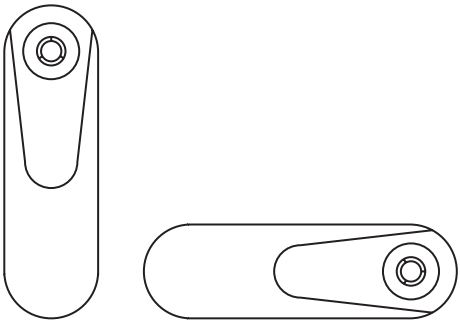
Bnature 3.0
DIRECT FLOW



User's Manual

Reverse Osmosis Equipment

Bnature 3.0

DIRECT FLOW

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THE EQUIPMENT FEATURES THE OPTION MARKED WITH ●

USER'S MANUAL

FOR REVERSE OSMOSIS EQUIPMENTS

1. INTRODUCTION

Congratulations. You have purchased one of the best household water treatment equipments that you can find on the market.

This equipment will help you improve the quality of the water and provide you with a maximum quality water with low mineralization.

Your equipment provides you with different benefits and advantages:

• It is a physical system which does not use or add chemical products to water.
• Provides high quality water.
• Has low maintenance costs.
• Ensures high production.
• Attractive compact design
• Direct flow reverse osmosis appliance, which ensure high water production and availability without relying on a external accumulation tank.

2. WHAT IS OSMOSIS?

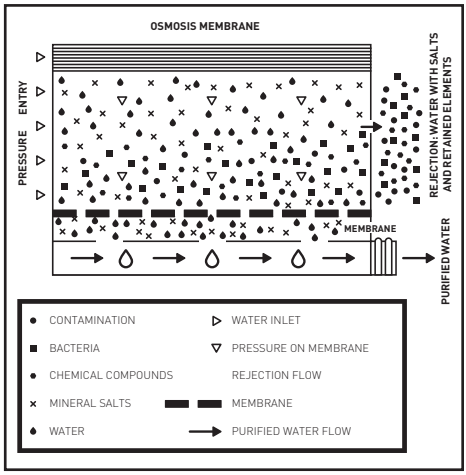
Natural or direct osmosis is the most common in nature, since most of the organisms contain semi-permeable membranes (for instance, plant roots, organs in our body, cellular membranes, etc).

When two solutions with different salt concentrations are separated by a semi-permeable membrane, water flows naturally from the solution with a lower concentration to that with a higher concentration. This flow continues until concentrations on both sides of the membrane are equal.

When it comes to reversing this process in order to obtain water with a low salt concentration using a highly concentrated one, it would be necessary to add pressure on the highly concentrated side, in order to stop this tendency and reverse the natural flow of the system. This process is called reverse osmosis. These days, reverse osmosis is the best method for producing pure water via a physical system (without using chemical products).

Inlet water presses against the semi-permeable membrane, so that part of it will get trough the pores of the membrane (pure water), while the remaining water (rejected or with high concentrations of salts) is diverted to the drainpipe (Fig. 1).

Figura 1



3. PRIOR WARNINGS

Warning: Carefully read all warnings included in the corresponding section of the Technical Manual.

Warning: This equipment IS NOT FIT TO BE USED WITH WATER UNSUITABLE FOR HUMAN CONSUMPTION. If the water to be treated comes from a public water supply (and therefore meeting current legislation requirements), this equipment will substantially improve the water quality.

Water treatment equipment need to undergo regular maintenance, which must be carried out by qualified technical personnel, in order to guarantee the quality of produced and supplied water.

3.1. USE OF THE EQUIPMENT

• Should you be away from home for more than a week, close the water inlet, empty the system and unplug it from the power supply (PUMP model). On your return, connect the power supply, open the inlet valve and the faucet. Let the water flow for at least 5 minutes before drinking water.

Warning: After a prolonged period (more than a month) during which the system has not been in operation or produced water, contact your distributor in order to carry out proper sanitization and maintenance.

• In order to improve the performance of the equipment, we recommend filling bottles rather than filling glasses each time.

Warning: Special attention must be paid to the regular cleaning and hygiene of the osmosis tap, especially during periodic maintenance and hygiene. For this purpose, use the sanitizing spray and disposable kitchen paper towels. Under no circumstances must a hand towel or a multi-use cloth for the kitchen be used.

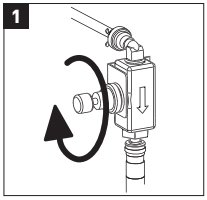
3.2. RECOMMENDATIONS ON HOW TO PROPERLY USE REVERSE OSMOSIS WATER

• If you wish to feed any other consumption point with osmosis water (such as a fridge with an ice-cube dispenser, another tap, etc), the piping should not be done with a metal tube, as this would give the water a bad taste. Always use a plastic tube.

Warning: The water supplied by household osmosis appliances has a LOW MINERAL CONTENT. The mineral salts required by the human body are provided by food, especially by dairy products and to a lesser extent, by the water we drink.

• It is recommended not to use aluminium kitchen ware when cooking with reverse osmosis water.

• If the system has a built-in mixing valve (1), the user will be able to regulate the salinity of the supplied water to the desired taste and/or local regulations. This regulation must be carried out while the equipment is producing water. To make the mixing system work, properly fill bottles instead of single glasses. Depending on the model, the mixing valve can be found in different places.



4. BASIC OPERATION

Tap water enters the system going through the sediment and the carbon filter. In this filtration stage, the system retains particles in suspension, chlorine and its derivative's, and other organic substances.

The flow of water towards the equipment is controlled by a solenoid valve.

After leaving the filtration stage, water is pushed towards the reverse osmosis membrane. This appliance includes a pump to increase pressure. Water pressure on the membrane makes the reverse osmosis process possible.

Osmotic water is supplied through the faucet. Rejected water, with an excess of salts and other dissolved substances, is diverted to the drain for disposal.

When the tap is turned off, a high pressure switch stops the system.

This appliance includes a low pressure switch as a safety system, which protects the pump against pressure drops by stopping the equipment and preventing dry running.

5. USER INTERFACE

Warning: This appliance incorporates an electronic controller which will efficiently manage functionality and status indications, as well as the different safety systems.

The datasheet of the appliance describes the states which may be found in each equipment, as well as the information they supply.

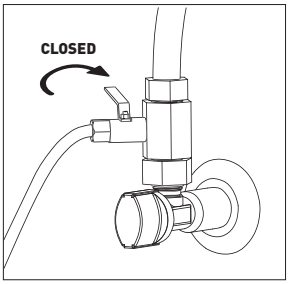
6. MAINTENANCE

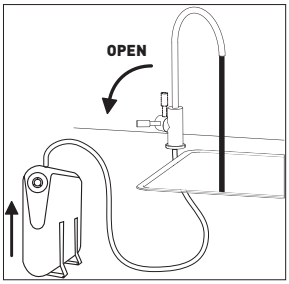
In order to guarantee the quality of the water supplied by your equipment, it should undergo regular maintenance.

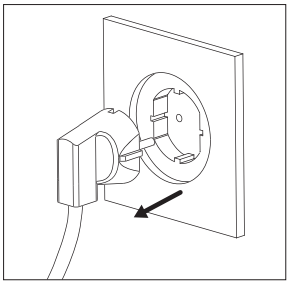
Read the corresponding section of the Technical Manual to check the recommended maintenance frequency.

7. TROUBLESHOOTING

SYMPTOM	CAUSE	SOLUTION
1. Leakage outside the system	Multiple causes	Call the Technical Service
2. No production	There is no water supply	Wait until water supply is re-established
	There is no power supply	Check the power supply of the house. If the problem persists, please call the Technical Service
	Leakage sensor is ON *	Leaking sensor is ON. If you cannot find the leak, dry the bottom of the appliance and the leaking sensor. If the problem persists, call the Technical Service
3. Low production	Inlet valve is partially closed	Open it
	Tank valve is closed	Open it. If the problem persists, please call the Technical Service
4. Excessive production	Multiple causes	Call the Technical Service
5. Unpleasant taste and odour	Multiple causes	Call the Technical Service
6. Water has a white colour	Air bubbles inside the system. These micro-bubbles will disappear after a few seconds	This is not a problem. This appearance of the water will slowly disappear as the air inside the system is removed
7. Rejected water does not stop flowing	Multiple causes	Call the Technical Service
8. The system does not start	There is no water supply	Check the status of the inlet valve of the house and the appliance
	There is no power supply *	Check the general power supply. If the problem persists, please call the Technical Service
	Leaking sensor is ON *	Leaking sensor is ON. If you cannot find the leakage, dry the bottom of the equipment and the leaking sensor. If the problem persists, call the Technical Service
9. The system turns constantly on and off	Multiple causes	Call the Technical Service
10. The appliance is always rejecting water towards the drain	Inlet solenoid valve or shut-off valve are not working properly *	Check and replace
	Production check valve is not working properly	Check and replace







Read in advance the section INTERFACE in the ***Data Sheet***. In the event of a fault, contact the Technical Assistance Service and proceed as follows: Close the inlet valve. Open the tap to empty the appliance and unplug it (depending on the model).

* This feature depends on the model. More information in the ***Data Sheet***.

NOTES

1. TECHNICAL CHARACTERISTICS

Application	
Water treatment	• Reverse osmosis
Use	• Improves the drinking water's characteristics (meeting all European Directive on Water for Human Consumption 98/83 requirements and its national transpositions in the various EU member states).
Modifications due to reduction or contribution	• Water treatment via reverse osmosis is able to greatly reduce salt and other concentrations. • Minimum reduction* of specific compounds and parameters: Sodium – 90 % Calcium – 90% Sulphates – 90% Chloride – 90% Total Hardness – 90% Conductivity – 90% (*) In function of the characteristics of the water to be treated.

Working limits	EQUIPMENT WITH PUMP · PUMP
Pressure (max. /min.)	6 bar (600 kPa) 1 bar (100 kPa)
TDS (max.)	1500 ppm
Temperature (max. / min.)	40ºC – 2ºC
Hardness (max.)	15ºHF**

(*) For salinity levels above 1500 ppm, please check with your distributor.
(**) For maximum performance and longevity of components.

In the event of any queries in relation to installation, use or maintenance of this equipment, please contact your distributor's technical assistance service (S.A.T).

2. PRIOR WARNINGS

Warning: This equipment IS NOT A WATER PURIFIER. In the event of the water to be treated coming from a public water supply (and therefore meeting current legislation requirements), this equipment will substantially improve the water quality.

Warning: In the event of the water to be treated not coming from a public water supply or from an unknown source, a physico-chemical and bacteria analysis of the water. Should be completed in order to ensure the correct purification process and by applying the appropriate techniques and equipment as necessary PRIOR TO THE INSTALLATION of the equipment. Please contact your distributor in order to receive advice on appropriate treatment.

2.1 CONDITIONS FOR THE CORRECT WORKING OF EQUIPMENT

• The system should not be used with hot water (T>40ºC).

• The ambient temperature must be between 4º and 45ºC.

• For water with salinity concentration above 1500 ppm please consult with your dealer.

• We recommend that the water to be treated should be softened or with a maximum hardness level of 15 ºHF in order for your equipment to achieve maximum performance.

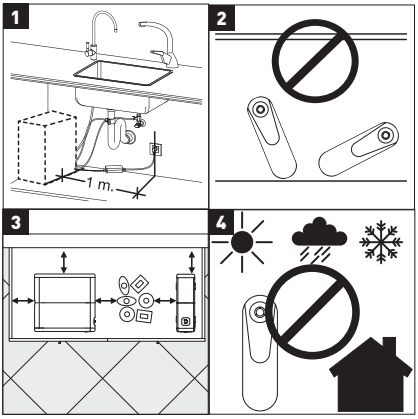
• In the event of the water to be treated having a hardness level in excess of 15 ºHF, the equipment's membrane life and equipment performance may be affected.

• In the event of the water to be treated containing aver 1,2 ppm of total chlorine, the installation of a carbon prefilter is advised in order to reduce the amount of chlorine and protect the internal components of the appliance.

• In the event of the water to be treated containing:
  • High concentrations of iron and manganese (In excess of 1ppm measured in the appliance's rejected water).
  • Prolonged hyper-chlorination.
  • Mud or turbidity in excess of 3 NTUs.
  • A nitrate concentration in excess of 100 ppm.
  • A sulphate concentration in excess of 250 ppm.

• Please consult your dealer for an appropriate pre-treatment recommendation, as well as ensuring the correct working of your equipment, avoiding any damage to components and to ensure the quality of the water supplied.

3. EQUIPMENT INSTALLATION



• In the event of modifying the home/workplace in order to install the equipment in the planned location, it should be done following national guidelines for interior installations of water and electric supply.

• BINATURE appliances require an electric outlet distanced at least 1 metre (1).

• BINATURE series should not be installed tilted (2), which would render the leak sensor useless.

The system, when filled with water, weighs more. Unexpected weight distribution may cause a connection element to become strained thus causing incorrect working of the machine, which could damage components or cause a leaking.

• The installation location should have sufficient space for the unit itself, its accessories, connections and room for servicing and repair. (3)

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

• The environment where the equipment and tap is to be installed should adhere to any appropriate hygiene and sanitation conditions .• Avoid any external dripping liquids from pipes or drains etc onto the equipment.

Warning: The unit should not be installed next to a heat source or in facing direct hot air (tumble dryer, refrigerator, etc).

3.1. INITIAL OPERATION AND MAINTENANCE

Warning: Water treatment equipment needs periodical maintenance carried out by qualified technicians in order to ensure the quality of the water produced.

• Consumable parts should be replaced as advised by the manufacturer.

• The equipment should be sanitised periodically and prior to its initial operation.

• After initial operation, water producer during the first 5 minutes of use should not be consumed.

• Maintenance should be carried out by qualified technicians who work under the appropriate hygienic conditions in order to reduce the risk of internal contamination of the equipment and its hydraulic system. (For further information please contact your distributor's technical service department).

• The mixing valve should always be closed during installation and initial operation. The mix should be set to the required characteristics and in accordance with the corresponding national legislation (measuring with an independent device/TDS/pH measure, on the tap dispenser section), while the equipment is filtering.

4. UNPACKING

Before installation and initial operation it is important to check the contents of the box and the condition of the equipment in order to check it has not been damaged during transport.

Warning: Claims due to damage in transit should be submitted along with the distributor delivery sheet or invoice, including the name of the freight company within 24 hours after reception of the goods.

Unpack the equipment and its accessories and remove of any protective packaging material.

Warning: Keep plastic bags out of the reach of children, as they may be dangerous.

Inside you will find: Water treatment equipment, installation accessories and documentation.

Recyclable materials have been used for the packaging and should be disposed of in the appropriate recycling bins or at the specific local recycling centre.

This product cannot be disposed of with other domestic waste products. At the end of the product's service life, the equipment should be returned to the place of purchase, or at a local recycling centre, indicating that said equipment contains electric and electronic components (model PUMP). The appropriate collection and treatment of products, which no longer are to be used, contributes to the preservation of natural resources and avoids any potential public health risks.

5. INSTALLATION

The installation of your osmosis equipment should be carried out by a suitably qualified technician. Please read carefully the user manual before use and consult with your distributor in case of doubt.

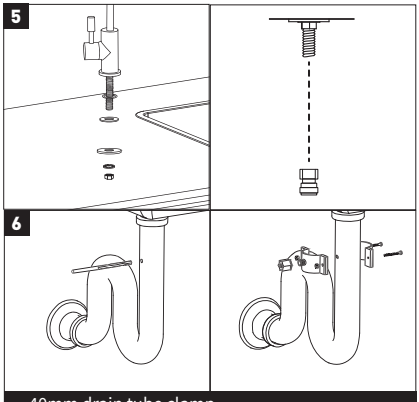
Warning: Given that the equipment to be installed will improve the quality of your drinking water, all tools to be used in the installation process should be clean, rust and grease free. Only use tools, which are specifically designed for membrane tube cutting. Please keep tools clean and disinfect them periodically.

Warning: The installation process should be carried out under appropriate hygienic conditions, taking all necessary precautions in relation to materials and components that will come into contact with water to be treated or consumed.
(For further information please contact your distributor).

Warning: Avoid external contamination of the equipment through improper handling, using gloves, sanitising gel and washing hands as often as is necessary during the installation process, initial operation and equipment maintenance.

The most common installation location tends to be under the kitchen sink unit or in an nearby cupboard.

Install the tap, the drain collar and entry inlet adapter and connect the units respective connectors (5, 6 and 7).



Warning: Some of the installation accessories may vary in function of the model and distribution region.

6. INITIAL OPERATION

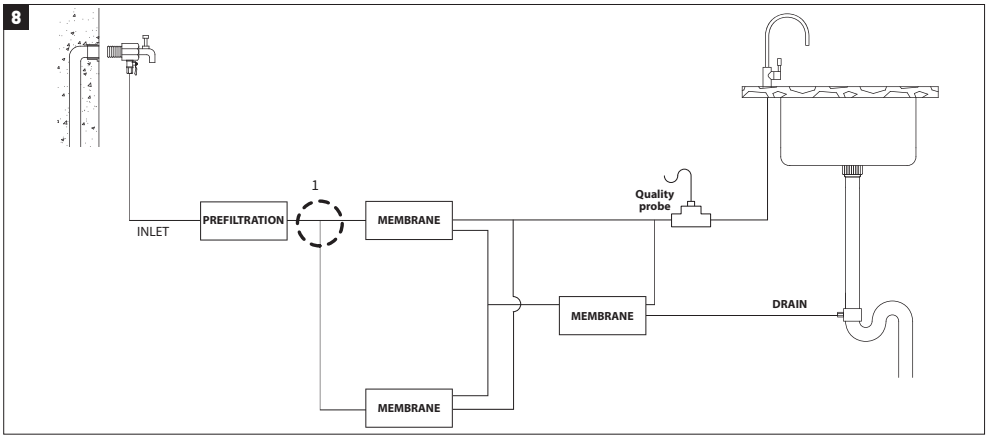
6.1 CARBON FILTER RINSE

The elimination of carbon dust caused by the filters during transport and handling of the equipment is required. This dust should be eliminated as it may completely or partly obstruct the reverse osmosis membrane as well as causing the equipment to malfunction.

To complete this process, disconnect the tube between the outlet of the carbon pre-filter and the membrane housing inlet (see (1) in sketch 8). Power the equipment hydraulically and electrically and aim this tube towards an external recipient or sink until the water runs clear.

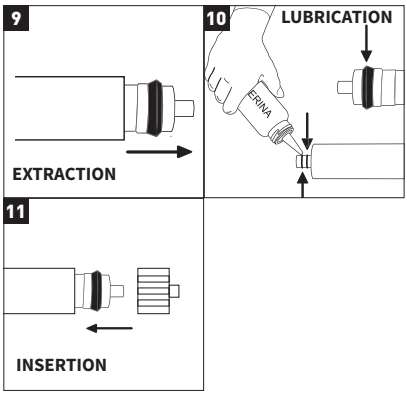
Warning: Do not clean the carbon pre-filters through the tap, as the carbon dust will penetrate the equipment’s components causing malfunction and/or reducing the service life of certain components.

After washing the filters, leave all tubes and components in their original position and connection points.



6.2. MEMBRANE ASSEMBLY

Warning: Take proper hygiene measures when handling the membrane.



Insert the membrane into the membrane housing paying close attention to placing it the right way in the container and using a food-grade lubricant for connecting parts in order to avoid pinching during installation (9, 10 and 11).

Warning: If during the membrane housing handling there is any movement from the connecting screws, they should be dismantled and resealed again after membrane installation in order to reduce future leakage risks.

6.3. SANITISE THE EQUIPMENT

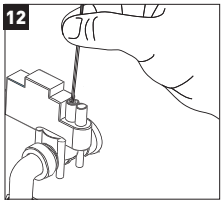
Sanitise the equipment according to the model and procedure indicated by the manufacturer (see ***Sanitising Procedure***).

In the event of any queries, please consult with your distributor.

6.4. SYSTEM STOP, START AND WATERTIGHTNESS CHECK

Turn off the appliance's tap with the hydraulic and electric power on, and carry out a visual inspection of the equipment ensuring no leakages occur (during approx. 1 minute).

In the event of the pump failing to stop, adjust the high pressure switch setting with a 2mm Allen key until the pump stops (12).

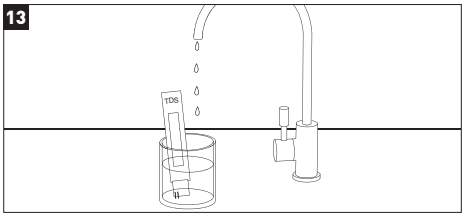


• Turn on the faucet the appliance should start working and supplying water.

• Turn off the faucet and check if the appliance stops.

6.5. RINSING AND CLEANING

Turn on the equipment's tap and check the quality of the water being dispensed with a conductivity tester or TDS; check the reduction of salts obtained is sufficient in relation to the water to be treated (15).



Warning: In the event of discovering that the water dispensed does not adhere to current national legislation, close the inlet valve, empty the equipment with the tap, disconnect it from the electric mains (PUMP model), and contact your technical assistance service.

Finally, clean the interior and the bottom of the equipment with disposable drying paper in order to remove any water, which may have been left, which would block the system.

7. MAINTENANCE

Warning: Some of your unit's components, such as the membrane, the pre-filters and the post-filters are consumable items which have a limited lifetime.

Their duration will depend on the quality of the local water, consumption, type of use and specific water conditions such as extreme turbidity, high chlorine levels, excessive iron content etc…

Warning: To guarantee the quality of the water produced by your equipment, periodical maintenance should be carried out.

Recommended maintenance
• **Pre-filter:** At least once a year *
• **Osmosis membrane:** Every 3 years approx. (for soft water (hardness <15ºHF))
• **Sanitation:** During the initial operation. At least once a year in function of use. Each time access is made with components in contact with the equipment's water or if water has not been consumed during more than one month.

* *In function of the expected consumption and the characteristics of the water to be treated.*

All maintenance should be carried out by qualified technicians who should handle the equipment properly, as well as using original replacement parts in order to maintain the equipment's characteristics, warranty, equipment features as well as preserving the quality of the water dispensed.

Warning: The use of non-original replacement parts, non-regulatory installation or initial operation, maintenance or improper use may invalidate the warranty, as well as rendering invalid the equipment's certifications.

An excess of any compound (total chlorine, turbidity, hardness etc) may reduce the equipment's service life and certain components. This maintenance advice is only a guide.

Your distributor will estimate the life of the replacement parts depending on the characteristics of the water to be treated as well as the expected consumption in each case.

Warning: All replacement parts come in specially designed individual packaging to ensure hygienic storage and transit. Take special hygiene measures when removing said parts from their packaging as well as during handling of the various components and connectors.

Warning: Before dismantling the equipment, take care to assure that you have all material necessary for the required maintenance (read section 5 Installation) as well as the necessary space for work. Work should be carried out in a correctly lit place, in appropriate hygienic conditions and with sufficient space to work comfortably

Change the filters properly, according to the model and type of filter. Ensure unions are watertight and the original hydraulic settings are as recommended by the manufacturer.

Sanitise the equipment following the instructions in the ***Sanitising procedure***.

For further information consult the equipment's ***Data Sheet***. In the event of any doubt please contact your distributor.

In the event of replacing the membrane, follow the manufacturer's instructions in relation to handling and sanitising as appear in the ***Sanitising procedure***.

Warning: Use gloves or appropriate personal protection measures when using chemical products during the sanitising procedure.

Warning: In the event of detecting that the water dispensed fails to adhere to current national legislation, close the unit on water valve, empty via the tap, disconnect from the electricity grid (according to model) and contact your technical assistance service.

SANITISING PROCEDURE

PRE-FILTER AND TAP TREATMENT

1. SANITATION

Necessary materials:

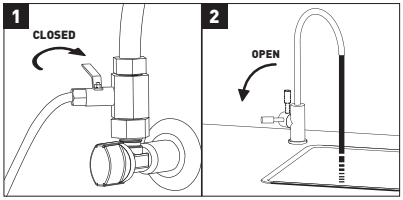
- Manual valve.
- Measuring housing and connectors.
- Hydrogen peroxide (0.5 l).
- Brush.
- Disposable vinyl gloves.
- Easy-to-rinse soap or detergent.
- Food-grade lubricant.
- Strips to detect hydrogen peroxide.
- Sanitising spray.
- Paper napkin.

The appliance must be sanitized when necessary during start-up, (whenever there is a risk of contaminating the appliance due to the manipulation of components in contact with water) or within the indicated frequency. To do so, follow the instructions below:

! ***Warning: Water used during the sanitising process must be drinking water from the public network and comply with the corresponding drinking quality requirements from RD 140/2003, EU Directive 98/83 or the local regulations in force.***

Turn on the faucet and let the water flow for a few seconds in order to renew the water that may be stored inside the appliance.

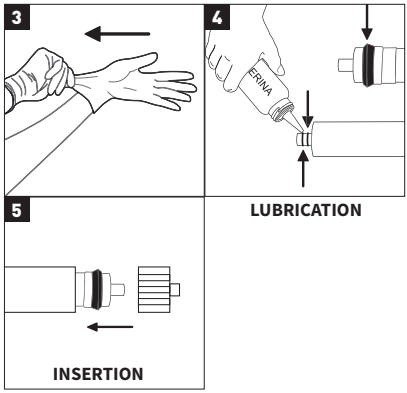
• Keep the inlet valve (1) closed and turn on the tap (2). Close the tap after making sure that no more water is running out of it.



• Change and wash the filters, as outlined in the corresponding section of the ***Technical Manual***. The sanitising process must be carried out with new pre-filters and post-filters. Rinse the filters before starting the process (to properly remove carbon dust).

• Use disposable vinyl gloves (3) to handle sanitising products.

! ***Warning: Maintain a high standard of hygiene when handling the membrane and the components of the appliance in contact with water. Use disposable gloves or wash your hands as often as necessary to avoid risk of contamination in the appliance.***

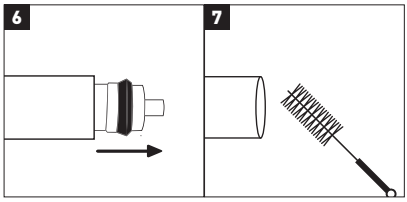


• To sanitise the appliance, the membranes must be inside the membrane housings.

If a new membrane must be installed: open the package, rinse it with tap water, lubricate the joints from the membrane with a food-grade lubricant (4 and 5) to prevent them from pinching during installation and insert it inside its housing in the proper direction.

Before opening the membrane housings, make sure you have a receptacle ready where you can partially empty it, as it might be full of water.

If you must replace an exhausted membrane for a new one: remove the exhausted membrane (6) and throw it away. Clean the inner surface of the membrane housing with a brush (it must be clean and disinfected) along with an easy-to-rinse (low foaming) soap or detergent, suitable for cleaning surfaces intended to be brought into contact with food (7). Then, rinse the membrane housing properly making sure that all traces of detergent are removed.



2. PRE-FILTER AND MEMBRANE TREATMENT

• Disconnect the inlet tube of the system marked as “feed-entrada” and place the dosage housing between the water inlet and the inlet of the equipment (8). For an easier and more comfortable access during the sanitising process and the opening and closing of the inlet valve, a manual valve in the closed position can be placed along with the sanitising dosage housing. This valve will work as the manual inlet valve of the system.

• Once the set has been installed, keep the new manual inlet valve closed and open the inlet valve that is connected to the wall adaptor (9). The dosage housing must be empty.

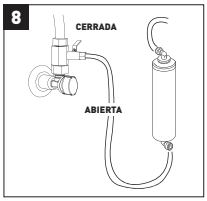
• Pour 0.25 litres of hydrogen peroxide in the dosage housing placed at the equipment’s inlet (10 and 12). Screw the housing’s cap properly to the vessel.

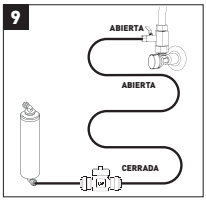
• The inlet manual valve and the tap must be closed. Plug the appliance to the power supply.

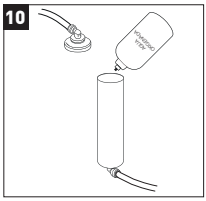
• Open the inlet valve and let the equipment start working so it will absorb the hydrogen peroxide. Let 1L. flow through the appliance. Before turning off the faucet close the inlet water valve in order to reduce pressure.
Pour 0,25 litres of hydrogen peroxide again and let 1L flow again.
At this moment the entire circuit contains sanitizing fluid.

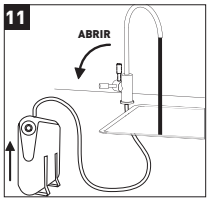
• After 10 minutes, turn on the faucet (11) and let the inlet water flow for 5 mins before drinking.

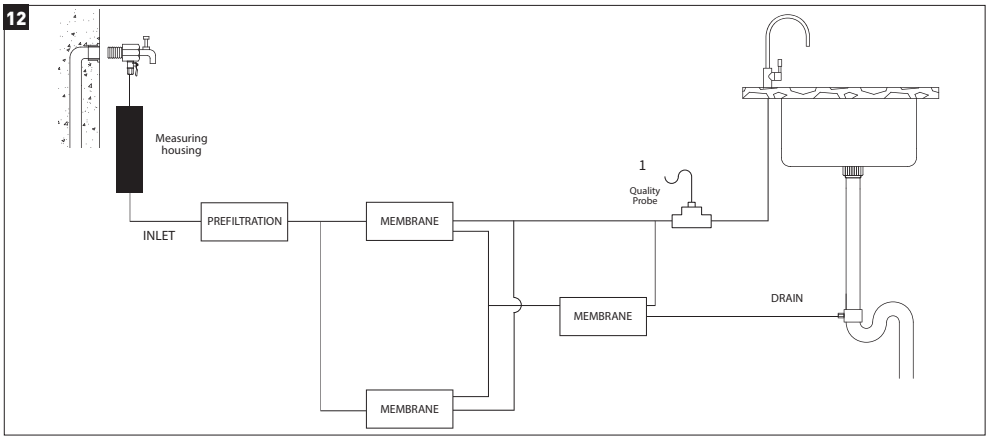
• Empty the dosage housing. Before opening this housing, make sure you have a receptacle in place where you can empty it, since it might be full of water.

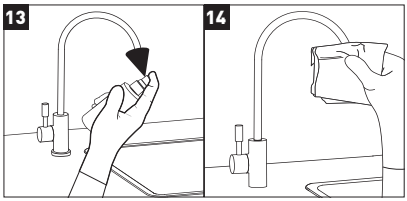












• Pay special attention to the disinfection of the tap spout. Use a sanitising spray (or hydrogen peroxide, by applying it in such a way that it goes inside the tap) and disposable kitchen paper towel. Apply the sanitising spray on the tap nozzle (13), rub the spout and the nozzle with a disposable paper towel and do not touch it with bare hands (14).

3. RINSE

• Rinse the appliance after each sanitization by flowing tap water for 5 minutes or more.

• Proceed to rinse the prefilter each time it's replaced and prior to the sanitization.

• Rinse the prefilter separately from the rest of the appliance even before its installation.

• Rinse the appliance with water that complies with local normative concerning the parameters of potable water.

• Slowly fill the prefilter in order to evacuate the air content and avoid internal turbulence wich may after the different stages of filtration.

• Keep the filter in the same position it is going to be once installed in the appliance during the entire rinsing process.

• Dry all the parts that may have got wet using a disposable paper towel, in particular the Aquastop leaking sensor.

• Since sanitising and rinsing do not guarantee either the complete removal of carbon dust found in new filters or sanitising residues, the tank must be emptied twice before the water can be used as drinking water.

NOTES

DATA SHEET

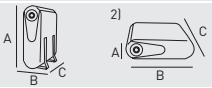
Binature 3.0 Direct Flow

1. TECHNICAL FEATURES

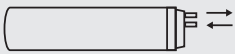
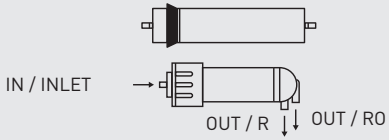
Application	
Water treatment	
	• Reverse osmosis
Use	
	• Improves the drinking water's characteristics (meeting all European Directive on Water for Human Consumption 98/83 requirements and its national transpositions in the various EU member states).
Modifications due to reduction or contribution	
	• Water treatment via reverse osmosis is able to greatly reduce salt and other concentrations. • Minimum reduction* of specific compounds and parameters: Sodium – 90 % Calcium – 90% Sulphates – 90% Chloride – 90% Total Hardness – 90% Conductivity – 90% (*) Depending on the characteristics of the water to be treated (in the membrane outlet). These values may vary in function of the type of post-filter used by the equipment and/or setting of the mixing valve (where applicable).

Working limits	
Pressure (max. / min.)	6 bar (250 kPa) 1 bar (100 kPa)
TDS (max.)	1500 ppm
Temperature (max. / min.)	40ºC – 2ºC
Hardness (max.)	15ºHF**

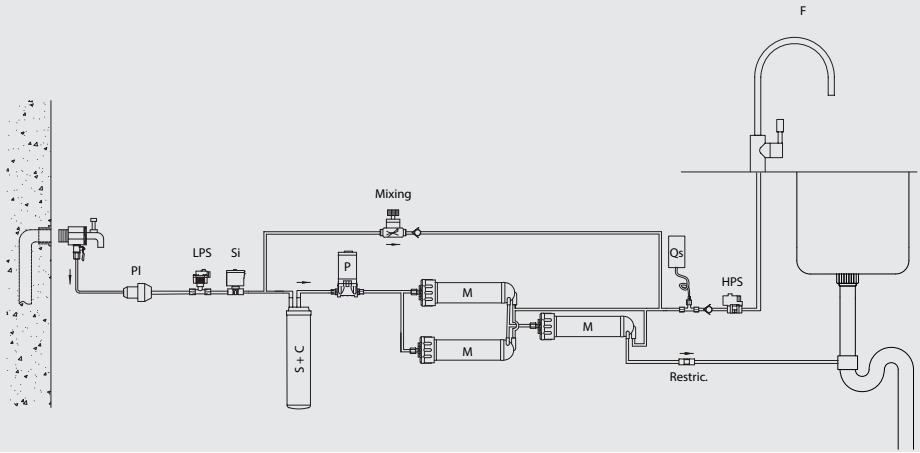
Technical Information	
Control type	High pressure switch. Inlet solenoid valve
Safety lock	Low pressure switch Electronic leaking sensor. Pressure limiter. Water quality control. Maintenance warning.
Dimensions (mm) **(A x B x C)** **Weight (kg)**	1) 475 x 165 x 435 2) 135 x 450 x 435 12
Total tank volume	-
Entry connection	3/8"
Drain connection	1/4"
Tap connection	3/8"
Wall adapter	3/8" M-F *****
Drain collar	40mm drain tube clamp



Data sheet

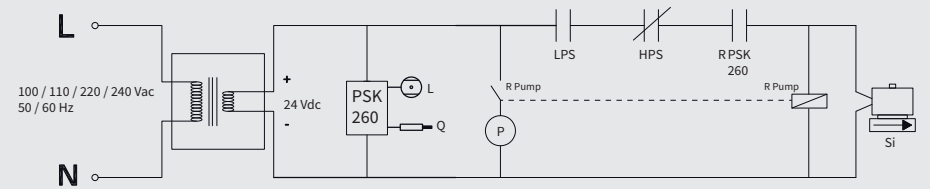
Pre-filters	1 x CS combined sediments / Carbon  	IN: ESPIGA 3/8" OUT: ESPIGA 3/8"
Membrane	3 x 1812 x 180 GPD GREEN FILTER  	IN: RH 1/8" OUT: RO RH 1/8" OUT: R RH 1/8"
Power supply	24 Vdc 5 A	
Electrical adaptator	100-240 Vac 50/60 Hz: 24 Vdc	
Tap type	Robin Metal Free *****	
Production	1,7 lpm. Without counter pressure. Water to be treated 15 ºHF. 200 ppm, 14 ºC, 2 bar****	
Control and management electronic system	PJK 260-A + PJK 028	
Membrane cleaning system	-	

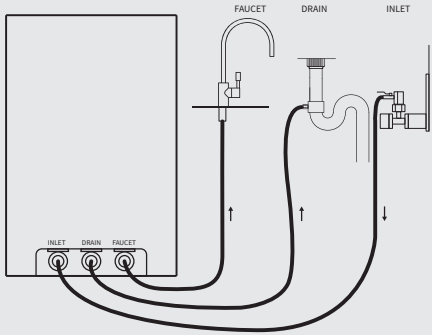
Hydraulic diagram



Data sheet

Electrical diagram **PUMP**





Hydraulic connections diagram

* For salinity levels above 1500 ppm, please check with your distributor.

** Higher levels of hardness can reduce the service life and correct function of certain components.

***Maximum accumulation may vary depending on the model.

**** Flows can vary by up to 20% in function of the temperature, pressure and specific composition of the water to be treated.

***** Possible variations depending on the model chosen.

MANUFACTURED BY:
PURICOM INDUSTRIAL WATER CORPORATION (Taiwan)

DISTRIBUTED BY:
IONFILTER. PURICOM EUROPE. PURICOM AMÉRICA
Pol. Ind. L'Ametlla Park. C. Aiguafreda, 8.
08480 L'Ametlla del Vallès. Barcelona (Spain)
T. 902 305 310 F. +34 936 934 329

2. HOW THE EQUIPMENT WORKS

• The mains water to be treated is fed through the equipment after passing through the pre-filtering stage that incorporates a turbidity (S+C) and carbon filte. During this filtering stage, chlorine, its derivatives and other organic substance particles are retained.

• The appliance incorporates a low pressure switch (LPS) to protect pump from pressure drops in the network.

• Water flow towards the appliance is controlled by a solenoid valve (Si).

• After the filtering stage, water flows towards the reverse osmosis membranes (M). The appliance incorporates a pump (P) to increase pressure. It is the effect of the water pressure upon the membrane, which makes the reverse osmosis possible.

• Water that is rejected or has excessive salt or other dissolved substances flows towards the drain outlet to be disposed of.

• Working cycles in a direct flow appliance are controlled by a high pressure swift (HPS).

• The appliance has different functional and/or safety systems, managed by a state-of-the-art electronic module:

• Electronic system for leakage detection (L). When the system detects this condition, it blocks the system and emits an acoustic signal and a light signal to inform about the situation. The unit will remain blocked until the leakage sensor is dry.

• Probe used to estimate the conductivity of water produced, thus assessing the state of the membrane and the components (Q). Press the front button to measure the conductivity of water produced.

• Automatic filter change warning, in order to inform the user that proper maintenance must be carried out to guarantee the quality of water produced. The equipment must undergo a proper maintenance.

• This appliance has built-in mixing valve. The user will be able to regulate the salinity of supplied water to the desired taste and/or local regulations.
This regulation must be carried out while the unit is producing water. To make the mixing system work, extract full jars. Depending on the model, the mixing valve can be found in different places.

• The unit includes a pressure limiter (PL) in order to protect the system from excessive pressure and make it work with consistency over time.

3. INTERFACE. SYSTEM STATUS.

PJK-260-A + PJK -028 CONTROLLER

VISUAL INDICATION	LED STATE	ACUSTIC INDICATION	PUSH BUTTON	MEANING
BLUE LED "Power"		-	-	Electrically powered system.
BLUE LED "Power"		-	-	The electric/electronic system is not working properly/has failed.
GREEN LED "Water quality detector"		-		When the PUSH-button on the front panel is pressed, it indicates that the quality of water produced is excellent.
GREEN LED "Water quality detector"	 x1			When the PUSH-button on the front panel is pressed, it indicates that the quality of water produced is poor.
GREEN LED "Water quality detector"		-	-	The system is working properly. If it doesn't light up after pressing the PUSH-button on the front panel, it means that another alarm of a higher priority has lit up.
RED LED "Leaking sensor/filters"			-	Carry out the maintenance/change the filters immediately. System blocked. *
RED LED "Leaking sensor/filters"	 x1		-	A water leak has been detected. System blocked. *
RED LED "Leaking sensor/filters"	 x2		-	Carry out the maintenance/change the filters soon. *

 - Led is off

 - Led is permanently on

 x1 LED is on: single flashing

 x2 LED is on: double flashing

 Acoustic signals

 Regular acoustic signal

* Contact your service.

** When you detect any of the states described above, contact with the maintenance service to arrange appointment. See the relevant section in the Manual Technical.

Contact your service if the unit does not stops producing water (after completely filling the tank) after several hours, without any water extraction.

Contact your service if the unit blocks repeatedly due to low water pressure and having pressure water on the rest of the house.

Contact your service if , after opening the faucet, the unit would find at rest, without dispensing water using the tap or showing any alarm.

The beeps are not continuous; they last a few seconds (10 "). While maintenance state is maintained it will be indicated by LEDs on the panel and acoustic notification periodically every 7 hours.

4. WARRANTY

END USER WARRANTY:

The distributor guarantees this equipment for a period of two years against any fault found, and in accordance with the provisions of RD (Royal Decree) 1/2007 of the 16th of November (Amended text of the General Law for the Protection of Consumers and Users). This guarantee encompasses reparation and replacement of defective parts by personnel authorised by the distributor or by the Official Technical Assistance Service (SAT), either at the location of installation or at their respective workshops. Labour and shipping costs incurred by said repairs are included in the guarantee.

IF/PEU/PAM will not be liable to honour the warranty in the event of parts, which are subject to general wear and tear, lack of due maintenance, damage or other incidents due to the consequence of misuse or inappropriate use in accordance with conditions, and functional limits of said equipment as indicated by the manufacturer. Furthermore, the warranty will be rendered invalid in the event of poor use or in the event of said equipment being modified or repaired by personnel not authorised by the distributor or by the official SAT. Replacement parts under warranty shall remain the property of IF/PEU/PAM*. IF/PEU/PAM* shall be held responsible for any lack of conformity of equipment in relation to its origin, identity or appropriateness of the products, in accordance with equipment type and end use.Taking into account the equipment's characteristics, in order for the warranty to cover any lack of conformity, the adherence to the installation and working technical conditions which appear in this warranty is essential, as well as the submission of either a sales invoice or receipt.

Failure to comply with said conditions my invalidate this warranty, taking into account the relevance of the equipment's aim and conditions and working limits.

The distributor guarantees that the installed equipment is appropriate for the improvement of the quality of the water to be treated, in accordance with the equipment's characteristics and current legislation.

The installation personnel and/or distributor guarantees the correct installation and initial operation of the equipment in accordance with the manufacturer's instructions and any current legislation, and will be responsible for any lack of conformity which arises from any incorrect application, installation or initial operation of said equipment.

For any warranty claim the submission of the sales receipt is required. The 2-year period is calculated from the date the equipment is purchased from the distributor.

If during the warranty period the equipment encounters any issues please contact your local distributor.

The equipment has been installed and is working in a satisfactory manner for the client and for the record:

*RO equipment prior treatment:

*RO equipment entry hardness [ºF]:

*RO equipment entry TDS [ppm]:

*RO equipment entry pressure [bar]:

*TDS produced water (tap) [ppm]:

*Installation and initial operation service result sheet

☐ CORRECT.

☐ OTHER INFORMATION:

The equipment's owners have been suitably and clearly informed of the use and maintenance required to ensure its correct working and of the quality of water to be produced. To these effects a maintenance contract is offered.

*Ref. Maintenance contract

☐ The maintenance contract IS ACCEPTED.

☐ The maintenance contract is NOT ACCEPTED.

In the event of needing further information, to report a breakdown or fault, please request either maintenance or technical assistance. Please read the sections relating to troubleshooting in this manual and contact the distributor or retailer.

In the event of equipment installation, where the water to be treated has a hardness in excess of 25ºF, IF/PEU/PAM* shall not be held responsible for any equipment breakdown, poor working or any associated consequences caused by the water's characteristics.

*** IF/PEU/PAM = IONFILTER/PURICOM EUROPE/ PURICOM AMÉRICA**

COMPANY AND/OR AUTHORISED INSTALLER:

(date and signature)

NOTES FOR THE COMPANY/AUTHORISED TECHNICIAN/INSTALLER:
Information marked with an (*) should be filled in by the installation technician.

IDENTIFICATION OF THE SYSTEM:

S/O

P/N

S/N

TECHNICAL ASSISTANCE LINE

Data sheet

5. EQUIPMENT INSTALLATION AND INITIAL OPERATION REGISTRATION SHEET. TECHNICIAN

NOTES FOR TECHNICIAN/INSTALLER: *Please read this manual carefully. In the event of any queries please contact your distributor's Technical Assistance Service (S.A.T.).*
Information marked with an (*) should be filled in by the installation technician *and copied to the WARRANTY SHEET.*
This document should be retained by the installer/distributor as it may be requested by IF/PEU/PAM, with the aim of improving customer and after sales service. The technician who carries out the installation should be suitably qualified.

S/O

P/N

S/N

INFORMATION REGARDING THE EQUIPMENT'S APPLICATION:

Source of water to be treated:

- ☐ Public water supply network.
- ☐ Other networks:

*RO equipment prior treatment:

*RO equipment entry hardness [ºF]:

*RO equipment entry TDS [ppm]:

*RO equipment entry pressure [bar]:

RO equipment entry chlorine concentration [ppm]:

INSTALLATION PROCESS CONTROL:

- ☐ Carbon pre-filter cleaning.
- ☐ Carbon post filter cleaning.
- ☐ Membrane assembly.
- ☐ Sanitation in accordance with protocol.
- ☐ Flow restrictor check.
- ☐ Maximum pressure calibration.
- ☐ Review and fittings.
- ☐ Pressurized system water tightness check.
- ☐ *TDS produced water (Work surface tap) [ppm]:
- ☐ Clearly inform of the correct use and maintenance required to ensure correct working of the equipment and for the quality of the water produced. Given the importance that correct equipment maintenance has to ensure the quality of water to be produced, the owner of the equipment should be offered a maintenance contract by suitably qualified technicians.

COMMENTS

*Installation and initial operation results:

- ☐ CORRECT (equipment installed and working properly. Produced water is suitable for this application)
- ☐ OTHER COMMENTS:

TECHNICIAN IDENTIFICATION

Company and/or installer, date and signature:

CONFORMITY OF EQUIPMENT OWNER:

I have been clearly informed regarding the correct use and maintenance required for the installed equipment, and have been offered a maintenance contract as well as being informed of how to contact the Customer Service Department in the event of wishing to make any information requests, to report an equipment breakdown or malfunction, or to request any technical services.

Comments:

***Ref. Maintenance contract:**

- ☐ The maintenance contract IS ACCEPTED.
- ☐ The maintenance contract is NOT ACCEPTED.

Model / Ref.:

Owner, Mr/Mrs/Ms:

Street:

Telephone No:

Town/City:

State/County: Post Code:

Date and signature:

6. EQUIPMENT INSTALLATION AND INITIAL OPERATION REGISTRATION SHEET. TECHNICIAN

DATE	TYPE OF SERVICE	NAME, SIGNATURE AND STAMP OF AUTHORISED TECHNICIAN	
/ /	☐ INITIAL OPERATION	TECHNICIAN	☐ ORDINARY ☐ EXTRAORDINARY ☐ WARRANTY
/ /	☐ MAINTENANCE COMPLETE	STAMP	
/ /	☐ REPAIR		
/ /	☐ SANITATION		
/ /	☐ OTHERS		
/ /	☐ MAINTENANCE COMPLETE	TECHNICIAN	☐ ORDINARY ☐ EXTRAORDINARY ☐ WARRANTY
/ /	☐ REPAIR	STAMP	
/ /	☐ SANITATION		
/ /	☐ OTHERS		
/ /	☐ MAINTENANCE COMPLETE	TECHNICIAN	☐ ORDINARY ☐ EXTRAORDINARY ☐ WARRANTY
/ /	☐ REPAIR	STAMP	
/ /	☐ SANITATION		
/ /	☐ OTHERS		
/ /	☐ MAINTENANCE COMPLETE	TECHNICIAN	☐ ORDINARY ☐ EXTRAORDINARY ☐ WARRANTY
/ /	☐ REPAIR	STAMP	
/ /	☐ SANITATION		
/ /	☐ OTHERS		
/ /	☐ MAINTENANCE COMPLETE	TECHNICIAN	☐ ORDINARY ☐ EXTRAORDINARY ☐ WARRANTY
/ /	☐ REPAIR	STAMP	
/ /	☐ SANITATION		
/ /	☐ OTHERS		
/ /	☐ MAINTENANCE COMPLETE	TECHNICIAN	☐ ORDINARY ☐ EXTRAORDINARY ☐ WARRANTY
/ /	☐ REPAIR	STAMP	
/ /	☐ SANITATION		
/ /	☐ OTHERS		

7. SERVICE BOOK. USER

DATE	TYPE OF SERVICE	NAME, SIGNATURE AND STAMP OF AUTHORISED TECHNICIAN	
/ /	☐ INITIAL OPERATION	TECHNICIAN	☐ ORDINARY ☐ EXTRAORDINARY ☐ WARRANTY
/ /	☐ MAINTENANCE COMPLETE	STAMP	
/ /	☐ REPAIR		
/ /	☐ SANITATION		
/ /	☐ OTHERS		
/ /	☐ MAINTENANCE COMPLETE	TECHNICIAN	☐ ORDINARY ☐ EXTRAORDINARY ☐ WARRANTY
/ /	☐ REPAIR	STAMP	
/ /	☐ SANITATION		
/ /	☐ OTHERS		
/ /	☐ MAINTENANCE COMPLETE	TECHNICIAN	☐ ORDINARY ☐ EXTRAORDINARY ☐ WARRANTY
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/ /	☐ REPAIR	STAMP	
/ /	☐ SANITATION		
/ /	☐ OTHERS		

Warning: the recommended maintenance intervals are defined in the corresponding section of the **Technical Manual.**

Bnature 3.0

DIRECT FLOW

MUBINATURE302015