MembraSAL — Demineralised water

100 l/h and 120 l/h, complete set

User guide · installation, setup and maintenance

Version 1.0 — 17 October 2026

1. Welcome

Thank you for choosing the MembraSAL for demineralised water. The set produces water that contains virtually no minerals. This water dries without streaks or limescale spots. It is made for technical use, such as window cleaning, laboratories, car washes and topping up appliances that cannot tolerate limescale.

> **Not intended as drinking water.** Demineralised water is intended for technical use. Do not use it for drinking or for making coffee or tea.

This guide applies to the 100 litres per hour set and the 120 litres per hour set. Where they differ, this is stated. A qualified installer installs the set. Installation is not included in the price. The guide is made to be read on screen; there is no need to print it.

2. Your set

The set works in three steps:

1. **Pre-filters.** Activated carbon and a fine filter with antiscalant keep dirt, chlorine and scaling away from the membrane.
2. **Reverse osmosis.** A pump pushes the water under pressure through the membrane. The membrane holds back most of the dissolved salts, including limescale. The clean water (product water) goes to the 12-litre storage tank. The water with the substances held back (flushing water) goes to the drain.
3. **Post-filters.** A mixed-bed filter removes the last minerals from the water. The post-carbon filter keeps the water clear. The conductivity meter shows how pure the water coming out of the set is.

When the storage tank is full, the MembraSAL briefly flushes the membrane and goes to rest. As soon as you draw water, it starts by itself.

Component	100 l/h	120 l/h
Capacity at 20 °C	100 litres per hour	120 litres per hour
Capacity at 10 °C	65 litres per hour	84 litres per hour
Membranes	one	two
Pre-filters	activated carbon and fine filter with antiscalant	20-inch pre-filter: carbon, microfibre and antiscalant
After the membrane	12-litre storage tank, mixed-bed filter and post-carbon filter	12-litre storage tank, mixed-bed filter and post-carbon filter
Monitoring	conductivity meter with display	conductivity meter with display
MembraSAL dimensions	approx. 42 × 32 × 13 cm, lying flat	55 × 58.5 × 28 cm (w × h × d)
Pump operating pressure	6 to 9 bar	6 to 9 bar
Connections	supply 3/8"; product water and drain 1/4"	supply 3/8"; product water and drain 1/4"

Component	100 l/h	120 l/h
Power	230 V, 50 Hz, European plug	230 V, 50 Hz, European plug
Use	intermittent: at most 30 minutes in a row, then at least 15 minutes rest	suitable for daily use with the storage tank

Cold water gives fewer litres per hour. That is normal with reverse osmosis.

3. Before you start

In the box

- The MembraSAL (100 or 120 l/h)
- Pre-filters with filter cartridges
- 12-litre storage tank
- Mixed-bed filter and post-carbon filter
- Conductivity meter with display
- Supply hose, product water hose and drain hose with clamp
- Set of hoses (1/4") and couplings

The right location

- A dry, frost-free room: between 5 and 40 °C. Also during storage before installation.
- Well lit (at least 150 lux) and well ventilated.
- A power socket and a drain nearby.
- Enough space to replace filters. Leave at least 4 cm free below each filter bowl.

Water, connections and power

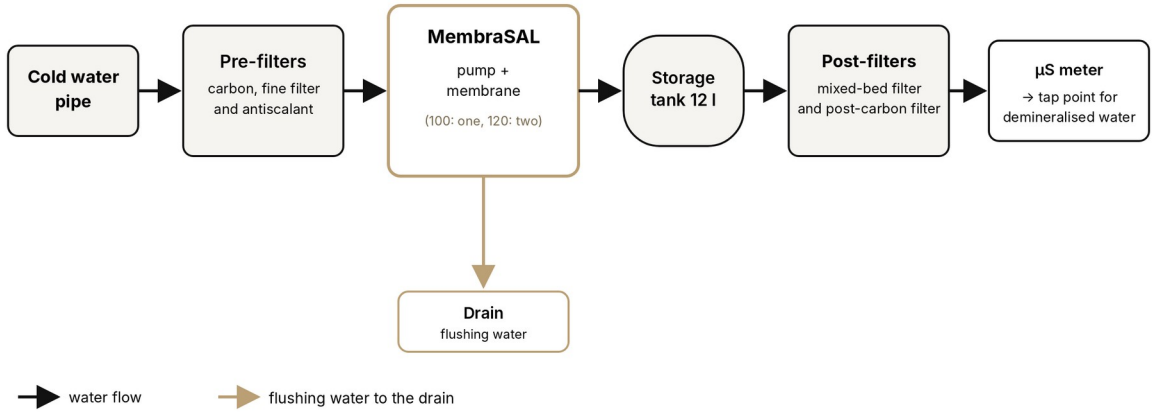
The set only works on mains water (drinking water) from the water company. The membrane is sensitive; the pre-filters with antiscalant protect it against scaling.

Component	Requirement
Water	mains water from the water company
Supply water pressure	100 l/h: 2.5 to 6 bar · 120 l/h: 2 to 6 bar; fluctuations at most 1 bar
Supply water temperature	5 to 30 °C
Free chlorine	0 mg/l in the water before the pre-filters. Dutch mains water normally meets this. If there is free chlorine in your water, an extra activated carbon cartridge must be fitted before it.
Dissolved salts	less than 1,500 ppm
Acidity (pH)	6.5 to 9
Iron and manganese	each less than 0.1 mg/l
Oil and odour	no oil; odourless
Flushing water drain	in accordance with the regulations that apply where you are
Power	230 V, 50 Hz, European plug (1/N/PE)

4. Installation

This part is for the installer.

Set-up MembraSAL Demineralised water



1. **Water off.** Close the water supply and release the pressure.
2. **Fit the pre-filters.** Fix the pre-filters to the wall. Note the arrows on the head: they point in the flow direction. Do not swap inlet and outlet.
3. **Position the MembraSAL.** Place the MembraSAL in its permanent location and connect the outlet of the pre-filters to the supply (3/8").
4. **Drain.** Connect the drain hose (1/4") to the drain, using the clamp supplied.
5. **Product water.** Connect the product water hose (1/4") to the storage tank. Connect the storage tank to the post-filters, and the post-filters via the conductivity meter to the tap point.
6. **Flush the pre-filters.** First flush new pre-filters to the drain, before the water goes to the MembraSAL. Carbon, iron particles or oil must not reach the membrane.
7. **Water on and power.** Open the water, check that everything stays dry and plug into the socket. The MembraSAL first flushes briefly and then starts working.
8. **Flush.** Let the MembraSAL run for about 10 minutes and let the water run to the drain, before using the water.
9. **Leak check.** Close the tap point, wait 5 minutes and check that all couplings are dry.
10. **Filter counters.** The installer leaves the filter counters at the factory start values.

5. Commissioning and setup

The conductivity meter

The conductivity meter shows how pure the water coming out of the set is, in µS (microsiemens). The lower the number, the fewer minerals remain. Demineralised water has a very low value.

Which value is right? That depends on what you use the water for. Agree a limit value with your installer that suits your application, and write it down. If the meter goes above it, the mixed-bed filter is full.

The MembraSAL display

The MembraSAL itself also has a display. It measures the water directly after the membrane, so before the post-filters.

Set	What you see
100 l/h	TDS – PPM (dissolved substances after the membrane), PURIFY (producing water), FULL (tank full, at rest), F1 and F2 (how long the pre-filters will last), CHECK (fault). Buttons: SELECT, CLEAR and FLUSH.
120 l/h	PERM. µS (conductivity after the membrane), FEED µS (your mains water), CARTRIDGE (litres until the filters need replacing), STAND BY (tank full, at rest). Buttons: square button, up arrow and down arrow.

The set comes with a phone app; you will receive it on delivery.

6. Daily use

- **You don't need to set anything.** Draw the water at the tap point. When the storage tank is full, the MembraSAL goes to rest by itself.
- **Check the conductivity meter regularly.** If the value goes above your limit, replace the mixed-bed filter (chapter 7).
- **Flushing manually:** 100 l/h: press FLUSH. 120 l/h: select FLUSH with the arrows and press the square button.
- **Not used for a long time?** First let a few litres run off before using the water.
- **Check now and then** that the hoses and couplings are dry.

7. Maintenance and replacement

Stick to these intervals, even if the water still seems fine.

When	What	Who
When the meter goes above your limit, and every 6 months at the latest	Replace the mixed-bed filter	You or your installer
Every 6 months	Replace the post-carbon filter	You or your installer
100 l/h: every 3 months · 120 l/h: every 6 months, or sooner if the water pressure becomes too low	Replace the pre-filter cartridges	You or your installer
After each replacement of the pre-filters	Reset the filter counter (see below)	You or your installer
Every year	Replace the membrane (100 l/h) or membranes (120 l/h)	Installer
Every year	Service check. What your installer checks every year is described in the service manual supplied on delivery.	Installer

Resetting the filter counter

- **100 l/h:** press SELECT until the bar of the replaced filter flashes and hold CLEAR until you hear a beep.
- **120 l/h:** hold both arrow buttons together for 6 seconds.

Replacing a filter

1. Close the water supply and release the pressure.

2. Unscrew the filter bowl or take the cartridge out of the head, and remove the old cartridge.
3. Rinse the bowl and the rubber ring with water.
4. Fit the new cartridge and screw the bowl or cartridge back on. Mind the flow direction.
5. First flush a new pre-filter to the drain. After a new mixed-bed filter or post-carbon filter, first let a few litres run off.
6. Open the water, check that everything stays dry and reset the filter counter.

Only use original cartridges and membranes from H2Ot: the pre-filter cartridge with antiscalant, the mixed-bed filter, the post-carbon filter and the replacement membrane for your set.

8. Troubleshooting

What do you see?	Possible cause	Solution
The meter shows too high a value	Mixed-bed filter full	Replace the mixed-bed filter
	Membrane fouled or worn	The installer checks or replaces the membrane
Little or no water	Pre-filter blocked, or water pressure on the supply too low	Check that the tap is open; replace the pre-filter
	Mains water too cold	The water must be warmer than 5 °C
Low pressure message (100 l/h: SOURCE, 120 l/h: LOW PRES.)	No or too little water on the supply	Check the supply and the pre-filters
CHECK is lit (100 l/h)	The MembraSAL has run too long continuously	Switch it off for 15 to 20 minutes. If that doesn't help, press CLEAR or contact your installer.
Leak at a filter	Bowl or cartridge not secured properly, or rubber ring dry	Water off, refit with a wet ring

Not working? First contact your installer. If something is broken within the warranty, email info@h2ot.nl with your order number and a photo. You will hear from us within 4 working days.

9. Safety

- Demineralised water is not intended as drinking water.
- Leave installation and electrical work to a professional. Unplug first before opening the cover.
- Make sure the water and pipes are depressurised before disconnecting anything.
- After every maintenance, check that all couplings stay dry.
- Protect the set against frost and sun.
- Follow the water, electrical and drainage regulations that apply where you are.

10. Warranty and disclaimer

Warranty. Your MembraSAL comes with a **2-year warranty** on the main components. Pre-filters, mixed-bed filters, post-carbon filters and membranes are consumables and are not covered. If the product does not work when connected and you report this within 24 hours of installation, we will replace it free of charge, provided it was installed within 3 months of delivery. The installer's costs are your own. Is something broken within the warranty? Email info@h2ot.nl with your order number and a photo; you will hear from us within 4 working days.

Sealed. Membranes and cartridges are supplied factory-sealed. Once the seal is broken, we cannot take them back for hygiene reasons.

What a filter does. How pure the water becomes depends on the composition of your mains water, the flow rate and timely replacement of the filters.

Liability. To the extent permitted by law, H2Ot is not liable for damage caused by incorrect installation, use that deviates from this guide, or failure to replace consumables in time. Your statutory consumer rights always apply. Please also read our general terms and conditions at h2ot.nl.

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