

# STRYM

**MANUAL** 

EQUIPMENT REVERSE OSMOSIS

## STRYM

## DIRECT FLOW

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## USER MANUAL

## FOR REVERSE OSMOSIS EQUIPMENT

#### **0. MAIN FEATURES**



#### **CLICK**

QUICK CONNECTIONS AND MAXIMUM SECURITY



#### **FILTER CONTROL**

AUTOMATIC MAINTENANCE NOTICE



### SOLENOID

VALVE IMMEDIATE CONTROL SECURITY MESH



#### DIRECT FLOW

DIRECT PRODUCTION OF OSMOTIZED WATER



#### STATUS LED STATUS INDICATIONS

M M

## HIGH PERFORMANCE MOTOR

HIGH ENGINE PERFORMANCE



#### SMART FAUCET INTELLIGENT TAP



#### AUTO FLUSHING AUTOMATIC SWEEPING

**MEMBRANE** 



## ELECTRONIC ADAPTER

ADAPTER
GREATER SECURITY
AND EFFICIENCY



### DOUBLE

FLOW HIGHER FLOW OF DISPENSED WATER



## DIRECT

EASE ACCESS AND MAINTENANCE



#### SOUNDS WARNING

SOUNDS WARNING



#### HIGH EFFICIENCY

RECOVERY IN THE PRODUCTION



## CAPSULATED MEMBRANE

MEMBRANE INSTALLED MAXIMUM HYGIENE



#### QUALITY CONTROL CONDUCTIVITY

CONTROL



#### BLOQUEO DE SEGURIDAD

TO GUARANTEE THE QUALITY OF THE WATER



Please keep this manual, which includes the warranty andservice book sections, in order to provide you with better afterservice

#### 1. INTRODUCTION

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

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

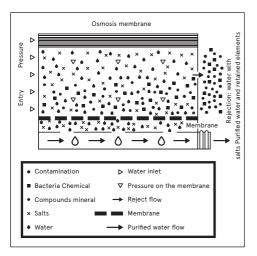
#### 2. WHAT IS OSMOSIS?

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

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

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

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



#### 3. PRIOR WARNINGS

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

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

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

#### 3.1. USE OF THE SYSTEM

- After a few days (less than a week) in the that the equipment has been at rest without being used, before consuming the dispensed water, open the tap and discard the dispensed water for 5 minutes.
- · When you are going to be absent for more than a week, close the water inlet tap to the equipment, drain it and disconnect it from the power supply. Once the equipment is depressurized, remove the filter cartridges and place them in a clean plastic bag and leave them in the refrigerator (not freezer) to limit bacterial growth. Place a blotting paper inside the cartridge housings to absorb any drops that may have escaped. When you return, connect the electrical supply of the same, open the inlet valve and the tap. Let the water run out for at least 15 minutes prior to your water consumption.
- ATTENTION: After a prolonged period (more than a month) in which the equipment has been without working or producing water, contact with your dealer in order to to perform proper sanitation and maintenance.
- · Remove entire jugs or bottles and avoid occasional removal of glasses to improve equipment performance.
- ATTENTION: You must pay special attention to the cleaning and hygiene of the osmosis tap, as usual and especially at the time of performance of regular maintenance and sanitation. To do this, use thesanitizing spray and disposable kitchen paper for single use. In no case should you use the cloth to dry your hands or the multipurpose basket used for cleaning the kitchen.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- 3.2. RECOMMENDATIONS FOR THE CORRECT USE OF OSMOTIZED WATER
- · If you wish to feed any other point of consumption

osmosis water (such as a refrigerator with an ice cube dispenser, another tap, etc...), the canalization should not be carried out with a metal tube, as this would give the water a bad taste. Always use plastic tubing.

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

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

#### 4. BASIC OPERATION

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

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

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

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

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

This equipment incorporates a minimum pressure switch as a safety system, which protects the pump from pressure drops, stopping the equipment and preventing its operation in vacuum.

#### 5. SER INTERFACE

ATTENTION: This equipment incorporates an electronic controller that will efficiently manage its funcionality, status indications, and all of the security systems.

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

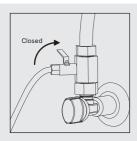
#### 6. MAINTENANCE

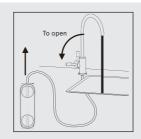
In order to guarantee the quality of the water supplied by your equipment, regular maintenance should be carried out.

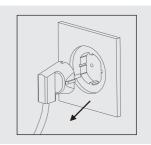
The team will report by means of the front LED panel and tap (depending on the model) the state in which it is find their filter elements and need to replace them. Read the corresponding section of the Technical Manual to see the recommended maintenance frequency (page 11 of this manual).

#### 7. DENTIFICATION AND RESOLUTION OF PROBLEMS

TROUBLE	POSSIBLE CAUSE	SOLUTION
1. Leak to the outside of the system	Several possible	Call for service.
2. No production.	1.There is no water supply. 2.There is no power supply.	Wait for the supply to return.     Check the electrical supply of the house.     If the problem is not solved problem, call for service.
3. Production limited.	Fuel tap partially closed.     Filters / membrane in poor condition or exhausted.	Open it completely.     Call for service.
4. Excessive production.	Several possible causes.	Call for service.
5. Unpleasant taste and smell.	Several possible	Call for service.
6. Whitish colour of the water.	Air in the system. Microbubbles of air that disappear after a few seconds.	It is not a problem. The appearance will disappear as the air inside the equipment is eliminated.
7. Continuous dripping noise in the drain.	Several possible	Call for service.
8. The system does not starts up.	<ol> <li>There is no water supply.</li> <li>There is no power supply.</li> </ol>	<ol> <li>Check the condition of the general key and the equipment input.</li> <li>Check the power supply general. If the problem is not solved, call the technical service.</li> </ol>
9. The system stops and starts constantly.	Several possible causes.	Call for service.
10. The equipment never stops rejecting water down the drain.	Inlet solenoid valve damaged.     Deteriorated production anti-return.	<ol> <li>Check and replace.</li> <li>Check and replace.</li> </ol>







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

## TECHNICAL MANUAL FOR REVERSE OSMOSIS EQUIPMENT

#### 1. MAIN FEATURES

#### **APPLICATIONS**

## Water treatment

#### Use

Improvement of the characteristics of drinking water (which complies with the requirements of the European Directive on water for human consumption 2184/2020 or its national transpositions in the different member states of the European Community or legislation in force).

#### Modifications for reduction or contribution

- Water treatment by reverse osmosis is capable of reducing concentrations of salts and other substances in high percentages.
- · Minimal reduction \* of certain compounds and parameters:

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

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

#### **OPERATING LIMITS**

**EQUIPMENT WITH PUMP** 

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

 TDS (max):
 1500ppm.

 Temperature (max / min):
 38 ° C - 5 ° C.

 Hardness (max):
 15 ° HF. \*\*

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

#### 2. PRIOR WARNINGS

ATTENTION: If the water to be treated does not come from a public supply network or

is of unknown origin, it will be necessary to carry out a physical-chemical and bacteriological analysis of the water to ensure its correct purification applying the appropriate techniques and equipment to each need BEFORE THE INSTALLATION of the equipment. Contact your dealer for advice on the most appropriate treatment for you.

2.1 CONDICIONES PARA EL CORRECTO FUNCIONA-MIEN2.1 CONDITIONS FOR CORRECT EQUIPMENT OPE-RATION

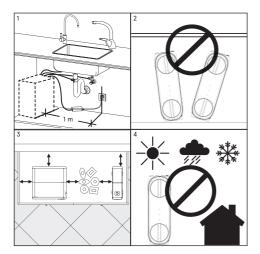
- The equipment should not be fed with hot water (T> 38°C).
- $\cdot$  The ambient temperature must be between 4° and 45°C
- · For waters with salinities higher than 1500 ppm, consult your distributor.
- · It is recommended that the water to be treated be decalcified or with a maximum hardness of 15°HF in order to obtain optimum performance from the equipment.
- $\cdot$  In the event that the water to be treated has a hardness greater than 15  $^{\rm o}{\rm HF},$  a reduction in membrane life and equipment performance.

If the make-up water contains a concentration greater than 1.2 ppm of total chlorine, it is recommended to Recommend the installation of an activated carbon dechlorination filter to reduce the concentration of chlorine in the water and thus protect and extend the life of the equipment components.

In case the water to be treated contains:

Elevated iron and manganese concentrations (Greater than 1ppm measured in the rejection of the machine). Prolonged hyperchlorination in time. Sludge or turbidity greater than 3 NTUs. A nitrate concentration greater than 100 ppm. A sulfate concentration greater than 250 ppm.

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



#### 3. SYSTEM INSTALLATION

- In the event that the home installation has to be conditioned in order to install the equipment in the planned place, it must be carried out in accordance with the national regulations for indoor installations of water and electrical supplies.
- $\cdot$  These equipments need an electrical outlet less than 1 meter away (1).
- The equipment filled with water weighs more, the distribution of weights in an unexpected position could cause some connection element to be forced, which could cause a malfunction, damage to equipment components or loss of water.
- The installation of the equipment lying down or inclined is not recommended (2)
- The place planned for its installation must have sufficient space for the appliance itself, its accessories, con-

nections and for carrying out convenient maintenance (3)

- Under no circumstances will the equipment be installed outdoors. perie (4).
- The appliance must only be used with the power supply supplied with the appliance.
- $\cdot$  The appliance should only be powered at a very low safety voltage.
- The environment and environment where equipment and faucet are installed must keep hygienic-sanitary conditions adequate.
- The appliance must only be used with the supplied power supply included in the packaging.
- · This appliance must only be powered with a very low safety voltage.
- $\cdot$  Avoid external drips on the equipment, coming from pipes, drains, etc.

ATTENTION: The equipment must not be installed next to a heat source or directly receiving a flow of hot air over it (dryer, refrigerator, etc.). The new hose sets supplied with the appliance must be used and the hose sets Old ones should not be reused.

#### 3.1. COMMISSIONING AND MAINTENANCE

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

- The new hose sets supplied with the appliance must be used and the old hose sets they must not be reused.
- The consumable elements must be replaced with the frequency indicated by the manufacturer.
- The equipment must be sanitized periodically and vialy to its commissioning.
- After commissioning, you must discard the water produced during the first 30 minutes of use.
- · Maintenance must be carried out by qualified technical personnel, with adequate hygienic conditions and attitude, in order to reduce the risk of internal contamination of the appliance and its hydraulic system. (For more information, contact the technical service of your distributor).

#### 4. UNBOXING

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

ATTENTION: Claims for damage during transport must be 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 receipt of the merchandise. Remove the equipment and accessories of its cardboard packaging, removing the corresponding protections.

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

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 normal municipal waste. When the useful life of the equipment has ended, it must be delivered to



the company or center where it acquired the apparatus, or at a Clean Point or local center Specific for the recovery of materials, indicating that it has electrical and electronic components. The correct onecollection and treatment of useless appliances, contributes

to preserving natural resources and also to avoid potential risks to public health.

#### 5. INSTALLATION

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

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

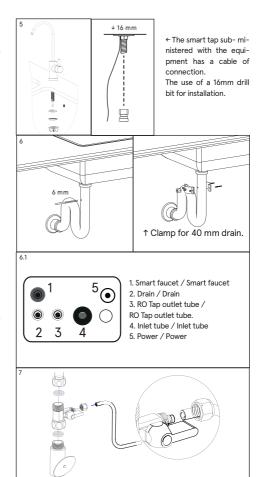
ATTENTION: The work must be carried out with tudy and adequate hygienic conditions, taking extreme precautions in everything related to materials and components that are going to be in contact with the water to be treated or consumed.

(For more information contact your distributor).

ATTENTION: Avoid risks of external contamination of the equipment due to improper handling, using gloves, hand sanitizer or washing them as many times as necessary throughout the installation.

tion, start-up and maintenance of the equipment.

The most common place for the equipment to be installed is usually under the kitchen sink or in an attached piece of furniture. Install the tap, hydraulically and electrically, to the equipment, drain collar and inlet socket adapter and connect them to the respective connectors of the equipment (5, 6, 6.1 and 7). Please note that in order for you to pass the cable, the hole should be at least 16 mm.



See hydraulic diagram on page12.

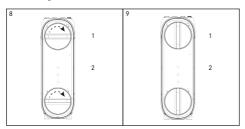
ATTENTION: Some of the installation accessories may vary depending on the model and the region in which the equipment is distributed.

#### 5.1 MIXING KIT

- · In case you want to increase the pH, the conductivity and the chlorine concentration at the outlet, you must carry out the installation according to the following scheme and using the corresponding components included in the mixing kit (consult your distributor).
- · After start-up, open the tap and with the corresponding meter for the parameter of interest, measure in the water dispensed from the tap and slowly and progressively open the mixing valve until the desired parameter is achieved.
- · The water dispensed must meet the requirements of potability established by the European Directive 2184/2020 or corresponding national legislation that transposes it.

#### 5.2. FILTER INSTALLATION

- · Install the filter PP + CB + PCB (1) in the first stage of the equipment (upper position) and the RO membrane (2) in the second stage of the equipment (lower position).
- To install the filters, present each filter in its respective housing with the handle in a horizontal position, as shown in figure 8.
- $\cdot$  Insert firmly all the way and turn the handle 90 degrees clockwise. After installation, the two filters should be as shown in figure 9.



#### 6. START UP

#### 6.1. FILTER RINSING

· It is necessary to remove the dust that the carbon block from the filter that is generated during the transport and handling of the equipment and corresponding ones. This dust must be eliminated since it could partially or completely obstruct the membrane as well as cause aequipment malfunction. Force two consecutive flushings.

#### 6.2. EQUIPMENT SANITATION

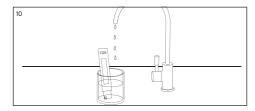
· Carry out a sanitization of the equipment, depending on the model and procedure indicated by the manufacturer (see the Sanitization Procedure). If in doubt, consult your dealer.

#### 6.3. SYSTEM TIGHTNESS, STOP AND START

- Close the tap of the equipment on the countertop and keep the equipment hydraulically and electrically powered by performing an visual inspection of the system to ensure that there is no leak (for approx.).
- $\cdot$  Open the dispensing tap. The equipment should activate and supply water. Close the tap again and check that the equipment stops.
- It is important to completely close the tap to avoid starting and stopping the equipment, which would activate the stoppage for protection of the pump.

#### 6.4. RINSE AND CLEAN

Open the tap of the equipment and measure the quality of the water that is being produced. With a conductivity or TDS meter, check that the reduction of salts obtained is adequate with respect to the water to be treated (10).



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

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

#### 7. MAINTENANCE

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

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

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

#### RECOMMENDED MAINTENANCE

- · PP + CB + PCB: 12 months or 6,000 liters
- RO osmosis membrane: 36 months or 20,000 l. forsoft waters to be treated. (hardness <15 °HF)).
- Sanitization: At start-up. At least every 12 months depending on use. Every time components in contact with water in the equipment are accessed or no water has been consumed for more than a month.
- \* Depending on the intended use and its own characteristics of the water to be treated.

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

ATTENTION: The use of non-original spare parts, installation outside the limits of operation and improper commissioning, maintenance or use, may lead to the loss of the guarantee, as well as the invalidation of the certifications to the submitted from the team.

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

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

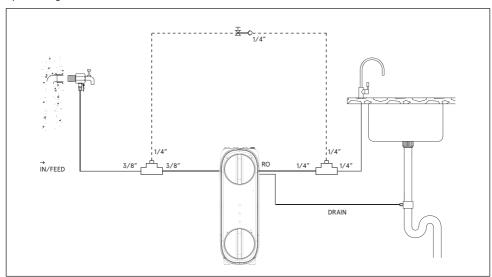
ATTENTION: All consumables are supplied in individual packaging specially designed to guarantee hygienic storage and transport conditions. Exercise hygiene precautions after removing the consumables from their packaging and when handling the various connectors and components.

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

- · 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.
- $\cdot$  For more information, see 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 diagram.



## SANITATION PROCEDURE

#### 1. HYGIENIZATION

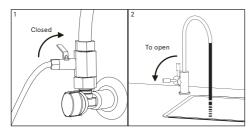
#### Necessary material:

- · Manual valve.
- · Dosing cup and connectors.
- · Oxibac (0.5 I).
- · Brush.
- · Single use vinyl gloves.
- · Easy-rinse soap or detergent.
- · Lubricant food.
- · Hydrogen peroxide detector strips.
- · Sanitizing spray.
- · Napkin paper.

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

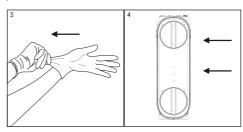
ATTENTION: The water used during hygiene The supply must be potable water (from the distribupublic complying with the corresponding potability requirements of RD 140/2003, European directive 2184/2020 or current local legislation).

- $\boldsymbol{\cdot}$  Open the tap and let water recirculate in order to renew the water inside the equipment.
- Close the inlet valve (1) and open the dispenser tap (2) to decrease the pressure in the equipment.



- Change the filters and wash them as indicated in the corresponding section of the Equipment Technical Manual. The sanitization must be carried out with the new pre-filters and post-filters installed and previously rinsed in an adequate way (the carbon dust from them has been correctly removed).
- $\cdot$  Use single (3) use vinyl gloves to handle sanitizing products.

ATTENTION: Exercise extreme hygiene measures when handling the filters, the membrane and equipment components in contact with water. Use disposable gloves or wash your hands as many times as necessary to avoid risks of contamination of the equipment.

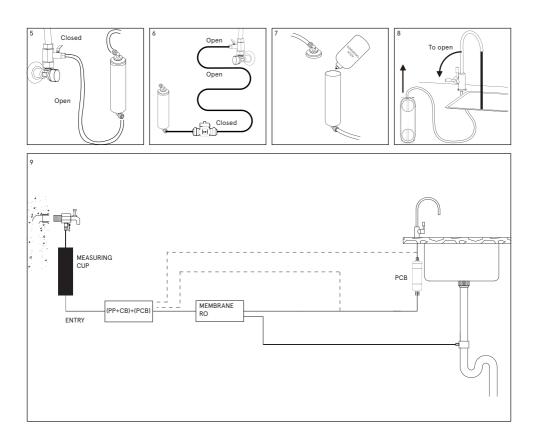


· To sanitize the equipment, the filters must be inside their housings (4).

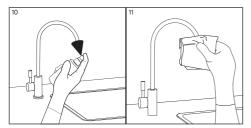
## 2. TREATMENT OF THE PRE-FILTER, THE MEMBRANE AND THE POSTFILTER

- Disconnect the inlet hose to the equipment marked "feed-in", and insert the measuring cup between the stopcock and the equipment's water inlet (5). For greater comfort and ease of access during sanitization and the inlet valve opening and closing operations, you can insert, together with the sanitizing dosing cup, a manual valve in the closed position, which will perform the same functions as the manual inlet shut-off valve to the equipment.
- Once the assembly is installed, keep the new manual inlet valve closed and open the inlet valve connected to the wall adapter (6). The measuring cup must be empty.
- Pour 0.25 liters of Oxibac in the dosing cup inserted in the equipment inlet (7). Screw the glass correctly to its head.
- The manual inlet valve and the tap must be closed. Connect the equipment to the electrical supply.
- Open the water inlet stopcock to the equipment and to the tap, allowing its operation to start and allowing the sanitizing product to suck into it. Fill a 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 empty 1 more liter of water. Close the tap. At this time the entire circuit contains sanitizing liquid.
- After 10 mins, open the dispenser tap(8) and let mains water circulate for 5 min.

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



• Pay special attention to sanitizing the tap spout. Use the sanitizing spray (or, failing that, hydrogen peroxide, dosing it in such a way that it penetrates the faucet spout) and single-use blotting paper. Spray the spray on the tap nozzle (10), rub the spout and tap nozzle with the disposable paper and do not touch it directly with your hands (11).



#### 3. RINSE

- Since sanitization and rinsing do not ensure the complete removal of carbon dust from new filters or sanitation residues, rinse the osmosis equipment with plenty of water, after each sanitization, circulating mains water of adequate quality for 5 minutes or more. Discard the first 5 liters of water before consuming it.
- Rinse with plenty of water that complies with local applicable regulations regarding water potability parameters.
- · At the end, take a blotting paper, dry all the parts that could have gotten wet and especially the Aquastop leak detection probe (if the equipment incorporates it).

## **DATA SHEET**

## FOR REVERSE OSMOSIS EQUIPMENT

#### 1. TECHNICAL CHARACTERISTICS

#### APPLICATION

#### Water treatment

Inverse osmosis

#### Use

Improvement of the characteristics of drinking water (which complies with the requirements of the European Directive on water for human consumption 2184/2020 or its national transpositions in the different member states of the European Community or legislation in force).

#### Modifications for reduction or contribution

- · Water treatment by reverse osmosis is capable of reducing concentrations of salts and other substances in high percentages.
- · Minimal reduction \* of certain compounds and parameters:

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

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

#### **OPERATING LIMITS**

Control type: Maximum pressure switch.

Inlet control bypass solenoid valve. Flushing

solenoid valve

Security system: Maintenance notice.

B C

Dimensions (A  $\times$  B  $\times$  C in mm):

Weight (in kg. including all

accessories):

Inlet connection (4): Drain connection (2): Tap connection (5):

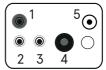
Wall adapter: Drain collar:

400 x 130 x 440.

3/8". 1/4".

1/4". 3/8" M-F. \*\*\*\*\*

Abrazadera para tubo de desagüe de 40 mm.

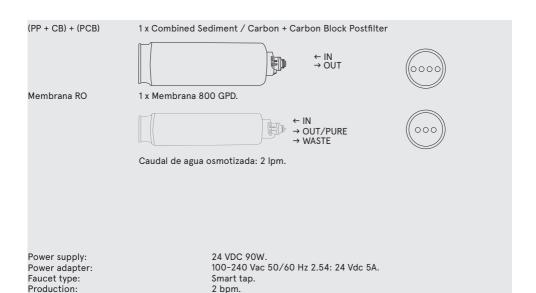


1. Smart faucet / Smart faucet

2. Drain / Drain3. RO Tap outlet tube /

RO Tap outlet tube.
4. Inlet tube / Inlet tube

5. Power / Power



1.1 bpm.

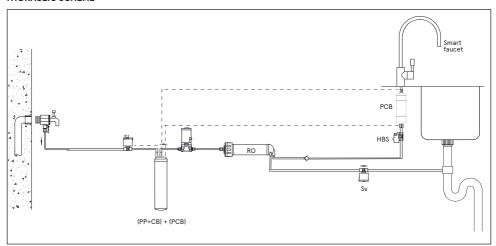
Automatic autoflushing.

#### HYDRAULIC SCHEME

Membrane cleaning system:

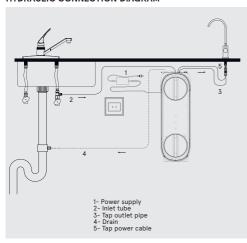
Rejection:

Recovery:



> 65% (Yield with make-up water at 25 °C, 230 ppm and pH 7.5).

#### HYDRAULIC CONNECTION DIAGRAM



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

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WLG (B-60326279) Aiguafreda, 8 Pol. Ind. L'Ametlla Park 08480, L'Ametlla del Vallès Barcelona - Spain

#### 2. SYSTEM FUNCTIONING

- The mains water to be treated enters the equipment through the pre-filtration stage that incorporates a PP and carbon BLOCK (CF) filter. In this filtration stage, suspended particles, chlorine, its derivatives and other organic substances are retained.
- The passage of water into the equipment is controlled by a cut-off solenoid valve (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. The osmosis water returns to the first cartridge where there is another carbon filter.
- · Reject water or water with excess salts and other dissolved substances is directed to the drain for disposal.
- Direct flow equipment controls start and stop by means of a pressure switch (HPS)
- The equipment incorporates different functional systems and / or security, managed by a state-of-the-art electronic module:
- · Automatic filter change notice, in order to inform the user that adequate maintenance must be carried out to guarantee the quality of the water dispensed.

To guarantee the quality of the water dispensed, the equipment must undergo periodic maintenance, therefore, as a precaution, it will stop supplying water until it is carried out. One month in advance the system will notify that the useful life of the filters is about to run out and the need to perform proper maintenance.

The equipment performs cleaning and sweeping of the membrane surface automatically to improve its perfor-

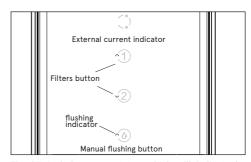
mance and prolong its life.

Membrane cleanings or flushings are performed by:

- · 30 "after powering the equipment electrically or pressing the button (manual flushing).
- · 15 "every 30 'of operation.

#### 3. INTERFACE, STATE OF THE SYSTEM

Display:



The kit includes a smart tap which will indicate by means of the LEDs on its base the need to replace any of the cartridges.

#### Solid ORANGE LED:

- · Filter change
- · Malfunction (excessive time running).

#### · Poor water quality.

- ORANGE LED flashing:
- · Maintenance notice.
- Solid BLUE LED:
- · Normal functioning.
- BLUE LED flashing:
- · Flushing.



#### 3.2. FILTER STATUS INDICATORS

FUNCTION	ACTION	LED STATUS
FLUSHING Cleaning of membrane	Hold down the lower button f or a few seconds.	The lower led blinks. Flashing blue tap led.
Dispensing water	Open the tap.	The fixed upper led. The tap led is blue.
End of life warning of filters	No actions.	The tap led is flashing orange. Led 1 or 2 blinks.
End of life notice of filters	Replace the corresponding filter and reset your controller.	The tap led is solid orange The machine stops. Led 1 or 2 stopped. Contact your technical service (SAT).
Excessive time continuous operation (120 min.)	Close the tap. Disconnect and reconnect power to reset this alarm.	The equipment stops its operation.  The faucet led is a fixed orange color.
Wash at power-up of the system	The system starts every time the RO is electrically connected, it does a 30 second wash.	The tap led is flashing blue. Lower white LED of the RO flashing.
Automatic washing of filters	Every 24 hours, the system will wash the membrane for 30 seconds. If the user opens the tap, the machine will stop the wash and go into normal mode.	The tap led is flashing blue. Lower white LED of the RO flashing.
Excessive time conti- nuous operation (120 min.)	Close the tap. Disconnect and reconnect power to reset this alarm.	The tap led is flashing blue. Lower white LED of the RO flashing.

To guarantee the quality of the water dispensed, the equipment must undergo periodic maintenance, therefore, as a precaution, it will stop supplying water until it is done. One month in advance the system will notify that the useful life of the filters is about to run out and the need to perform maintenance.

#### 3.3. BUG IDENTIFICATION AND RESOLUTION

SYMPTOM	ORIGIN	ACTION
Does not produce water	Lack of pressure in the network.	Check in another tap. If there is network pressure, contact SAT.
Low water flow	Partially clogged prefilter or membrane.  Inlet pipe or tap pinched.	Replace cartridge. Contact SAT if applicable. Check tubes. If no clamping is detected, contact SAT.
The team stops and starts while the tap is closed	Anti-return faulty production.	Close the inlet valve and disconnect the equipment. Contact SAT and take the equipment out of service.
The water tastes and smells bad	Long period without using the equipment.	Open the tap and discard 10 liters. If it is not resolved, contact SAT.
Does not dispense Water. Orange Led.	Equipment running more than 120 minutes continuously.	Close the tap on the equipment. And reset the alarm. If this happenswith the tap closed, contact the SAT.

When you detect that the equipment is in any of the states described, contact Contact the maintenance service to make the appointment and thus carry out the required maintenance.

See the corresponding section in the technical manual.

Contact your service technically if the equipment is repeatedly blocked due to lack of mains water pressure at the inlet and having pressure in the rest of the house.

Contact your service technical if after opening the tap the equipment is at rest without dispensing water through the tap or show

any kind alarm.

Contact your service technique to reset the counters after the filter change.

#### 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 equipme requires to ensure its proper functioning and the quality of the water produced. A maintenance contract is offered for this purpos
*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 re- the operation, troubleshooting and troubleshooting sections of this manual beforehand and contact the distributor or compa 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 by the installer and transcribed by him/herself from the INSTALLATION REGISTRATION sheet.

#### 5. INSTALLATION REGISTER SHEET

Service (T.A.S.). The data marked with the symbol * n him/herself to the WARRANTY page. This sheet must be	ual carefully. If in doubt, contact your dealer's Technical Support must be filled in by the technician/installer and transcribed by e kept by the installer and may be requested by the distributor in rvice. The technician who performs the installation and commis-
INFORMATION ON THE USE OF THE EQUIPMENT:	
Origin of the water to be treated:	
PUBLIC SUPPLY NETWORK	
OTHER	
* Pre-treatment of the equipment:	
* Hardness of entry to the equipment (°F):	
* TDS of entry to the equipment (ppm):	
* TDS produced water (ppm):	
Inlet pressure to the equipment (bar):	
INSTALLATION STEP CONTROL:	
Pre-filter assembly: Overflow installation: Start-up according to protocol: Checking of fittings: Measurement of inlet hardness: Output hardness measurement:	Installation of isolation by-pass: Correct drainage installation: Brine suction test/tank filling: Leakage of the pressurised system: Programming of the equipment: Adjustment of residual hardness:
COMMENTS	
* Result of installation and commissioning:	
CORRECT (equipment installed and working correctly. Produc	ced water suitable for the application).
OTHER:	
IDENTIFICATION OF THE AUTHORISED TECHNICIAN/INSTALLER: CC COMPANY AND/OR AUTHORIZED INSTALLER, DATE AND SIGNATURE:	ONFORMITY OF THE OWNER OF THE EQUIPMENT:  I have been clearly informed of the use, operation and maintenance required by the installed equipment, having been offered a maintenance contract and informed of how to contact a customer service in the event of a request for information, communication of a breakdown or malfunction, request for maintenance or intervention by a technician.  Remarks:
*Ref: Maintenance contract:	
ACCEPTS the maintenance contract	SERIAL NUMBER
DOES NOT ACCEPT the maintenance contract	
Model/Ref:	
Owner:	
Street	
Telephone: City: Province: C.P.:	EQUIPMENT WARRANTY DIRECTED TO THE DISTRIBUTOR: The distributor will only be responsible for the replacement of parts in the event of non-conformity. The repair of the equipment and the costs involved (labour, shipping costs, travel, etc.) will be borne by the distributor, in accordance with the general conditions of contract and sale, so it can not be passed on later to the manufacturer.

#### 6. MAINTENANCE SERVICE

DATE	TYPE OF SERVICE	NAME CLONATURE AND CT	AMD OF TECHNICIAN
DATE	TYPE OF SERVICE  START-UP	NAME, SIGNATURE AND STA	AMP OF TECHNICIAN
	START-UP		
	COMPLETE MAINTENANCE	TECHNICIAN	
	PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY
	COMPLETE MAINTENANCE	TECHNICIAN	
	PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY
	COMPLETE MAINTENANCE	TECHNICIAN	
	PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY
	COMPLETE MAINTENANCE	TECHNICIAN	
	PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY
	COMPLETE MAINTENANCE	TECHNICIAN	
	PREPARATION	STAMP	ORDINARY
	SANITIZATION		EXTRAORDINARY
	OTHERS		WARRANTY

#### 6. MAINTENANCE SERVICE

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

#### 6. MAINTENANCE SERVICE

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