Introduction

The water purifiers proposed by DIASYS are a combination of 2 elements:

- **a reverse osmosis system removing 95% of impurities**
- **a deionising filter producing pure water(conductivity below 5µS/cm)**

The reverse osmosis membrane has the advantage to prolong the lifetime of the deionising filter.

The water purifiers designed by Diasys are especially built for providing deionised water to clinical chemistry and immunology analysers.

catalog

- Water purifiers
- UV sterilizer
- Auto-filling water level sensor
- Conductivity meters

recommended conditions

A reverse osmosis system works well with water at ambiant temperature. The tap water should not be too hot (above 35°C) or too cold (below 10°C). Outside these bounds, the membrane might be damaged irreversibly. The optimum production of water is obtained at 25°C.

In order to activate the reverse osmosis process, the tap water pressure in the membrane must be strong enough, above 2.5 BAR (ideal pressure is generally around 4.5 BAR) but can vary depending of the membrane. When the tap water pressure is too low or vary, a booster pump is required. It is recommended to rince the membrane every month using the following process:

- **disconnect the restrictor**
- **leave water flowing during 20 minutes**
- **reconnect the restrictor**

This manual process is similar to the flush function available on the system equipped with an electronic controller, which allows to rince the membrane easily just by pressing a button.

Troubleshooting

PROBLEM	CONDITION	POTENTIAL CAUSES	SUGGESTED ACTION
Water purifier OFF	Power light OFF	No power supply	- Verify the power supply wires - Switch power ON
		Power supply fuse is broken	Check and replace the fuse
No production of purified water	- Power light ON - indicator PUMP is off - indicator SOURCE is ON	The inlet tap water supply is closed or has insufficient pressure	Improve water supply
		Water inlet tubing folded or obstructed	Check that the inlet pipe is not damaged.
	- Power light ON - all control light indicators OFF	Fuse in the controller box broken	Replace fuse
Weak purified water production	- Power light ON - indicator PUMP light ON - Pump running continuously	Pre-treatment clogged	Replace the pre-treatment filters before the RO membrane
		Weak flow of inlet water	Increase the flow of the inlet water
		Reverse osmosis membrane clogged	Change the membrane
	Pump leakage	Pump damaged	Replace the pump
		Flow restrictor blocked	Replace flow restrictor
	- Power light ON - indicator PUMP light ON - Pump always OFF	Pump fuse burned	Replace the pump fuse
Starts and stops continuously	Light indicators FULL and PUMP alternate	Defective high-pressure sensor or check valve	Change pressure sensor and check valve
Lack of pressure on water output	- Power light ON	Watertank hand valve closed	Turn ON the watertank hand valve
		Requested pure water volume above the capacity of the water purifier	Wait the watertank is filled again
		Lack of pressure in the pressurised watertank	Re-adjust the air-pressure of the water tank
purified water conductivity too high		Resin saturated	Replace resin cartridge or bottle
Drain flowing continuously	- POWER light ON - FULL indicator ON - Pump indicator OFF	Inlet solenoid valve defective	Replace the inlet solenoid valve
	- Power light ON - Pump indicator ON - Auto-Flush not activated	Flush solenoid valve defective	Replace the flush solenoid valve

Conductivity meter display OFF		Batteries out of order	Replace the batteries

Q & A

- What are the different qualities of water ?
- What's the difference between RO and DI water purification?
- Why carbon to filter water ?
- Why a booster pump ?
- How to disconnect autofilling ? (OMINI autofilling version only)
- How to replace an old controller without white wire by a new one ?
- Why indicator lamps of the controller are off?
- When to replace the reverse osmosis membrane?
- Is the UV sterilizer to be connected before or after the water purifier?