



## **USER MANUAL**

EQUIPMENT REVERSE OSMOSIS



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# **USER MANUAL** FOR REVERSE OSMOSIS EQUIPMENT

## **0. MAIN FEATURES**

CLICK



FAST CONNECTIONS AND MAXIMUM SECURITY



FILTER CONTROL AUTOMATIC NOTIFICATION MAINTENANCE



SOLENOID VALVE IMMEDIATE CONTROL SAFETY MESH



## AQUASTOP

AUTOMATIC SYSTEM LEAK DETECTION

DIRECT FLOW DIRECT PRODUCTION OSMOTIC WATER



LED STATUS DIRECTIONS STATE



HIGH PERFORMANCE MOTOR HIGH ENGINE YIELD



SMART FAUCET TAP INTELLIGENT



ELECTRONIC ADAPTER GREATER SECURITY AND EFFICIENCY

DOUBLE FLOW HIGHER FLOW RATE OF DISPENSED WATER

DIRECT ACCESS EASE OF ACCESS AND MAINTENANCE



QUALITY CONTROL CONTROL OF CONDUCTIVITY



SOUND WARNINGS NOTICES SOUND



ľ

PRESSURE CONTROL PROTECTION PRESSURE DROPS

HIGH EFFICIENCY RECOVERY IN PRODUCTION



EXCLUSIVE MEMBRANE MEMBRANE ORIGINAL



Keep this manual, which includes the Service and warranty book books, to be able to provide you with a better after-sales service.

### 1. INTRODUCTION

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

This equipment will help you improve the characteristics of your 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 concentration of salts are separated by a semipermeable membrane, naturally, there is a flow of water from the solution of lower concentration to that of higher concentration. This flow continues until the concentration on both sides of the membrane are equalized.

When it comes to reversing this process and achieving a flow of water of lower concentration of salts from one of higher concentration, a sufficient pressure must be made, of the water of greater concentration on 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 chemicals).

The water to be purified presses on the semipermeable membrane, so that part of it will be able to cross the pores of the membrane (osmotic water), while the rest of the water (rejected or with high concentration in salts) will be diverted to the drain (Fig. 1).



#### **3. PRIOR WARNINGS**

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

ATTENTION: This equipment does not purify of water. If the water to be treated is provided from a public supply (and therefore complies with current legislation), this equipment will substantially improve the quality of the water.

Water treatment equipment requires regular maintenance by qualified technical personnel in order to ensure the quality of the water produced and supplied.

#### 3.1. USE OF THE EQUIPMENT

 $\cdot$  When you are going to be absent for more than one month, close the water inlet to the equipment, empty it and disconnect it from the power supply (PUMP model). When you return, connect the electrical power supply of the same, open the entrance key and the tap. Let the water out for at least 5 minutes prior to water consumption.

ATTENTION: After an extended period (more than a month) in which the equipment has not been working or producing water, contact your distributor in order to carry out a sanitization and adequate maintenance.

• Dispense jugs or whole bottles and avoid occasional glass extraction to improve equipment performance.

ATTENTION: Special attention should be paid to the cleaning and hygiene of the osmosis tap, on a regular basis and especially at the time of periodic maintenance and sanitation. To do this, use the sanitizing spray and single-use disposable kitchen paper. In no case should a cloth be used to dry your hands or a multipurpose cloth used for cleaning the kitchen.

• This device can be used by children from 8 years of age and people with reduced physical, sensory or mental abilities or with lack of experience and knowledge if they have received supervision or instructions on the use of the device safely and understand the dangers involved. Children should not play with the device. Children should not perform user cleaning and maintenance without supervision.

## 3.2. RECOMMENDATIONS FOR THE CORRECT USE OF OSMOTIC WATER

 If you want to feed with osmotic water any other point of consumption (such as a refrigerator with a cube dispenser, another tap, etc ...), the channeling should not be done with a metal tube, since this would give a bad taste to the water. Always use plastic tube.

ATTENTION: The water provided by domestic osmosis equipment is low mineralized. The mineral salts the human body needs are mostly provided by food, especially dairy products and to a lesser extent by drinking water.  $\cdot$  It is recommended not to use aluminum utensils 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 stage of filtration, suspended particles, chlorine, its derivatives and other organic substances are retained.

The passage of water into the equipment is controlled by means of an electric solenoid valve.

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

The osmotic water comes out of the equipment through the dispensing tap. Rejection water with excess salts and other dissolved substances is directed into the drain for disposal.

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

This equipment incorporates the turbine as a safety device, which protects the pump from pressure drops, stopping the equipment and preventing damage to the pump.

#### 5. USER INTERFACE

ATTENTION: This equipment incorporates an electronic controller that will efficiently manage the functionality and status indications in which it is located, as well as the different security systems.

The technical data sheet of the equipment 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, it must be kept regularly maintained.

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

## 7. PROBLEM IDENTIFICATION AND RESOLUTION

PROBLEM	POSSIBLE CAUSE	SOLUTION
1. Leak to the outside of the unit	Several possible causes.	Call technical support.
2. Zero production.	<ol> <li>There is no water supply.</li> <li>There is no power supply.</li> <li>Leaking sensor activated.</li> </ol>	<ol> <li>Wait for the supply to return.</li> <li>Check the power supply of the unit. In case of not solving the problem, call the technical service.</li> <li>Leaking sensor activated. If a leak is not detected dry the base of the equipment along with the leak sensor. If the problem persists call the technical service.</li> </ol>
3. Low production.	<ol> <li>Partially closed inlet valve.</li> <li>Filters / membrane's service life ended.</li> </ol>	1. Open it completely. 2. Call technical support.
4. Excessive roduction	Several possible causes.	Call technical support.
5.Unpleasant taste and smell.	Several possible causes.	Call technical support.
6.White water	Air in the system. Microbubbles of air that disappear after a few se- conds.	It's not a problem. The appearance will di- sappear as the air inside the equipment is expelled.
7. Continuous dripping noise in drain.	Several possible causes.	Call technical support.
8. The equipment does not start.	<ol> <li>There is no water supply.</li> <li>There is no power supply.</li> <li>Leaking sensor activated.</li> </ol>	<ol> <li>Check the status of the general inlet and the equipment inlet.</li> <li>Check the general power supply. If the problem is not fixed, call technical support.</li> <li>If the leak is not detected, dry the bottom of the equipment along with the leak sensor.</li> <li>If problem persists, call technical support.</li> </ol>
9. The unit stops and starts constantly.	Several possible causes.	Call technical support.
10. Constant water to drain.	1. Inlet solenoid valve defective. 2. Check valve defective	1. Review and replace. 2. Review and replace.







Read the INTERFACE section of the Data Sheet. In case of anomaly contact the SAT and proceed as directed: Close the entry valve. Open the faucet to depressurize the system and unplug.

## TECHNICAL MANUAL FOR REVERSE OSMOSIS EQUIPMENT

#### **1. MAIN FEATURES**

#### APPLICATION

Water treatment Reverse 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 versions in the different member states of the European Community).

#### Modifications by reduction or contribution

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

Minimum 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 outlet of the membrane). These values may vary depending on the type of post-filter that incorporates the equipment and / or regulation of the mixing valve (if it's included.

#### **OPERATING LIMITS**

Pressure (max./min.): TDS (max.): Temperature (max./min.): Hardness (max.): EQUIPMENT WITH PUMP

4 bar - 1 bar (400kPa-100kPa) . 1500ppm. 38 °C - 5 °C. 15 °HF. \*\*

ATTENTION: If you have any questions about the installation, use or maintenance of this equipment, please contact the technical assistance service (S.A.T.) of your distributor.

#### 2. PRIOR WARNINGS

ATTENTION: the equipment IS NOT A WATER PURI-FIER. In the event that the water to be treated comes from a public supply (and therefore complies with) with current legislation), this equipment will substantially improve water quality.

ATTENTION: In the event that 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 bacterio-logical analysis of the water to ensure its correct purification by applying the appropriate techniques and equipment to each need, PRIOR TO THE INSTALLATION of the equipment. Contact your dealer with to advise you on the most appropriate treatment for your case.

2.1 CONDITIONS FOR THE CORRECT FUNCTIONING OF THE EQUIPMENT

 $\cdot$  The equipment should not be fed with hot water (T>38°C).

 $\cdot$  The ambient temperature should be between 4° and 45°C.

 $\cdot$  For waters with salinities greater than 1500 ppm consult with your distributor.

• It is recommended that the water to be treated be decalcified or with a maximum hardness of 15 °HF in order to obtain an optimal performance of the equipment.

 $\cdot$  In the event that the water to be treated is of a hardness greater than 15 °HF, there could be a reduction in the life of the membrane and in the performance of the equipment.

In the event that the input water contains a concentration greater than 1.2 ppm of the total chlorine, the installation of an activated carbon filter is recommended to reduce the concentration of chlorine in the water and thus protect and extend the life of the components of the equipment.

In case the water to be treated contains:

High concentrations of iron and manganese (Greater than 1ppm measured in machine rejection). Prolonged hyper chlorination over time. Sludge or turbidity greater than 3 NTUs. A nitrate concentration greater than 100 ppm.

A sulfate concentration greater than 250 ppm.

• Contact your dealer to recommend the most appropriate pretreatment for you, to ensure the correct operation of the equipment, avoid damage to components and guarantee the quality of the water supply.



#### 3. INSTALLATION OF THE EQUIPMENT

 In case of having to condition the installation of the house to be able to install the equipment in the foreseen place, it must be carried out following the national standards for interior installations of water and electrical supplies.

• This equipment needs an electrical outlet less than 1 meter away (1).

 $\cdot$  This equipment should not be installed lying down or tilting (2), because the leak sensor will be disabled.

The equipment full of water weighs more, the distribution of weights in an uneven position could cause some connection element to be forced, thus generating a malfunction, damage to equipment components or loss of water.

• The place intended for its installation must have sufficient space for the apparatus itself, its accesses, connections and for the realization of a comfortable maintenance (3).

• Under no circumstances should the equipment be installed outdoors (4).

• The environment and environment where equipment and tap are installed must comply to adequate hygienic-sanitary conditions.

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

 $\cdot$  This appliance must only be supplied at safety extra low voltage.

 $\cdot$  Avoid external drips on the equipment, coming from pipes, drains, etc.

ATTENTION: Equipment must not be installed next to a heat source or directly receiving a flow of hot air on it (dryer, refrigerator, etc.).

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

3.1. COMMISSIONING AND MAINTENANCE

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

 $\cdot$  Consumable elements must be replaced with the frequency indicated by the manufacturer.

• The equipment must be sanitized periodically and prior to its commissioning.

 $\cdot$  After putting into service, it must discard the water produced during the first 30 minutes of use.

 Maintenance must be carried out by qualified technical personnel, with appropriate attitude and hygienic conditions, in order to reduce the risk of internal contamination of the apparatus and its hydraulic system. (For more information contact the technical service of your distributor).

### 4. UNPACKING

It is important that before installation and commissioning, check the box and condition of the equipment, in order to ensure that they have not been damaged during transport.

ATTENTION: Claims for damage during transport must be submitted together with the delivery note or invoice to your distributor, attaching the name of

#### the carrier within a maximum period of 24 hours after the receipt of the goods.

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

# ATTENTION: Dispose of properly and keep out of reach of children the 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 municipal waste. When the useful life of the equipment has been completed, it must be delivered to the company or center where the device was acquired, or to a Specific Clean Point or local center for the recovery of materials, indicating that it has electrical and elec-

tronic components. The correct collection and treatment of unusable equipment 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 sufficiently qualified personnel. Read this manual in advance and consult with the dealer if in doubt.

ATTENTION: Since the apparatus to be installed improves the quality of the water to be discharged, all tools to be used for assembly and installation must be clean and in no case may be contaminated or impregnated with fats, oils or oxides. Use tools for exclusive use for tube cutting, membrane manipulation, etc. Keep them clean and disinfect them periodically.

ATTENTION: The work must be carried out with an attitude and adequate hygienic conditions, extreme the precautions in everything related to materials and components that will find is 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 hands as many times as necessary.

The most common place for installation of the unit is usually under the kitchen sink or in an adjoining cabinet.

Install the tap, hydraulically and electrically, to the equipment drain collar and inlet adaptor and connect them to the respective equipment connectors (5, 6, 6.1 and 7).



See hydraulic diagram on page 21.



#### 5.1. MIXING KIT

 In case you want to increase the pH, conductivity and chlorine concentration at the outlet, you will need to carry out the installation according to the following scheme and using the component cores included in the mixing kit (check with your distributor).

• After start-up, 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 you get the desired result.

• The water dispensed must comply with the requirements of potability established by the European Directive 98/83 or corresponding national legislation that applies.

#### 5.2. INSTALLATION OF FILTERS

- · Remove protective plastic from filters.
- · Install pre-filter number 1 (PP+CB) in position.

 $\cdot$  Enter it as shown in the image (8) and make a 90° turn so that it is correctly installed (9 and 10).

 $\cdot$  Perform the same procedure with the other filters by guiding the sequence of numbers.

• After you complete the installation of the filters, open the inlet valve and equipment rinse faucet during 10 minutes.



## 6. COMMISSIONING

#### 6.1. FILTER RINSING

 It is necessary to remove dust and carbon grains from the filter that is generated during 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. To do this, first open the water faucet. According to the appliance electrically. Then press the power button for 1.5 seconds. The unit will rinse the filters.

#### 6.2. SANITIZATION OF EQUIPMENT

 Perform a sanitization of the equipment, according to the model and procedure indicated by the manufacturer (see the Sanitization Procedure). If you have any questions, contact your dealer.

#### 6.3. SYSTEM TIGHTNESS, SHUTDOWN AND START-UP

 $\cdot$  Close the equipment tap on the worktop and keep the equipment hydraulically or electrically powered by carrying out an ocular check of the system to ensure that

there are no leaks (for 5 min approx.)

Open the dispenser faucet. The equipment should start and supply water. Turn off the faucet again and check that the equipment stops.

#### 6.4. RINSING AND CLEANING

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



ATTENTION: in case of detecting that the treated water does not comply with the current national legislation, re-perform the measurement. If the problem persists, close the inlet valve of the equipment, open the tap, disconnect it electrically and contact your technical support.

• Finally, clean the inside and bottom of the equipment with single-use kitchen roll, in order to remove the water that could have fallen onto it, as it could cause a false alarm and blockage of the system.

#### 7. MAINTENANCE

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

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 chlorination, excess iron, etc.

ATTENTION: In order to guarantee the quality of the water supplied by your equipment, it must be periodically maintained.

Prefilter PP + CB: 12 months or 3600Lts. \* RO membrane: 36 months or 12000 Lts. \* Postfilter GAC: 12 months or 6000 Lts. \*

\* Lts. Litres of water produced.

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, 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 limits of operation and commissioning, improper maintenance or use, may lead to the loss of the guarantee, as well as the invalidation of any kind of quality certifications.

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

The distributor will foresee the duration of the consumables according to 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 forguarantee 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 scheme.



## SANITIZATION PROCEDURE

### **1. SANITATION**

Necessary material:

- · Manual valve.
- $\cdot$  Measuring cup and connectors.
- Hydrogen peroxide 3% (0.5 l).
- Brush.
- · Single-use vinyl gloves.
- $\cdot$  Soap or detergent that is easy to rinse.
- · Food lubricant.
- Hydrogen peroxide detector strips.
- · Sanitizing spray.
- · Paper napkin.

Sanitize the equipment during commissioning, when appropriate (whenever there is a risk of contamination of the equipment due to the handling of components in contact with water) or with the indicated period. To do this, follow the steps indicated below:

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

 $\cdot$  Open the faucet and let water recirculate in order to renew the water inside the equipment.

• Close the inlet valve (1) and open the dispenser faucet (2) to decrease the pressure on the equipment.



• Perform the change of filters and washing them as indicated in the corresponding section of the Technical Manual of the equipment. The sanitization must be carried out with the new pre-filters and post-filters installed and rinsed previously in an appropriate way (Removing coal dust from them).

 $\cdot$  Use single-use vinyl gloves (3) use to handle sanitizing products.

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



• To carry out the sanitization of the equipment, the filters must installed in their places. (4).

In case you replace a deteriorated membrane or a filter at the end of its useful life, remove the deteriorated one for disposal and clean the inside of the housing and the connections with a brush (which must be cleaned and disinfected) together with soap or detergent that is easy to rinse (that generates little foam) and suitable for cleaning surfaces in contact with food (5). Then rinse the housings and connections correctly ensuing that all traces of detergent are removed.



## 2. TREATMENT OF PREFILTER, MEM-BRANE AND POSTFILTER

 Disconnect the inlet tube to the equipment marked "feed-inlet", and insert the dosing cup between the inlet valve and the water inlet of the equipment (6). For greater convenience and ease of access during the sanitization and opening and closing operations of the inlet valve, you can intersperse together with the sanitizing measuring cup, a manual valve in closed position, which will perform the same functions as the manual shut-off valve inlet 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 Hydrogen Peroxide into the dosing glass interspersed at the entrance of the equipment (8). Thread the glass correctly to its head.

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

 $\cdot$  Open the water inlet faucet to the equipment and the tap, allowing it to start its function and letting it suck the Hydrogen Peroxide into it. Fill a 1L jug with tap water. Before turning on the faucet, turn the inlet key back on to lower the pressure. Refill the dispenser with 0.251 of hydrogen peroxide and empty1 liter more water. Close the faucet. At this time the entire circuit contains sanitizing liquid.

 $\cdot$  After 10 mins. open the dispenser faucet (9) and let mains water circulate for 5 mins.

 $\cdot$  Empty the measuring cup. Before opening it, have a container in your hand where you can empty it, as it may be full of water.



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



#### 3. RINSE

 Since sanitization and rinsing do not ensure the complete removal of carbon dust from new filters or sanitization residues, rinse the osmosis equipment with abundant water, after each sanitization, circulating adequate quality mains water for 5 minutes or more. Discard the first 5 liters of water before consuming it.

• Proceed to a pre-filter lacing each time you replace it and prior to each sanitization of the equipment.

 $\cdot$  Rinse the pre-filter, preferably isolated from the rest of the equipment even before installation.

 $\cdot$  Rinse with plenty of water that complies with local applicable regulations regarding water potability parameters.

 $\cdot$  Fill the pre-filter slowly in order to evacuate the air contained and avoid internal turbulence that alters the different stages of filtration. When the water sprouts from the opening of the outlet increase progressively the flow. Extract at least 4L and make sure that this water no longer contains fine carbon.

 $\cdot$  Keep, throughout the process, the filter in the same position as it will occupy once installed on the equipment.

• At the end take a drying kitchen paper, dry the parts that may have been wet and in particular the Aquastop leak detection sensor (in case the equipment incorporates it).

## TECHNICAL SHEET FOR REVERSE OSMOSIS EQUIPMENT

### **1. TECHNICAL CHARACTERISTICS**

#### APPLICATION

Water treatment Reverse 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 by reduction or contribution

• Water treatment by reverse osmosis is able to reduce concentrations of salts and other substances in high percentages.

Minimum 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 outlet of the membrane). These values may vary depending on the type of post-filter that incorporates the equipment and / or regulation of the mixing valve (in case it is included).

#### **OPERATING LIMITS**

	EQUIPO CON BOMBA	
Pressure (max./min.): TDS (max.): Temperature (max./min.): Hardness (max.):	4 bar - 1 bar (400kPa-100kPa). 1500ppm. 38 °C - 5 °C. 15 °HF. **	
Type of control:	Flow sensor. Input control by solenoid valve. Flushing solenoid valve	
Security system:	Minimum pressure switch. Electronic leak sensor. Water quality control. Maintenance notice.	A
Dimensions (W x B x C in mm):	249 x 250 x 461.	D ~
Weight (in kg, including all accesses):	12,45.	
Input connection: Drain connection: Tap connection: Wall adapter: Drain collar:	3/8". 1/4". 1/4". 3/8" M-F. ***** Tube clamp 40 mm drain.	6 1. Entrance 4 5 1. Entrance 2. Osmotic water 3. Drainage 4. Electronic faucet 5. Food

Data sheet



#### HYDRAULIC SCHEME



#### HYDRAULIC CONNECTION SCHEME



### 2. OPERATION OF THE EQUIPMENT

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

 $\cdot$  The equipment incorporates a flow sensor to protect the pump against pressure drops in the network (LPS).

• The flowing of water into the equipment is controlled by means of a cutting 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 the reverse osmosis process possible.

• Before flowing out of the tap, the water passes through the charcoal postfilter, which improves the taste.

• Water rejecting or with excess salts and other dissolved wastes is directed towards the drain for its disposal.

• Direct flow equipment controls starting and stopping using a pressure switch (HPS)

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

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

 $\cdot$  Quality probe to estimate the conductivity of the produced water to evaluate the state in which the membrane and components are found (Q). When dispensing tap water, the system will perform a measurement of  \* For salinities above 1500ppm check with your dealer.
 \*\* Higher hardness may reduce the life and functioning of certain components.

\*\*\* Maximum accumulation depending on the inlet pressure.

\*\*\*\* The flow rates can vary by 20% depending on the temperature, pressure and specific composition of the water to be treated.

\*\*\*\*\* It may vary depending on the model.

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the conductivity of the produced water.

• Automatic notification of change of filters, in order to inform the user that the appropriate maintenance must be carried out to guarantee the quality of the water dispensed.

## 3. INTERFACE. STATE IN WHICH THE SYSTEM IS LOCATED

3.1 COLORS OF THE WATER QUALITY INDICATOR



- · No color: Smart faucet off.
- · Flashing blue LED: Automatic flushing.
- · Fixed blue LED: Normal water quality.
- · Flashing orange LED:
- 1. Useful life of the filters about to run out.

2. Insufficient water supply or blocked rotation of the water purifier.

- Fixed orange LED:
- 1. Exhausted filter life. Urgent change of filters.

2. The water purifier goes into automatic shutdown mode.

3. Abnormal water supply.

#### AUTOMATIC WATER SHUT OFF MODE:

Indicates that the water purifier has been producing water for 2 hours. Turn the unit off and on again and then press and hold the power button for 1.5 seconds.

#### **3.2. FUNCTIONALITIES**

FUNCTION	ACTIONS
1. Flushing on the start of the machine.	Whenever electrically connected the system will flush the RO membrane during 30 seconds.
2. Daily flushing.	When the machine has been idly operating for 24 hours, the system will wash the membrane for 30 seconds. If the user opens the faucet, the machine will stop flushing and goes into normal mode.
3. Opening the faucet	The system is put into normal operation.
4. Tap closure.	The system stops producing water and goes on standby.
5. Turn off the tap after more than 4 hours after the last use.	The system will wash the membrane for 15 seconds.
6. Protection for ex- cessive working time.	If the equipment is running for more than two hours nonstop, the overuse pro- tection will be activated. The indicator light will be on fixed in orange. To restart the equipment, electrically disconnect it, and then press the power button for 1.5 seconds.

### 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:

#### 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:

Installation of isolation by-pass:

Leakage of the pressurised system:

Programming of the equipment:

Adjustment of residual hardness:

Correct drainage installation:

Brine suction test/tank filling:

*Ref: Maintenance contract:				
ACCEPTS the maintenance contract	SERIAL NUMBER			
DOES NOT ACCEPT the maintenance contract				
Model/Ref:				
Owner:				
Street				
	EQUIPMENT WARRANTY DIRECTED TO THE DISTRIBUTOR:			
Telephone:	parts in the event of non-conformity. The repair of the equip- ment and the costs involved (labour, shipping costs, travel, etc.)			
City:	will be borne by the distributor, in accordance with the general conditions of contract and sale, so it can not be passed on later			
Province: C.P.:	to the manufacturer.			

DATE	TYPE OF SERVICE	NAME, SIGNATURE AND STAMP OF TECHNICIAN	
	START-UP		
	COMPLETE MAINTENANCE	TECHNICIAN	
	O PREPARATION	STAMP	ORDINARY
			EXTRAORDINARY
	O OTHERS		WARRANTY
	COMPLETE MAINTENANCE	TECHNICIAN	
	O PREPARATION	STAMP	ORDINARY
			EXTRAORDINARY
	O OTHERS		WARRANTY
		TECHNICIAN	
	O PREPARATION	STAMP	ORDINARY
			EXTRAORDINARY
	O OTHERS		WARRANTY
	COMPLETE MAINTENANCE	TECHNICIAN	
	O PREPARATION	STAMP	ORDINARY
			EXTRAORDINARY
	O OTHERS		WARRANTY
	COMPLETE MAINTENANCE	TECHNICIAN	
	O PREPARATION	STAMP	ORDINARY
			EXTRAORDINARY
	O OTHERS		WARRANTY

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Data sheet

DATE		NAME, SIGNATURE AND STA	AMP OF TECHNICIAN
	START-UP		
	COMPLETE MAINTENANCE	TECHNICIAN	
	O PREPARATION	STAMP	ORDINARY
			EXTRAORDINARY
	O OTHERS		WARRANTY
	COMPLETE MAINTENANCE	TECHNICIAN	
	O PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	O OTHERS		WARRANTY
		TECHNICIAN	
	O PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	O OTHERS		WARRANTY
	COMPLETE MAINTENANCE	TECHNICIAN	
	O PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	O OTHERS		WARRANTY
	COMPLETE MAINTENANCE	TECHNICIAN	
	O PREPARATION	STAMP	ORDINARY
			EXTRAORDINARY
	OTHERS		WARRANTY

DATE TYPE OF SERVICE		NAME, SIGNATURE AND STAMP OF TECHNICIAN	
	START-UP		
	COMPLETE MAINTENANCE	TECHNICIAN	
	O PREPARATION	STAMP ORDINARY	
		EXTRAORDIN	IARY
	O OTHERS	WARRANTY	
	COMPLETE MAINTENANCE	TECHNICIAN	
	O PREPARATION	STAMP ORDINARY	
		EXTRAORDIN	IARY
	O OTHERS	WARRANTY	
		TECHNICIAN	
	O PREPARATION	STAMP ORDINARY	
	SANITIZATION	EXTRAORDIN	IARY
	O OTHERS	WARRANTY	
	COMPLETE MAINTENANCE	TECHNICIAN	
	O PREPARATION	STAMP ORDINARY	
		EXTRAORDIN	IARY
	O OTHERS	WARRANTY	
	COMPLETE MAINTENANCE	TECHNICIAN	
	O PREPARATION	STAMP ORDINARY	
		EXTRAORDIN	IARY
	O OTHERS	WARRANTY	

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Data sheet

DATE	TYPE OF SERVICE	NAME, SIGNATURE AND STAMP OF TECHNICIAN	
	START-UP		
	COMPLETE MAINTENANCE	TECHNICIAN	
	O PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	O OTHERS		WARRANTY
	COMPLETE MAINTENANCE	TECHNICIAN	
	O PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	O OTHERS		WARRANTY
		TECHNICIAN	
	O PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY
	COMPLETE MAINTENANCE	TECHNICIAN	
	O PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	O OTHERS		WARRANTY
	COMPLETE MAINTENANCE	TECHNICIAN	
	O PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY