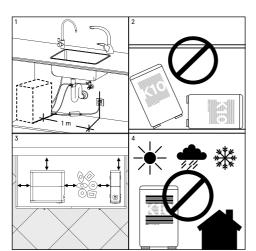
- 2.1 CONDITIONS FOR THE CORRECT OPERATION OF THE EQUIPMENT
- The equipment should not be supplied with hot water (T>38°C)
- \cdot The surrounding temperature must be between $\ 4^{\circ}$ and $45^{\circ}\text{C}.$
- For water with a level of salinity that is higher than 1500 ppm, check with your distributor.

- We recommend that the water to be treated be decalcified or of a maximum hardness of 15 HF so as to obtain the best performance from the equipment.
- \cdot If the water to be treated is harder than 15 HF, the longevity of the membrane and the performance of the equipment may be reduced.
- · If the water supplied contains a total chlorine concentration greater than 1.2 ppm, we recommend the installation of an active carbon dechlorination filter to reduce the concentration of chlorine in the water and thus protect and extend the life of the equipment's components.

If the water to be trated contains:

High concentrations of iron and magnesium (Higher than 1 ppm when measured in the water that the machine rejected). Extended periods of hyper-chlorination. Sludge and cloudiness higher than 3 NTU. Nitrate concentration higher than 100 ppm. Sulphate concentration higher than 250 ppm.

• Get in touch with your distributor so that they can recommend you the most appropriate treatment for your case so as to ensure the correct operation of the equipment and thus avoid any damages to the components and guarantee the quality of the water provided.



2.2 LOCATION OF THE EQUIPMENT

- If you need to adapt the facilities of your residence or business in order to be able to install the equipment in the designated space, any adaptation should be done following all applicable national regulations concerning the internal installation of water and power supplies.
- \cdot This equipment requires that a power outlet be placed at least one meter away (1).

• This equipment should not be installed laying down or at angle (2), as the leakage detector would become disabled.

When filled, the equipment weighs more and the distribution of weight in an unforeseen posiont may lead some connection elements to be forced, and may thus lead the equipment to malfunction, its components to be damaged or loss of water.

- The spot designated for its installation must be large enough to host the device, its accessories, connections and to allow for maintenance to be carried out comfortably (3).
- ·The equipment should never be installed outdoors (4).
- The environment and room where equipment and tap are installed must maintain adequate hygienic-sanitary conditions.
- ·Avoid external drips on the equipment, coming from pipes, drains, etc.

ATTENTION: The equipment must not be installed next to a heat source or should not receive any direct hot air over them.

2.3. START UP AND MAINTENANCE

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

- · Consumables must be replaced with the frequency indicated by the manufacturer.
- The equipment must be sanitized periodically and prior to start-up.
- · After commissioning, discard the water produced during the first 10 minutes of use.
- · Maintenance must be carried out by qualified technical personnel, with adequate attitude and hygienic conditions, in order to reduce the risk of internal contamination of the device and its hydraulic system. (For more information contact the technical service of your distributor).

3. UNPACKING

It is important that before you install and start-up the equipment, you revise the materials received in order to guarantee that they have not been damaged during transportation.

ATTENTION: Any claim for damages suffered during transportation must be presented together with the delivery note or invoice to your distributor, noting the name of the carrier, within 24 hours from receiving the merchandise.

Take out the equipment and accessories from their cardboard packaging, removing the corresponding protections

ATTENTION: Make sure to properly dispose of any plastic bags, keeping them out of the reach of children as they can be dangerous for them.

Inside you will find: The water treatment equipment, installation accessories and its documentation.

The materials used in the packaging are recyclable and must be discarded in the appropriate collection bins or in the local center designated for the recuperation of waste materials.

This product cannot be discarded together with other urban waste. When the equipment's lifespan comes to an end, it should be handed over to the company or center where you acquired the device, or in a Recycling Center or local center specialized in the recycling of materials, indicating that it has electronic components and refrigerating gases. The proper collection and treatment of unusable devices contributes to the preservations of natural resources and helps avoid any potential risks to public health.

4. INSTALLATION



ATTENTION: Before disassembling the equipment, anticipate all the material you will need to perform maintenance operations (read section 5 Installation) and the space required for it. Work in a properly lit place, in adequate hygienic conditions and with enough space to perform operations comfortably.

The installation of your osmosis equipment must be carried out by qualified personnel sufficient for this. Read this manual beforehand and consult the dealer in case of doubt.

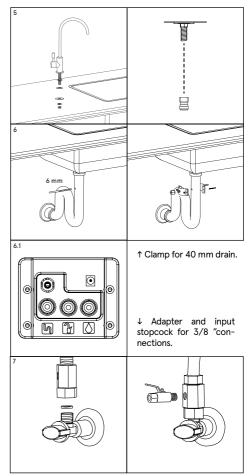
ATTENTION: Since the device to be installed improves the quality of the water to be consumed, all the tools that are going to be used for assembly and installation must be clean and in no case can they be contaminated or impregnated with grease, oils or oxides Use tools exclusively for tube cutting, membrane manipulation, etc. Keep them clean and disinfect them periodically.

ATTENTION: The work must be carried out with an appropriate attitude and hygienic conditions, taking precautions in everything related to materials and components that will be 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 by improper handling, using gloves, hand sanitizing gel or washing your hands as many times as necessary throughout the installation, commissioning and maintenance of the equipment. The most frequent place for the installation of the equipment is usually under the kitchen sink or in an attached furniture.

Install the faucet, hydraulically and electrically, to the equipment drain hose and inlet adapter and connect them to the respective equipment connectors (5, 6, 6.1 and 7).



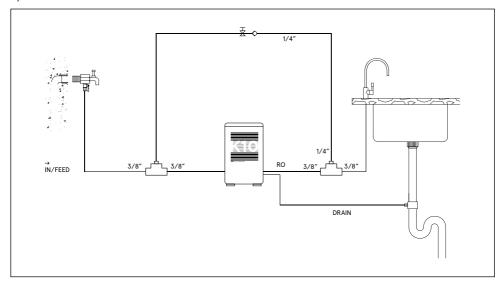
See hydraulic diagram on page 13.

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

4.1. MIXING KIT

If you want to increase the pH, conductivity and concentration of chlorine at the outlet, you must perform the installation according to the following scheme and using the corresponding components included in the mixing kit (consult your dealer).

Hydraulic scheme



- · After commissioning, open the tap and with the corresponding meter of the parameter of interest, measure in the water dispensed by the tap and slowly and progressively open the mixing valve until the desired parameter is achieved.
- The water dispensed must comply with the drinking requirements established by European Directive 98/83 or corresponding national legislation that transposes it.

4.2. INSTALLATION OF FILTERS

- · Remove the filter cartridges from their cardboard packaging. The number of each cartridge must match that of the housing
- · Ilnsert the PPF 1 sediment filter into the housing 1. The triangle icon on the filter cover should point to the icon



- \cdot Press the filter firmly and rotate it 90° clockwise. Match the triangle icon with the icon
- Follow the steps above to install the carbon prefilter, membrane and carbon postfilter.

5. START-UP

5.1. RINSING THE FILTERS

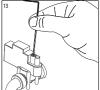
It is necessary to clean off from the filters the granulated carbon dust that is generated during the transportation and manipulation of the equipment and the corresponding cartridges. This dust must be cleaned off as it may partially or wholly obstruct the reverse osmosis membrane, leading also to the malfunctioning of the equipment

To rinse the filters follow the steps below:

- 1. Check that all items are installed correctly.
- 2. Open the water inlet valve
- 3. Connect the power supply
- 4. Open the tap and let the water run through the filters.
- 5. Rinse the machine for 10 minutes. It is normal to see black remains of coal in the outlet water.
- 6. After rinsing, close the tap and check that the pump stops.
- 7. Once these steps have been done, you must sanitize the machine. To do this consult the sanitation procedure.

5.2. SANITATION OF THE EQUIPMENT

Perform a sanitization of the equipment, according to the model and procedure



to the model and procedure indicated by the manufacturer (see the Sanitation Procedure). If you have any questions, ask your dealer.

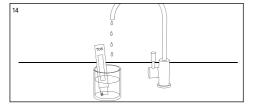
5.3. SEALING THE SYSTEM, STOPPING AND STARTING

• Turn off the faucet on the countertop and keep the equipment hydraulically or electrically powered by performing an eye check of the system to ensure there is no leakage (for approx. 10).

If the equipment pump does not stop, adjust the maximum pressure switch tare with an Allen key of 2, until the pump (13) stops. Open the dispensing tap. The equipment should be activated and supply water. Turn off the tap again and check that the equipment stops.

5.4. RINSING AND CLEANING

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



attention: in case of detecting that the water dispensed does not comply with the national legislation in force, re-measure If the deviation persists, close the equipment's input key, empty it through the tap, disconnect it electrically and contact your technical service.

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

6. MAINTENANCE

ATTENTION: Some components of your equipment, such as prefilters and the membrane, are consumables that have a limited duration.

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

ATTENTION: In order to guarantee the quality of the water supplied by your equipment, you should perform periodic maintenance.

RECOMMENDED MAINTENANCE

Filter	Max life-span.
Step 1 - PPF Sediments Filter	12 months*
Step 2 - CTO Carbon Pre-Filter	12 months
Step 3 - RO Membrane	24 months**
Step 4 - CTO Carbon Post-Filter	12 months

- * Depending on the intended use and characteristics of the water to be treated.
- ** For waters to be treated soft (hardness <15°HF)

Maintenance must be performed by trained personnel, who must handle the equipment properly, as well as use original spare parts to maintain the characteristics, warranty, 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 operating limits and commissioning, improper maintenance or use, may result in the loss of the warranty, as well as the invalidation of the certifications to which the equipment has been submitted.

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

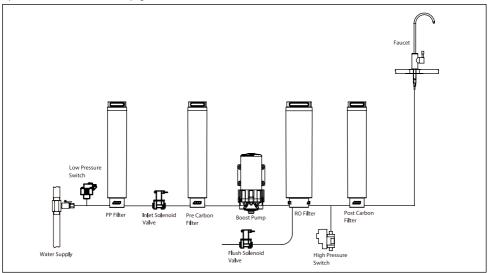
Your distributor will anticipate the duration of the consumables depending on the characteristics of the water to be treated and the expected consumption in each case.

ATTENTION: All consumables are served with an individual packaging specially designed to guarantee hygienic storage and transport conditions. Extreme hygienic precautions after removing consumables from their packaging and during handling of the different connectors and components.

- Change filters 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, see the technical data sheet of the equipment. If you have any further questions, ask your dealer.

ATTENTION: Wear gloves or appropriate personal protective measures, if you use chemicals during sanitation.

Hydraulic scheme It comes from page 10.



SANITATION PROCEDURE

1. SANITATION

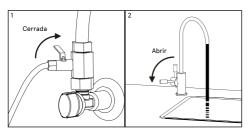
Necessary material:

- · Manual valve.
- · Dosing cup and connectors.
- · 3% hydrogen peroxide (0.5 l).
- · Brush.
- · Vinyl gloves for single use.
- · Easy rinse soap or detergent.
- · Food lubricant.
- · Hydrogen peroxide detector strips.
- · Sanitizing spray.
- · Paper napkin.

Perform a sanitization of the equipment during startup, when appropriate (whenever there is a risk of contamination of the equipment by handling components in contact with water) or with the indicated periodicity. To do this, follow the steps below.

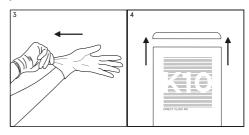
ATTENTION: The water used during sanitation must be potable water (from a public distribution network that complies with the corresponding potable water requirements as per RD 140/2003, European directive 98/83 or current local legislation).

- Open the tap and let water recirculate in order to renew the water inside the equipment.
- \cdot Close the inlet valve (1) and open the dispensing tap (2) to reduce the pressure in the equipment.

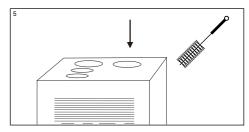


- Change filters and wash them as indicated in the corresponding section of the Technical Manual of the equipment. Sanitation should be carried out with the new prefilters and postfilters installed and previously rinsed properly (Correctly removed carbon dust from them).
- \cdot Use single (3) use vinyl gloves to handle sanitizing products.

ATTENTION: Extreme hygienic measures during the manipulation of filters, membrane and equipment components in contact with water. Wear disposable gloves or wash your hands as many times as necessary to avoid risk of contamination of the equipment.



- · To clean the equipment, the filters must be inside their housings (4).
- If you replace a damaged membrane or a filter at the end of its useful life, remove the damaged one for disposal and clean the inside of the housing and connections with a brush (which must be kept clean and disinfected) together with soap or Easy rinse detergent (which generates little foam) and suitable for cleaning surfaces in contact with food (5). Then rinse the housings and connections correctly, ensuring that all detergent residue is removed.



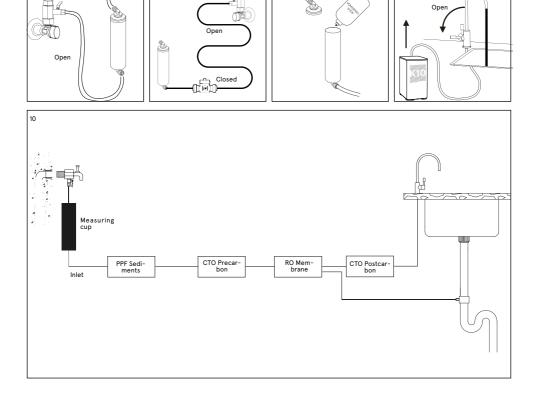
2. TREATMENT OF PREFILTER, MEMBRANE AND POSTFILTER

Disconnect the inlet tube to the equipment marked "feed-in", and insert the measuring cup between the stopcock and the water inlet of the equipment (6). For greater comfort and ease of access during sanitation and the opening and closing operations of the inlet valve, a manual valve in the closed position can be inserted with the sanitizing dosing vessel, which will perform the same functions as the manual valve entry cut to the equipment.

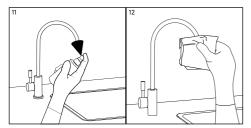
- Once the assembly is installed, keep the new manual inlet valve closed and open the inlet valve connected to the wall adapter (7). The measuring cup must be empty.
- Pour 0.25 liters of Oxygenated Water into the dosing vessel interspersed at the equipment inlet (8). Thread the glass correctly to its head.
- The manual inlet valve and the tap must be closed. Connect the equipment to the power supply.
- Open the water inlet stopcock to the equipment and the tap, allowing it to start its operation and allowing it to breathe the Oxygenated Water into it. Fill a 1L jug with tap water. Before closing the tap, close the inlet valve again to lower the pressure. Refill the dispenser with 0.25I of hydrogen peroxide and drain 1 liter more water. Turn off the tap. At this time the entire circuit contains sanitizing liquid.
- \cdot After 10 mins. open the dispensing tap (9) and let the water circulate for 5 mins.
- Empty the measuring cup. Before opening it, have a container at your fingertips where you can empty it, as it can be filled with water.

Open

Closed



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



3. RINSING

- · Since sanitation 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 sanitation, circulating mains water of adequate quality during 5 minutes or more. Discard the first 5 liters of water before consuming it.
- Proceed with a pre-filter rinse each time you replace it and prior to each sanitation of the equipment.
- Rinse the pre-filter, preferably isolated from the rest of the equipment even before installation.
- · Rinse with plenty of water that complies with local regulations regarding water potability parameters.
- Fill the pre-filter slowly in order to evacuate the contained air and avoid internal turbulences that alter the different stages of filtration. When water sprouts through the outlet opening, increase the flow rate progressively. Extract at least 4L and make sure that this water no longer contains fines from coal.
- · Keep, throughout the process, the filter in the same position it will occupy once installed in the equipment.
- At the end, take a paper towel, dry all the parts that could have been wet and especially the Aquastop leak detection probe (if the equipment includes one).

TECHNICAL SHEET

FOR REVERSE OSMOSIS EQUIPMENT

1. TECHNICAL CHARACTERISTICS

APPLICATION

Water treatment

Reverse Osmosis

Use

Improves the characteristics of drinkable water (that complies with the requirements of EU Directive on water for human consumption 98/83 and its national transpositions in the various member states of the European Community).

Modifications for reduction or intake

- · The treatment of water through inverse osmosis is able to reduce the concentrations of sal and other substances in high percentages.
- Minimum reduction* of specific compounds and parameters:

Sodium: 90%. Calcium: 90%. Sulphate: 90%. Chloride: 90%. Total hardness: 90%. Conductivity: 90%.

* Based on the characteristics of the water to be treated (at the exit of the membrane). These values may vary depending on the post-filter that is included in the equipment and/or settings of the mixing valve (if one is included).

OPERATIONAL LIMITS

FQUIPMENT WITH PUMP

Pressure (max./min.): 4 bar - 1 bar (400kPa-100kPa).

TDS (max.): 1500ppm. 38 °C - 5 °C. Temperature (max./min.): 15 °HF. ** Dureza (máx.):

Type of control: Inlet control solenoid valve.

Flushing solenoid valve Minimum pressure switch. Electronic leakage sensor

Maintenance notice

430 x 231 x 324

15.

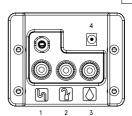
Dimensions (A x B x C en mm):

Weight (in kg, including all accessories):

Input connection: 3/8" Drain connection: 3/8" Tap connection: 3/8"

3/8" M-F**** Wall adapter: Drain collar: Pipe clamp

40 mm drain.



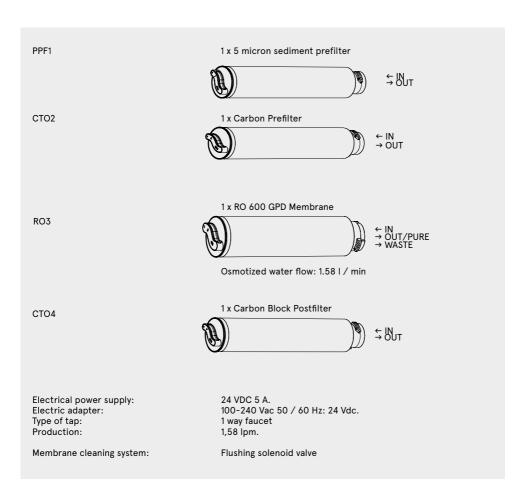
1. Drain 2. Faucet

Α

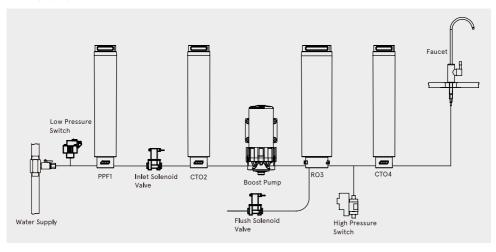
Inlet
 Power Grid

Technical Sheet

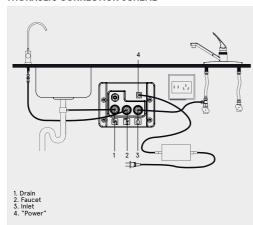
Security System:



HYDRAULIC SCHEME



HYDRAULIC CONNECTION SCHEME

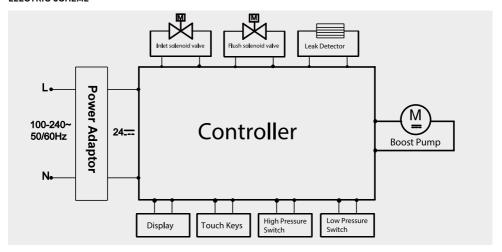


- * For salinities above 1500ppm consult your dealer.
 ** Higher hardnesses may reduce the life and operation of certain components.
- *** Maximum accumulation depending on the inlet pressure.
- **** Flow rates can vary by 20% depending on the temperature, pressure and specific composition of the water to be treated.
- **** May vary depending on the model.

DISTRIBUTED BY::

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ELECTRIC SCHEME



2. OPERATION OF THE EQUIPMENT

- The equipment incorporates a minimum pressure switch to protect the pump from pressure drops in the network (LPS).
- The mains water to be treated enters the equipment through the prefiltration stage that incorporates a PPF1 sediment filter. At this stage of filtration, the suspended particles are retained.
- In the second filtration stage, CTO2, a block carbon filter reduces chlorine, its derivatives and other organic substances.
- The passage of water into the equipment is controlled by a cut-off solenoid valve (Si).
- · Water, after being treated in the filtration stage, is propelled towards the reverse osmosis membrane (RO3). The equipment incorporates a pump (P) to increase the pressure. The pressure of the water on the membrane makes the reverse osmosis process possible.
- · Before running out of the tap, the water passes through the CTO4 carbon postfilter, which improves the taste.
- Rejection water or with excess salts and other dissolved substances is directed to the drain for disposal.
- Direct flow equipment controls the travel and stop using a pressure switch (HPS)
- The equipment incorporates different functional and / or security systems, managed by a last generation electronic module:
- · Electronic leak detection system (L). When the system detects this situation, it blocks the equipment emitting an acoustic and luminous signal informing about it. The device will remain locked until the detection probe is dry.

- The automatic flushing solenoid valve (Si F) opens to rinse the rejection and thus reduce the effect of natural osmosis and improve water quality, especially in the first dispensed vessel.
- Automatic warning of changing filters, in order to inform the user that proper maintenance must be performed to ensure the quality of the water dispensed.

3. INTERFACE. STATE IN WHICH THE SYSTEM IS FOUND

3.1. PROGRAMMING GUIDE FOR LED DISPLAY AND TOUCH PANEL

When the machine is switched on, the display will flash 3 times and the machine will automatically rinse for 30 seconds. The display will turn off automatically if no button is pressed for 5 minutes. Then the machine enters Energy Saving. Press any button to turn on the display.

In the case of system error, water leak detected or end of the useful life of a filter, the display will be on and will not enter the Energy Saving mode.

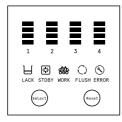
The "Select" button is used to:

- 1) Select the filter on which you want to reset its life time.
- 2) Press and hold "Select" for 3 seconds to force an automatic rinse.

The "Reset" button is used to:

1) Press and hold the "Reset" button for 3 seconds to enter the filter life time reset program.

2) Press "Select" to select the filter that needs a reset.



LACK

"LACK" icon flashing: There is no water supply or the inlet pressure is too low.

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"STDBY" icon on: Equipment ready to use.

STDBY

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"WORK" icon on: Equipment producing water.

WORK

"FLUSH" icon blinking: Equipment rinsing all filters.

FLUSH

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"ERROR" icon blinking: Some problem has been found in the device.

ERROR

Fix the problem.

WARNING: All display icons flash and a beep is emitted when a water leak is found in the equipment.

3.2. FILTER LIFE TIME INDICATOR

There are 4 lights to indicate the life time of each filter. If the filter has just been installed, the 4 lights should be on, indicating that the filter is 100% of its useful life. As the filter is treating water, its life time will be shortened.

Once you have reached the end, the filter icon will flash and an alarm of 10 beeps of 1 second will be emitted every 30 minutes.

When the filter is replaced and its counter is reset, the icon will turn on again and alarms will be deactivated. The team will work as usual.



3.3. TYPES OF RINSE

- 1. On: When connected to power, the equipment will automatically rinse all filters for 30 seconds.
- **2.Forced:** If the "Select" button is held down for 3 seconds, the device will automatically rinse all filters for 18 seconds.
- **3. Accumulated:** When the equipment has accumulated 1 hour of work, the equipment will rinse all filters for 18 seconds. If a rinse has been forced during this time, the accumulated time will have restarted.
- 4. After dispensing water: If the equipment dispenses water for less than 1 minute, it will rinse for 3 seconds. If it dispenses between 1 and 5 minutes, it will rinse for 5 seconds. If it does between 5 and 10 minutes, 8 seconds. If you dispense for more than 10 minutes, it will rinse 12 seconds.

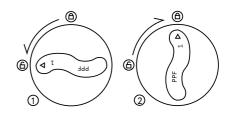
3.4. MAINTENANCE GUIDE

FILTER	*MAX LIFE-SPAN
Step 1 - PPF Sediment Filter	12 months
Step 2 - CTO Carbon Prefilter	12 months
Step 3 - RO Membrane	24 months
Step 4 – CTO Carbon Prefilter	12 months

* The life of the filters can be significantly reduced depending on the characteristics of the water. For hygiene reasons, it is advisable not to exceed the maximum useful life.

3.5. HOW TO REPLACE FILTERS

- 1. Close the water inlet tap.
- 2. Open the tap to depressurize the system
- 3. Disconnect the power supply
- 4. Rotate the filter to be replaced 90° counterclockwise until the triangle matches the icon (Figure 1). Remove the filter.
- 5. Insert the new filter into the housing so that the triangle matches the icon.
- 6. Turn the filter firmly 90° clockwise until the triangle matches the icon (Figure 2)
- 7. Turn on the power supply and open the water inlet valve.
- 8. Follow the instructions in the HOW TO RESET FILTER COUNTERS section to reset the replaced filter.
- 9. Perform a forced rinse according to the RINSE TYPES section. Rinse for 5 or 10 minutes.



3.6. HOW TO RESTART THE FILTER COUNTERS

- 1. Press and hold the "Reset" button for 3 seconds to access the filter reset menu.
- 2. Press "Select" to choose the filter you wish to reset.
- 3. Press and hold the "Reset" button for 3 seconds. Then a beep will sound, which means that the filter's life time has been reset.

WARNING: If no button is pressed within 10 seconds of the filter reset menu, the device will automatically exit the menu.

3.7. TROUBLESHOOTING

PROBLEM	POSSIBLE SOLUTIONS
1. The pump does not work, no water is produced	
A. There is no power supply.	A. Turn on the power or wait for the supply to return.
B. The transformer is damaged.	B. Replace the transformer.
C. Some filter has reached the end of its useful life.	C. Replace the filter.
D. There is a leak in the equipment.	D. Locate the leak and fix it.
E. The equipment has been producing water for 6 hours.	E. Disconnect the power supply and reconnect.
F. Low inlet water pressure.	F. Install a pressure group so that the low pressure switch can be activated.
G. The low pressure switch is defective and does not send the signal to the controller.	G. Repair or replace the low pressure switch.
H. The high pressure switch is defective and does not reset.	H. Repair or replace the high pressure switch.
I. The pump is damaged	I. Replace the pump.
2. The pump does not stop	
A. The pump is damaged.	A. Replace the pump
B. The high pressure switch is damaged.	B. Repair or replace the high pressure switch.
3. The pump starts and stops continuously	
A. Low inlet pressure.	A. Increase inlet pressure.
B. Defective low pressure switch.	B. Repair or replace the low pressure switch.
C. Defective high pressure switch.	C. Repair or replace the high pressure switch.
D. There is some leak in the equipment.	D. Locate and fix the leak. Dry the leak sensor well.
4. Insufficient production flow	
A. Faucet valve stuck or interlocked.	A. Open or unclog the tap valve.
B. Clogged sediment / carbon prefilters or carbon postfilter.	B. Replace clogged filters.
C. Low inlet pressure.	C. Increase inlet pressure.
D. Clogged reverse osmosis membrane.	D. Ensure that the inlet pressure is between the required values. Ensure that the rejection line of the machine
	is free of obstructions. Unclog the duct and replace the membrane if necessary.

E. The tap is defective.	E. Repair or replace the tap.	
F. No water comes out due to rejection. The flow restrictor is	F. Repair or replace the flushing valve.	
clogged.		
5. Production water has high TDS		
A. Plugged prefilters.	A. Replace filters.	
B. Reverse osmosis membrane at the end of its useful	B. If the life of the membrane has been too short (less	
life.	than 24 months), correct the problem. Replace the	
	membrane.	
C. Production and rejection connected backwards.	C. Correct the connections.	
D. No water comes out due to rejection. The flow res-	D. Repair or replace the flushing valve.	
trictor is clogged.		
E. The new carbon postfilter has not been thoroughly	E. Open the tap and rinse the carbon postfilter for 10	
rinsed.	minutes.	
F. The inlet water has increased its TDS.	F. An increase in TDS of the inlet water will also cause an	
	increase in TDS in the production water.	
6. Smells and flavors in the production water		
A. The carbon postfilter is depleted.	A. Replace the carbon postfilter.	
B. Production and rejection connected backwards.	B. Correct the connections.	
C. Increase in the TDS of the incoming water.	C. Replace the membrane.	
7. Leakage or dripping in the tap		
A. Water comes out with the tap closed.	A. Fix the tap valve or replace the tap.	
8. Leaks in the external connection to the machine		
A. Tubes improperly connected in the connectors.	A. Check the tightness of all connections.	
B. Scratched pipes in the sealing area.	B. Cut the tubes eliminating those grated areas and re-	
	connect.	
C. O-rings in poor condition.	C. Replace the o-rings.	

4. WARRANTY

The distributor guarantees the equipment for a period of two years for issues with conformity that is detected during this period, pursuant to RD 1/2007 of 16 November (Consolidated text of the General Law for the Defense of Consumers and Users).

- The warranty includes the reparation and substitution of defective pieces by authorised personal by the Distributor or the Official Technical Assistance Service (TAS), where it was installed or in a workshop. The warranty includes all labor and transportation costs that may arise.
- The distributor is excluded from this warranty if the parts are damaged due to natural wear and tear, lack of maintenance, blows or other lacks of conformity that are the result of the inappropropiate use of the equipment or inappropriate according to the conditions and operational limits indicated by the manufacturer of the product. Also, the warranty is no longer valid if the equipment has been poorly handled or used, or if they have been repaired or modified by personnel that does not work for the distributor or official TAS.
- · The parts substituted under warranty will remain property of the distributor.
- Will respond for any non-compliance in the equipment if it relates to the origin, identity or suitability of the products, in accordance with their nature and purpose. Taking into account the characteristics of the equipment, if the warranty is to cover any lack of conformity, compliance with the technical installation and operation conditions of this warranty sheet is essential; as is a copy of the invoice or purchase ticket. If these conditions are not fulfilled, it may lead to the invalidation of the warranty, taking into account the equipment's purpose and the conditions and operating limits in which it must operate.
- The distributor guarantees that the equipment installed is suitable in particular for the improvement of the quality of the water to be treated, based on the characteristics of the equipment and all applicable laws.
- The installer and/or distributor guarantees the correct installation and implementation of the equipment as indicated by the manufacturer and applicable law and will also respond for any lack of conformity that may result from the incorrect application, instalment or implementation of the equipment.
- · For any warranty claims it is necessary to present the purchase invoice. The 2-year period is calculated from the day the equipment was purchased from the distributor.
- · If during the warranty period your equipment presents any issues, contact your distributor.

- * Previous treatment to the equipment:
- * Inlet Hardness of the Equipment (°F):
- * Equipment inflow TDS (ppm):
- * TDS of produced water (ppm):
- * Equipment inflow pressure (bar):

*Results of the Installation Data Sheet and Start-up:

Correct:

Others:

The owner of the equipment has been informed adequately and clearly of the use, manipulation and maintenance that the equipment requires to guarantee its correct operation and the quality of the water produced. For this reason, we offer you a maintenance contract.

*Ref. Maintenance Contract:

ACCEPTS the maintenance contract

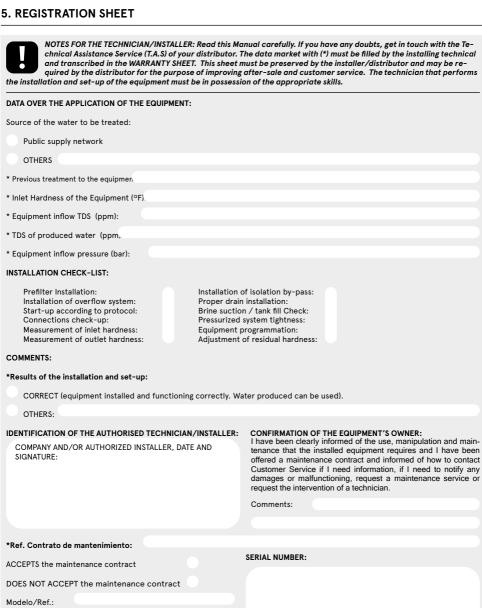
DOES NOT ACCEPT the maintenance contract

If you need information, or if you need to communicate any damages, maintenance requests or request the intervention of a technician, first read the operational, detection and problem shooting sections of this manual and get in touch with the distributor or the company that sold your equipment.

SERIAL NUMBER:

COMPANY AND/OR AUTHORIZED INSTALLER, DATE AND SIGNATURE:





Owner:

Street:

Phone:

City: Provice: ZIP CODE:

EQUIPMENT WARRANTY FOR THE DISTRIBUTOR:

Will bear the responsability only and exclusively the substitution of the parts in case of non-conformity. The reparation of the equipment and the expenses that this will entail (labor, transportation costs, displacements, etc), will be the responsability of the distributor, in accordance with what is outlined in the general conditions of sale, which will not be transferable to the manufacturer

DATE	TYPE OF SERVICE	NAME, SIGNATURE AND SE TECHNICIAN	AL OF THE AUTHORIZED
	START-UP		
	FULL MAINTENANCE	TECHNICIAN	
	PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY
	FULL MAINTENANCE	TECHNICIAN	
	PREPARATION	STAMP	ORINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY
	FULL MAINTENANCE	TECHNICIAN	
	PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY
	FULL MAINTENANCE	TECHNICIAN	
	PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY
	FULL MAINTENANCE	TECHNICIAN	
	PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY

DATE	TYPE OF SERVICE	NAME, SIGNATURE AND SEAL OF THE AUTHORIZED TECHNICIAN	
	START-UP		
	FULL MAINTENANCE	TECHNICIAN	
	PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY
	FULL MAINTENANCE	TECHNICIAN	
	PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY
	FULL MAINTENANCE	TECHNICIAN	
	PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY
	FULL MAINTENANCE	TECHNICIAN	
	PREPARATION	STAMP	ORDINARY
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	OTHERS		WARRANTY
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	OTHERS		WARRANTY

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	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY
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	PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY
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	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY
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	PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY

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	START-UP		
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	PREPARATION	SEAL	ORDINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY
	FULL MAINTENANCE	TECHNICIAN	
	PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY
	FULL MAINTENANCE	TECHNICIAN	
	PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY
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	PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
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	FULL MAINTENANCE	TECHNICIAN	
	PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY