

REVERSE OSMOSIS DEVICES

THE ZB SERIES

The reverse osmosis models in the **ZB** series are the following: **ZB01**, **ZB02**, **ZB04**.

These devices are quite compact and feature a stainless steel body; moreover, any component that gets in contact with osmotic water is in plastic

They may continue to run uninterruptedly and they do fit cup- and dishwasher requirements with break tank.

They do not need maintenance works so as to carry out regenerations or any other procedures; users only have to check quality of the supplied water on a regular basis.

The **ZB01** model supplies up to 60 litres of osmotic water and runs on hydraulic pipes, thus not needing power.

The **ZB02** and **ZB04** models run on electricity and their power consumption is 40 and 90 watt respectively. They supply 100 and 200 litres of osmotic water per hour.

Pressure in the water supply network and inlet water temperature can modify osmotic water quantity. Performance is negatively impacted by too cold water and low water mains pressure.



No Electricity



ZB04

The **ZB SERIES** is made up of reverse osmosis water treatment devices that use semi-permeable membranes. They are able to let water flow while absorbing salts dissolved into it.



The **ZB SERIES** devices can easily be used and do not require the use of chemicals.

ZB02



They all feature an activated carbon pre-filter retaining small sediments as well as chlorine in inlet water.

ZB01

Once the water is filtered, it flows through the reverse osmosis membranes, which remove mineral salts and any bacteria, thus supplying up to 98% pure water.



Worth of notice is that not all the water getting into contact with the membranes will be treated; in fact, part of it will be drained so as to keep the membranes clean. This means that the removed substances will flow through the drainage.

All the water flowing into the **ZB** device is called **INLET WATER**. Once filtered, it gets to the reverse osmosis membrane.

The part of water that flows in and then out of the membrane, and that will be used by the machine, is called **PERMEATE**.

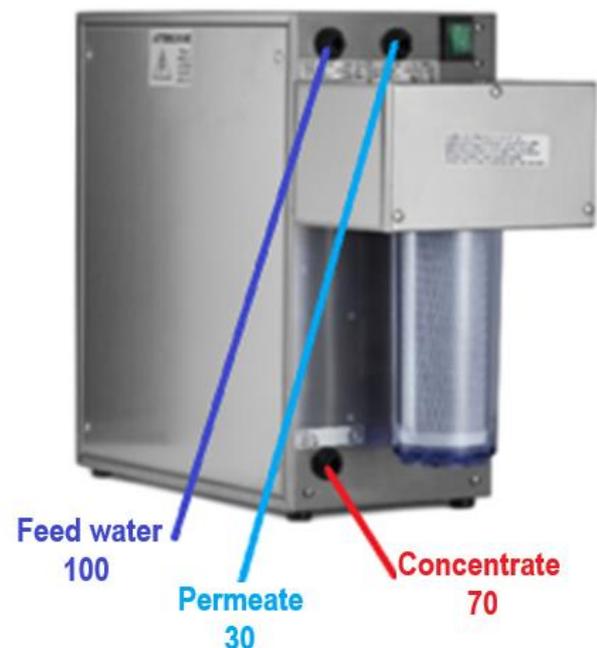
CONCENTRATED water is the untreated water that contains all the mineral salts dissolved in **INLET** water and that will be drained.

During ordinary operations **CONCENTRATED** water is higher than **PERMEATE**. If, for instance, inlet water amounts to 100 litres, 15 litres will be **PERMEATE**, and 85 litres of **CONCENTRATED** water will be drained.

Unfortunately, such ratio cannot be changed, the risk being to damage the membrane.

As to the **ZB SERIES**, it features membranes connected in series and in pairs so as to increase its yield. The concentrated water flowing out of the first membrane is the **INLET** water for the second membrane.

This procedure doubles the actual yield; in fact, with 100 litres of **INLET** water, 30 litres of **PERMEATE** are supplied, thus draining 70 litres of **CONCENTRATED** water.



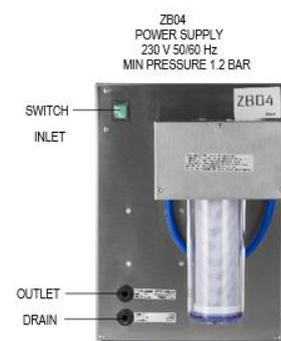
The **ZB SERIES** devices are completely automated and no adjustment is needed.
The **ZB01** model is simply based on water pressure, and it does not need electricity.

When the user opens the tap, this device supplies osmotic water.
When the outlet water tap is closed, the entire device will stop running.

The **ZB02** and **ZB04** models feature a PCB that controls their operation and, thanks to some pressure switches, it can start or stop the pump supplying outlet water.

Moreover, each time they stop after having supplied the needed water, they carry out a membrane rinsing procedure.

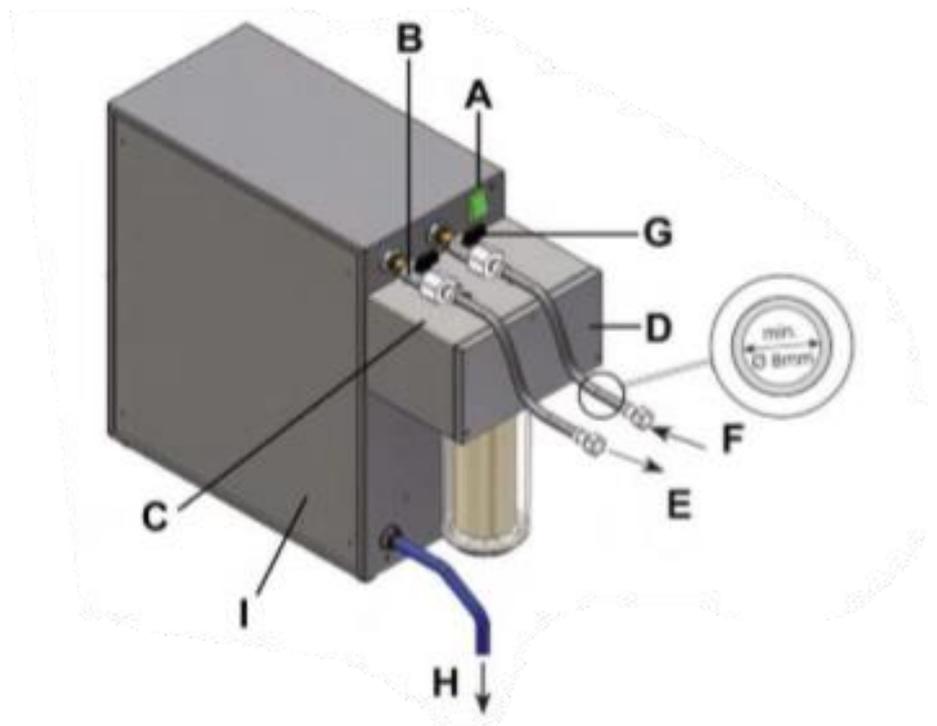
The **ZB02** and **ZB04** models do meet the typical cup- and dishwasher break tank requirements. They also feature a small tank ensuring some extra water supply that is useful for rinsing.



INSTALLATION SUGGESTIONS:

KEYS:

- A - ON-OFF SWITCH
- B - OUTLET TAP
- C - FILTER HOLDER
- D - PANEL
- E - OUTLET PIPE
- F - INLET PIPE
- G - INLET TAP
- H - DRAIN PIPE
- I - SIDE PANEL



MAINTENANCE: FILTER REPLACEMENT

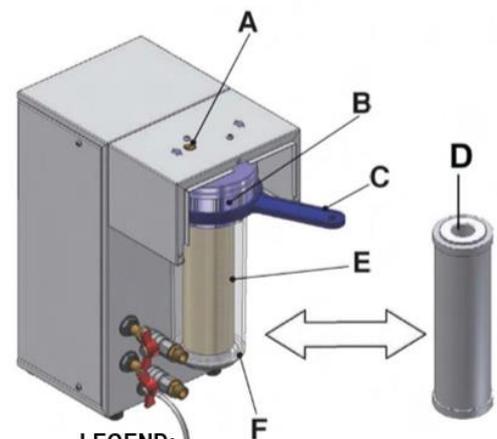
As to ordinary maintenance, filter replacement is the required procedure.

Please disconnect power supply before carrying out any cleaning or maintenance procedure on the **ZB02** and **ZB04** models.

Efficient filter features are crucial for good machine operation. As a matter of fact, poor filtration causes device failure.

Replacing the filter each time it is visibly too dirty is advisable; in any case, replacing it with an OEM spare is recommended every 6 months.

Contacting an installing technician who can carry out the maintenance procedure by complying with instructions in the operation handbook is advisable.



LEGEND:
 A-Filter screw
 B-Filter sleeve
 C-Filter key
 D-Spare cartridge
 E-Cartridge
 F-Cup filter

Use locations:



with
 BREAK TANK

