ViruLEX — Ultrafiltration for the whole house

User guide · installation, setup and maintenance

Version 1.1 — October 2026

1. Welcome

Thank you for choosing ViruLEX. In this guide you will read what ViruLEX does, how it is installed and set up, and how to maintain it properly. The guide is made to be read on screen; there is no need to print it.

Have ViruLEX installed by a qualified installer, who knows your situation best. Installation is not included in the price.

2. Your ViruLEX

ViruLEX filters all the water entering your home using ultrafiltration. The water passes through membranes with very small pores, down to 0.01 micron. In this way ViruLEX removes bacteria, viruses, fungi and microplastics up to 99.99999%. It is installed at the main connection, where the water enters your home.

ViruLEX works fully automatically. It regularly cleans the membranes itself by flushing them in reverse (backwash). A screen filter at the front stops larger particles, down to 200 micron.

Component	Specifications
Capacity	1,000 litres per hour
Dimensions (d × w × h)	80 × 50 × 160 cm
Weight	78 kg (83 kg with packaging)
Filtration	ultrafiltration, down to 0.01 micron; two membranes
Pre-filter	screen filter, down to 200 micron
Backwashing	automatic, by default every 60 minutes or after 1,000 litres; every 24 hours when idle
Operating pressure	at most 4 bar; pressure fluctuations at most ± 1 bar
Power	230 V, 50 Hz, earthed connection (1/N/PE)
Power consumption	0.017 kW, including the backwash pump (which only runs very briefly now and then)
Operation	control panel with display

What ViruLEX does not do

ViruLEX does not remove dissolved substances from your water. So it does not remove limescale, chlorine or PFAS, and it does not change the taste.

- **Limescale:** for that there is ZeNO.
- **Chlorine, PFAS and taste:** for that there is SorCA.

3. Before you start

In the box

ViruLEX is supplied complete on a frame, including:

- Two ultrafiltration membranes
- Screen filter (pre-filter) with flush valve
- Backwash pump and backwash tank
- Cleaning tank with dosing pump
- Control panel with display
- Leak detector for the floor

The right location

- Indoors, out of the sun, wind and rain.
- A room of 5 to 40 °C. A cold room can reduce the amount of filtered water.
- Enough space around ViruLEX for maintenance.
- Good ventilation and sufficient light (at least 150 lux) to work.
- At the main connection, on the cold water pipe.
- A drain and a power socket nearby.

Water, pressure and connections

Component	Requirement
Water temperature	at most 35 °C; above 25 °C the membranes work slightly less well
Water pressure	at most 4 bar. The normal mains pressure from the water company at the household connection (2.2 to 2.5 bar) is suitable.
Water quality	turbidity below 300 NTU, suspended solids below 100 mg/l, pH 2 to 11, oil/grease below 2 mg/l. With normal tap water this is fine.
Pipes	copper or plastic; no iron or steel pipes before ViruLEX
Water connection	supply 25 mm; the installer matches the outlet couplings to your pipe
Drain	open drain without narrowing; let the hose hang 10 to 15 cm above the drain (air gap)
Power	230 V, 50 Hz, earthed; protected by a 10 A circuit breaker (C characteristic)

Tip: have the installer fit a bypass, so you still have water while ViruLEX is being serviced. An extra storage tank or pressure vessel is not needed with a normal household connection.

4. Installation

These steps are for the installer.

1. **Check.** Check all couplings. They may have come loose during transport.
2. **Position.** Place ViruLEX level in the chosen spot, with space around it for maintenance. Place the leak detector on the floor.
3. **Connect the supply.** Connect the cold main pipe to the supply, via a bypass.

4. **Connect the drain.** Run the drain hose to an open drain, without narrowing. Let it hang 10 to 15 cm above the drain. Follow local regulations.
5. **Flush the membranes.** At the first start, run the filtered water to the drain for 30 to 60 minutes to flush the new membranes. Do not put the hose into the drain, but let the water run in from above, with a generous air gap (at least twice the diameter of the drain pipe).
6. **Connect the outlet.** Then connect the outlet to the pipe to your home. A non-return valve is already fitted.
7. **Power.** Connect ViruLEX to an earthed 230 V circuit with a 10 A circuit breaker.
8. **Mind the pump.** The backwash pump is not self-priming. Never let it run dry: this damages the pump and voids the warranty.

5. Commissioning and setup

The control panel

Button	What it does
Reset	stops the running programme and returns to the start screen
Rotary knob OFF	ViruLEX is on standby and does not filter
Rotary knob AUTO	ViruLEX filters and backwashes automatically; this is the normal position
Rotary knob CIP	maintenance position, for cleaning the membranes (see chapter 7)
OK ■, up ▲, down ▼	scroll through the menus and confirm settings

First start

1. **Power on.** ViruLEX starts in the OFF position. The display shows the time and date, and whether the system is ready to start.
2. **Basic settings.** The installer sets the time and date and enters the conductivity of your water. ViruLEX uses this after cleaning to check that no cleaning agent remains. The alarm is then set to that value plus 500 µS/cm.
3. **Start.** Turn the rotary knob to AUTO. ViruLEX starts up and begins filtering.
4. **View statistics.** Hold OK ■ for 2 seconds. The system data is then shown for 4 seconds.

Backwashing: the default settings

ViruLEX cleans itself. You don't need to do anything. The installer can adjust these values.

Setting	Default
Backwash after a set time	every 60 minutes
Backwash after a volume of water	after 1,000 litres
Backwash when idle	every 24 hours
Duration of backwash	50 seconds
Flushing the screen filter	5 seconds
Forward flush	15 seconds

6. Daily use

- **Leave the rotary knob on AUTO.** ViruLEX then filters and backwashes by itself.

- **You will occasionally hear backwashing.** That is normal: the pump briefly flushes the membranes and the flushing water goes to the drain.
- **Check the display now and then.** If there is a message, see chapter 8.
- **Going away for a long time?** Leave ViruLEX switched on. When idle it backwashes automatically every 24 hours.

7. Maintenance and replacement

These are the manufacturer's intervals. You do the monthly maintenance yourself; leave electrical work to your installer.

The cleaning agent

ViruLEX cleans the membranes with a cleaning agent from a jerrycan in the unit. Usually this is peroxide. **Always keep the jerrycan topped up:** without cleaning agent, ViruLEX cannot keep the membranes clean.

The cleaning agent is not included. It is a chemical, and we do not ship chemicals. You buy it yourself.

Well water with a lot of iron? Then a different agent is sometimes needed, such as sodium hydroxide or sodium hypochlorite. Discuss with your installer which agent suits your water.

Every month: how to clean the membranes

1. **Protect yourself.** Wear gloves and safety glasses when working with the cleaning agent.
2. **Check the jerrycan.** Top up the cleaning agent if the level is low.
3. **Clean the screen filter.** Open the flush valve of the screen filter and let the dirt flush away to the drain.
4. **Turn the rotary knob to CIP.** Select the CIP programme with ▲ or ▼ and confirm with OK ■. Then add the cleaning agent to the cleaning tank within 60 seconds.
5. **Let ViruLEX do its work.** The agent works for about 50 minutes. After that ViruLEX flushes the membranes itself. You don't need to do anything.
6. **Turn the rotary knob back to AUTO.** ViruLEX filters as usual again.
7. **Check the display.** If you see message 09 (high conductivity), there is still some agent left. Let ViruLEX keep flushing. If the message remains, contact your installer.

Overview

When	What
Every month	Clean the screen filter, check and top up the jerrycan with cleaning agent, clean the membranes (CIP) — see above. Check all parts for leaks.
Every 6 months	In addition: check the level sensors and floats in the tanks.
Every year	In addition: run all maintenance programmes (cleaning, backwash from above and below, filling the backwash tank) and check that they work properly. Clean all tanks. Tighten the bolts of flange connections and quick couplings. Power off and tighten the connections in the control cabinet — installer.
Every 3 years	In addition: replace the level sensors in the tanks, replace the dosing pumps, replace the supply hoses and valves for the cleaning agent — installer.
Membranes	Replace about once every 4 years. Sooner if too little water comes through after cleaning (message 05).

Protect ViruLEX against frost. Clean the outside with a dry cloth, with the power off.

8. Troubleshooting

In the event of a fault, the display shows a message with a number.

What do you see?	Possible cause	Solution
01 Leak	The leak detector on the floor is wet	Find and fix the leak and restart ViruLEX. If the message remains, have the leak detector replaced.
02 No water in cleaning tank	A valve or level sensor is not working	Contact your installer.
03 Storage tank empty	No supply (only with an extra storage tank)	Check that the main tap is open.
04 No pressure	No or too little water coming in	Check that the main tap is open. If the message remains, contact your installer.
05 Too little water	Pressure too low or dirty membranes	Have the installer check the pressure and clean or replace the membranes.
06 Tank filling error	Tank does not fill	Restart ViruLEX. If that doesn't help, contact your installer.
07 Tank emptying error	Pump, valve or level sensor not working	Contact your installer.
08 Level sensor error	Level sensor in the backwash tank	Contact your installer.
09 High conductivity	Residue of cleaning agent or different water	Let ViruLEX keep flushing. If the message remains, contact your installer.
Display stays blank	No power	Check the power and the circuit breaker in the meter cupboard.

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

- Leave installation and electrical work to a qualified installer.
- Switch off the power before cleaning or inspecting anything. Do not open the control cabinet yourself.
- Never let the backwash pump run dry.
- Wear gloves and safety glasses when working with the cleaning agent. Keep it out of the reach of children and follow the instructions on the packaging.
- Protect ViruLEX against frost, sun and rain.
- Follow the water, electrical and drainage regulations that apply where you are.

10. Warranty and disclaimer

Warranty. Your ViruLEX comes with a **2-year warranty** on the main components. Membranes and filters 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.

No medical advice. This guide is a user manual and not medical advice. Our products are not medicines or medical devices and are not intended to diagnose, treat, cure or prevent any disease. If you have questions about your health, please contact your doctor.

What a filter does. How much a system removes depends on the composition of your water, the flow rate and proper maintenance.

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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