THE LOCAL WATER

User Manual

Reverse Osmosis System

TLW 2

The Positive Business Company
www.thelocalwater.com

TLW 2 As of April 2025

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1. Introduction

1.1. General Information

We thank you for your trust in choosing this product from

The Positive Business Company UG.

This manual is intended to help you enjoy our product for many years to come.

The Local Water TLW 2 is manufactured in accordance with the latest technical standards and recognized safety regulations. Nevertheless, its use may pose risks to the user or third parties, or may result in damage to *the Local Water TLW 2* or other property.

Use the *The Local Water TLW 2* only when it is in perfect working order and in accordance with its intended purpose, while being mindful of safety and potential hazards, and in compliance with these operating instructions!

Any modifications that compromise safety or functionality must be reported immediately to your nearest service center. If necessary, stop operating the unit. In particular, have any malfunctions that could compromise safety rectified immediately!

These operating instructions contain guidelines for operating the *The Local Water TLW 2*. Read these operating instructions before performing any work with or on the *The Local Water TLW 2*.

Keep the manual in a safe and accessible place so that it is immediately available in the event of maintenance or a malfunction.

In addition to this user manual and the mandatory accident prevention regulations applicable in the country of use and at the site of operation, you must also observe the recognized rules for safe and proper work practices, as well as plant regulations and provisions at the installation site.

Our products are subject to continuous improvement. Therefore, design changes made after the publication of this user manual could not be taken into account.

If you have any questions, please contact our service department (see Chapter 15).

1.2. Symbols Used in the Text

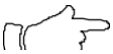
The following terms and symbols are used in these operating instructions to indicate particularly important information.

Hygiene Note!

This symbol is used specifically to indicate a biological or microbiological hazard when there is a risk of illness or poisoning (e.g., from viruses, mold, or bacteria).

Caution!

This symbol precedes warning notices indicating a risk of damage to the device or other property.



Note

This symbol appears with instructions you should follow when working with or on the device.

- A dot before the text means: You must do this.

- A dash before the text means: This is part of a list.

1.3. Intended Use

The Local Water TLW 2 is intended exclusively for the production of table water from water suitable for consumption in accordance with the applicable Drinking Water Ordinance (TVO).

It is a compact reverse osmosis system with two membranes and a capacity of 600 to 1,000 liters per day. The system operates without a storage tank. Water is dispensed via a separate faucet. An integrated backpressure shut-off valve automatically shuts down the system as soon as the faucet is closed.

The housing containing the filter system must be installed in an upright or horizontal position.

Any other or additional use is considered improper. The manufacturer is not liable for any resulting damage. The user bears sole responsibility for any risks.

Do not operate the system with other liquids!

Do not operate the system with water contaminated with bacteria or with water of unknown quality if no disinfection takes place before or after the system!

Please also observe the warranty provisions.

If electrostatic or magnetic water softeners are installed upstream, precipitation may occur, which can cause the membranes to become blocked.

We assume no liability for damage caused by such water softeners.

Proper use also includes following the operating instructions and complying with the inspection and maintenance requirements.

Maintenance must be documented in this manual (see Chapter 14); otherwise, no warranty can be provided for this device.

Do not make any modifications, additions, or alterations to the device without the manufacturer’s approval.

1.4. Definitions

The terms used in these operating instructions have the following meanings:

Raw water:

- Water supplied to the building by water utilities through water mains.
- Water from private water supply systems.

Concentrate:

Water that is separated from the treated pure water by reverse osmosis and discharged separately. The concentrate is not suitable for human consumption.

Permeate:

Pure water obtained through reverse osmosis.

Total hardness in raw water:

A measure of the hardness components (lime) in °dH (°German hardness).

Conductivity (LF):

The salts dissolved in water conduct electricity. The more substances present, the higher the conductivity. Electrical conductivity is measured in µs/cm.

Dynamic inlet pressure:

Pressure at the inlet while water is flowing (system in operation).

Retention rate:

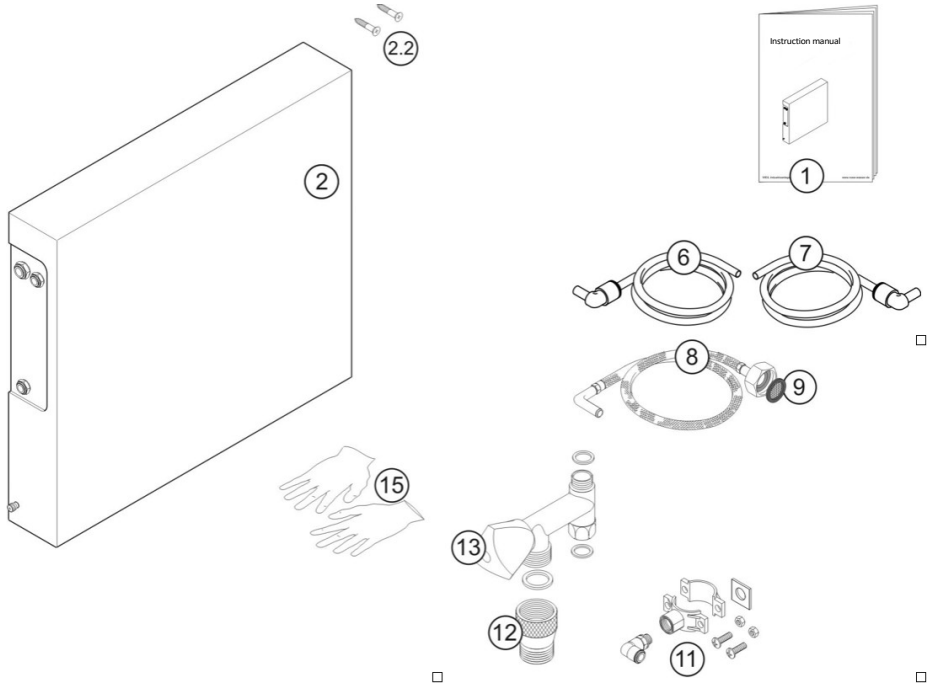
The proportion of salts filtered out of the raw water, relative to the salt content. Calculation:

$$\frac{\text{LF Permeate}}{\text{LF Raw Water}} = X \bullet 100 = X\ \%;\ 100\% - X\% = X\%\ \text{retention}$$

Example:

$$\frac{19\ \mu S/cm}{360\ \mu S/cm} = 0.0527 \bullet 100 = 5.27\ \%;\ 100\ \% - 5.27\ \% = 94.73\ \%\ \text{retention}$$

1.5. Scope of Delivery



The Local Water TLW 2 is delivered ready for installation.

- Make sure all the parts listed below are included.
- If any part is missing, contact your dealer or our service department.

Legend:

1. User Manual (PDF)
2. Housing with reverse osmosis technology

2.2 Mounting screws

6. PE tubing, blue, ∅ 6 mm, length 2 m, for permeate connection
7. PE tubing, red, ∅ 6 mm, length 2 m, for concentrate connection

8. Reinforced hose, chrome-plated, ∅ 10 mm, length 1.5 m, for raw water connection
9. Filter cartridge

11. Drill-through clamp with connection elbow

12. Aquastop for the raw water connection
13. Unit valve with backflow preventer

15. Disposable gloves, for sterile work

Operation and Design

The Local Water TLW 2 system operates on the principle of reverse osmosis. It was specifically designed to dispense small quantities of fresh drinking water. It is connected to a cold water line.

Reverse osmosis (RO) is a process that has been used for decades in water treatment (e.g., seawater desalination). In this process, water is forced under pressure through semipermeable membranes capable of retaining substances dissolved in the water, such as salt ions and organic compounds (e.g., drug residues). Salt retention depends on the membrane properties, pressure, and temperature.

The low-salinity water that passes through the membranes is called **permeate** (in this case, purified water/table water). The high-salinity portion of the water flowing perpendicular to the membranes is referred to as **concentrate**.

In the *The Local Water TLW 2,* the tap water pressure of 3–5 bar is used as the driving force. The higher the pressure, the more efficient the reverse osmosis process becomes.

A total of two reverse osmosis membranes are used in the system. To protect the membranes from dirt particles, the tap water is first passed through a prefilter. The configuration of the individual system components is shown in Figure 1.

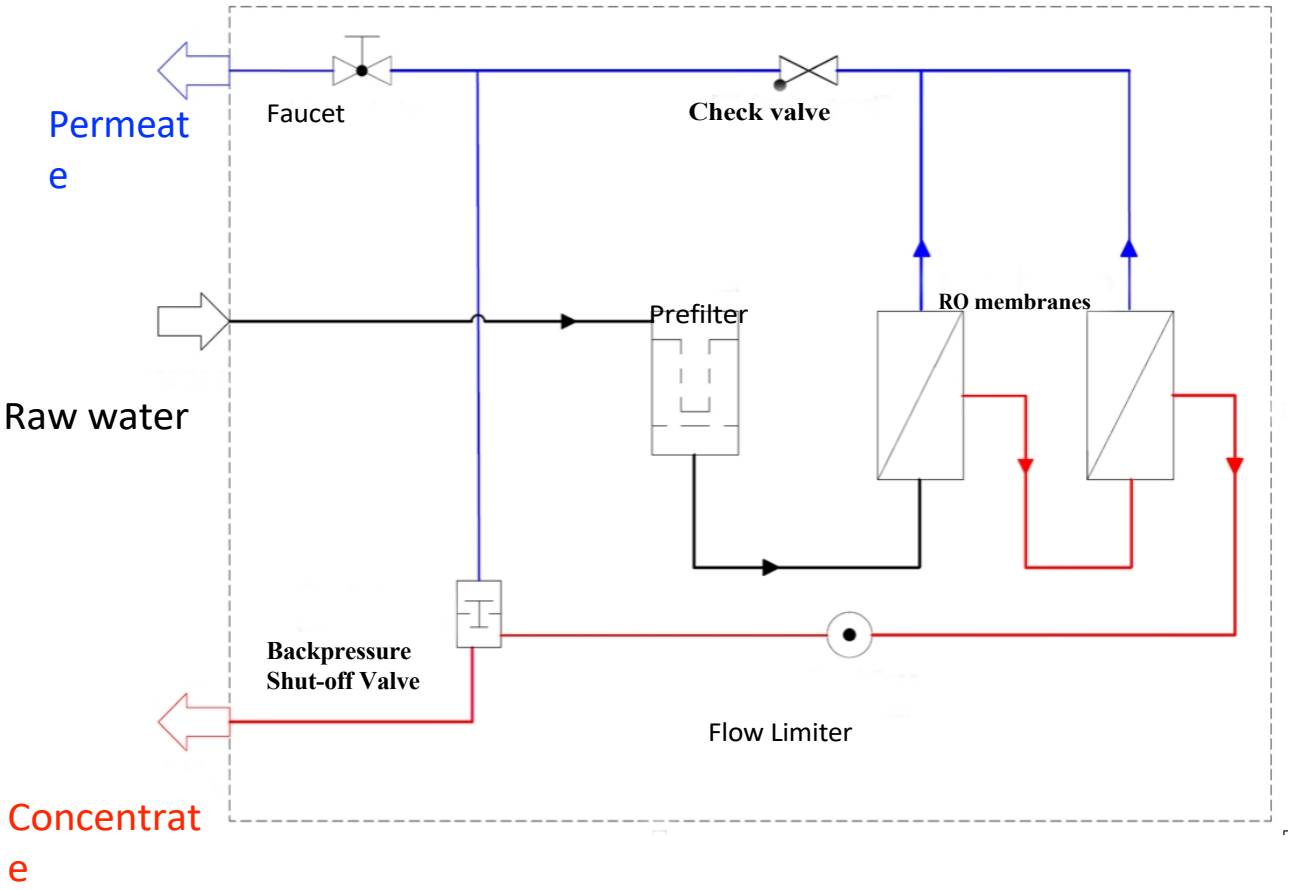


Figure 1: Flow diagram of the Local Water TLW 2

To prevent dissolved substances on the concentrate side from precipitating as salts (scaling) as a result of concentration and thereby clogging the membrane surface, a certain concentrate flow rate must be maintained. The ratio of permeate to concentrate is approximately 1:2. A flow limiter is installed in the concentrate line to limit the concentrate flow.

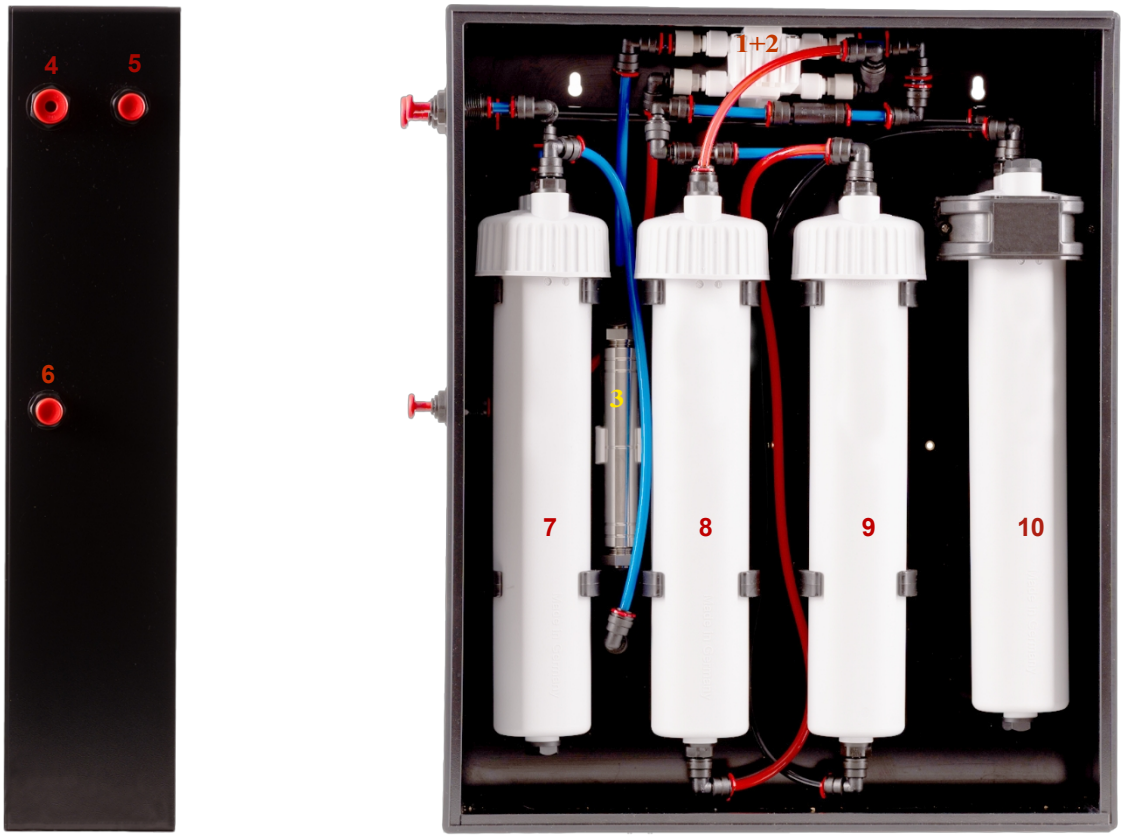


Figure 2: Components of The Local Water TLW 2

Legend:

1.	Check valve	10.	Core+ OS prefilter
2.	Flow restrictor		
3.	Energizer		
4.	Raw water connection		
5.	Permeate connection		
6.	Wastewater/concentrate connection		
7.	Core OM post-filter		
8.+9	TLW X		

The recovered permeate (pure water) can be drawn off via a faucet. The saline concentrate is discharged into the wastewater line (sewer system). The water supply to the system is interrupted as soon as the faucet is closed. The automatic shutdown of the system is controlled by the backpressure shut-off valve.

1.6. Technical Data

Parameters	Value
Permeate Capacity	600 to 1,000 liters per day
Permeate-to-concentrate ratio	approx. 1 : 2
Desalination rate	> 90%
Water temperature	+4 to +25 °C
Permissible ambient temperature	+5 to +35 °C
Raw water inlet pressure (dynamic)	3 to 6 bar
Inlet pH	3–11
Total hardness in raw water	30 °dH
Hose connections: Raw water (cold water line) Permeate / Concentrate	 10 mm 6 mm
Housing dimensions (W x H x D)	48 cm x 47 cm x 11.5 cm
Weight of the housing with filter system (without water)	approx. 5.5 kg

The specifications apply to iron-free drinking water (in accordance with the German Drinking Water Ordinance) with a salt content of 500 mg/l, a water temperature of 15 °C, and a dynamic inlet pressure of 4 bar.

2. Installation

2.1. General Notes

2.1.1. Prerequisites

Installation must be carried out carefully and conscientiously in compliance with safety and hygiene regulations.

Do not expose the *The Local Water TLW 2* to extreme temperatures. Connect the

The Local Water TLW 2 only to the cold-water line.

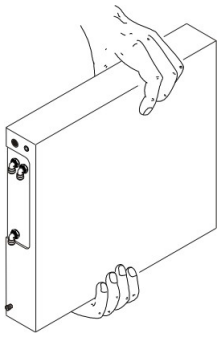
The dynamic water pressure should be at least 3 bar and must not exceed 6 bar. (Check with your water utility or read the pressure gauge in the entrance area of your home.) If a maximum water pressure of 6 bar cannot be guaranteed, an external water pressure reducer must be installed upstream (contact a plumber for this).

The connection of the *The Local Water TLW 2* to the raw water supply must only be performed by trained professionals (plumbers).

2.1.2. Transport

Caution!
If the unit is lifted only by the housing, the rear panel with the filter system may, under certain circumstances, break free from its mounts due to its own weight and fall.

When transporting the unit, the housing must be securely gripped at the front and back.



2.1.3. Installation Location

When selecting a location for the *The Local Water TLW 2*, ensure that the unit is easily accessible for maintenance purposes.

The housing with the filter system is securely mounted on a flat surface (e.g., a wall). For this purpose, there are two mounting brackets on the rear panel of the filter system.

If, due to space constraints, an upright position is not possible, the housing can alternatively be placed horizontally. Note that the unit must be put into operation in an upright position to ensure adequate venting.

The faucet is mounted directly above the unit on the kitchen countertop.

Note
Pay attention to the hose lengths.
Choose the distance between the housing and the faucet, raw water, and wastewater connections so that they can be connected to the hoses.

The hose length for connecting the housing to the faucet is 2 m. The drain hose is also 2 m long. The reinforced hose length for connecting the *The Local Water TLW 2* to the cold-water line is 1.5 m.

The optional leak detector is placed directly under or in close proximity to the *The Local Water TLW 2*.

2.1.4. Notes on the Connection Hoses

Note
The hoses should be long enough so that they are neither stretched nor unnecessarily long. If the hoses are stretched, the location of the unit must be adjusted accordingly. If the hoses are too long, kinks will occur. In this case, the hoses must be shortened to ensure proper water flow.

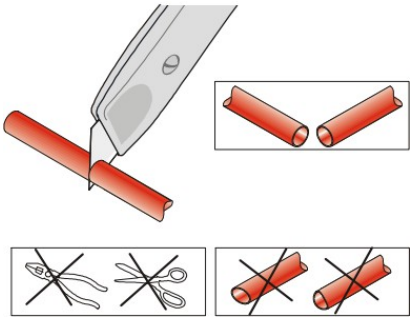
Note
Do not shorten the hoses until the location of the housing has been precisely determined. The hoses should only be shortened enough to ensure that, during future maintenance, there is sufficient space to perform maintenance work on the filter system without having to remove the hoses.

Warning!
The concentrate must always be able to drain freely. The hoses must not be kinked. The concentrate line must not be closed off with a shut-off valve or solenoid valve.

The Panzerflex hose for the raw water supply cannot be shortened.

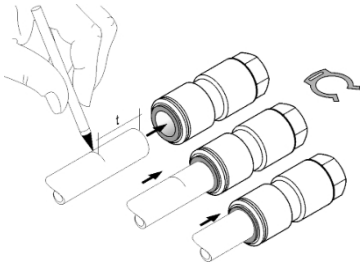
2.1.5. Cutting the Plastic Hoses

If the PE/PA hoses are shortened, the cut must be straight. Use a sharp knife for this.



Caution!
Do not use scissors, pliers, or similar tools. Crushed or angled cuts will cause leaks.

2.1.6. Connecting the hoses



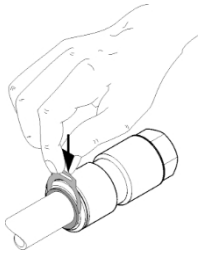
- Remove the red retaining ring.
- Cut the hose to the required length.
- Slide the hose into the connector (black quick-connect fitting).
- Replace the red retaining ring.

Caution!
When connecting the plastic hoses to the fittings, you must feel a noticeable resistance point. If this resistance point is not overcome, or if the red retaining ring is missing, the hoses will not be securely seated and may be pushed out of the connection fittings during operation.

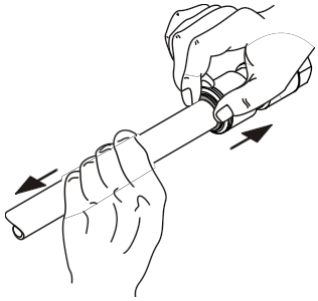
Note
The insertion depth **-t-** must be approximately 16 mm for hoses with a 6 mm outer diameter and approximately 20 mm for hoses with a 10 mm outer diameter.

- As a precaution, mark the insertion depth values on the hoses with a suitable pen.

2.1.7. Loosening the Hose Connections



- Remove the red retaining ring.
- Use pliers or a screwdriver to help if you ring cannot be removed by hand.
- Push the black ring toward the fitting.
- Pull the hose out of the fitting.



Caution!
Be careful not to damage the retaining ring. The retaining ring ensures proper functioning of the *The Local Water TLW 2*

2.2. Connection Diagram

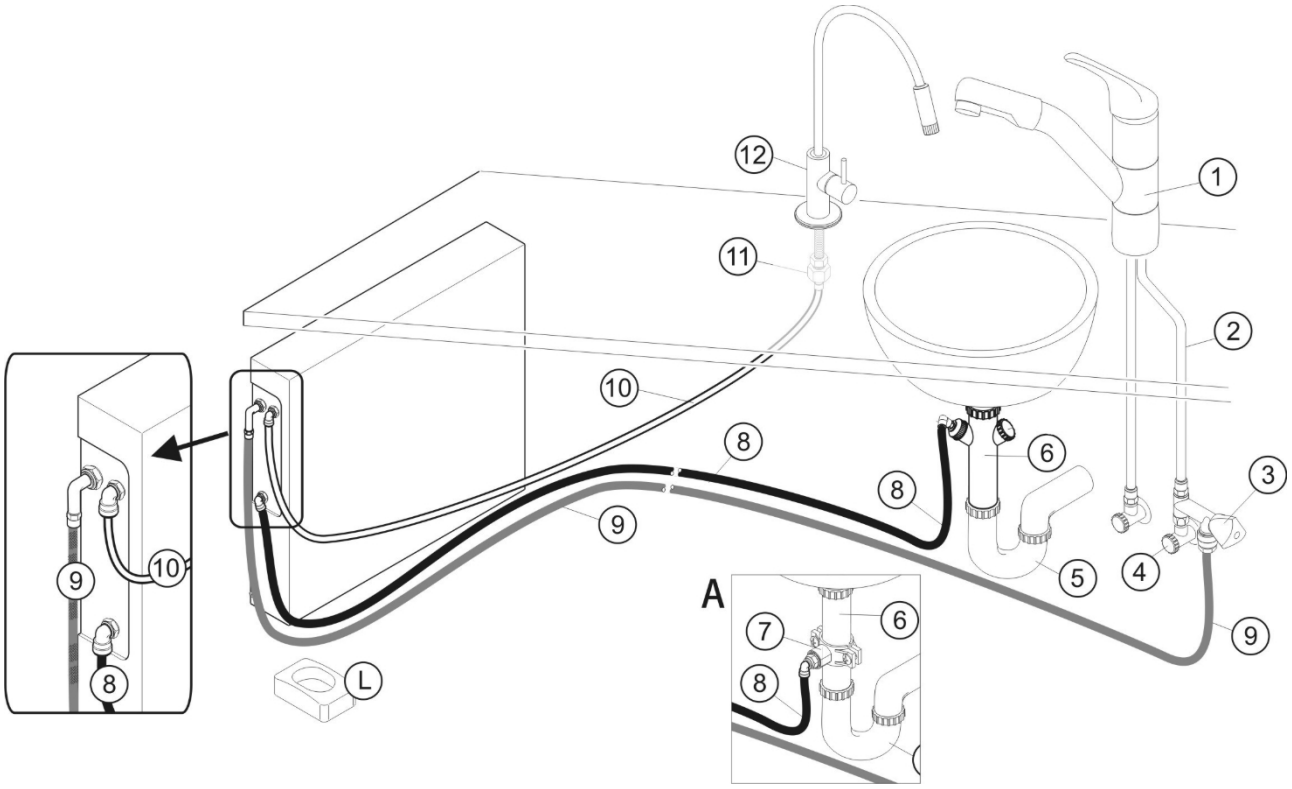


Figure 3: Connection diagram

Legend:

1	Standard water fixture
2	Cold water line
3	Appliance valve with Aquastop
4	Angle valve on the cold water line
5	Drain elbow
6	Connection pipe
7	Tapping clamp
8	Concentrate line (red)
9	Raw water line (reinforced hose with filter insert)
10	Permeate line (blue)
11	On-site kitchen sink
12	Permeate faucet
L	Leak detector

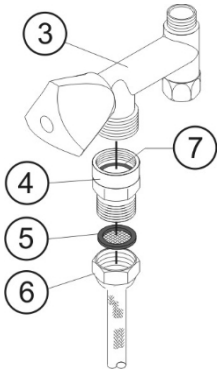
2.3. Establishing the raw water supply

The following work should be performed exclusively by a qualified professional (plumber) to prevent damage caused by leaks in the water line!

Caution!
The Aquastop operates reliably at a flow rate of 1.5 liters per minute or higher. Minor leaks are not detected by the Aquastop.

Important!
Installing the Aquastop does not relieve you of the obligation to shut off the water supply during extended periods of inactivity!

Installing the appliance valve



Check that the gasket **–7–** is present and undamaged in the Aquastop –4–.

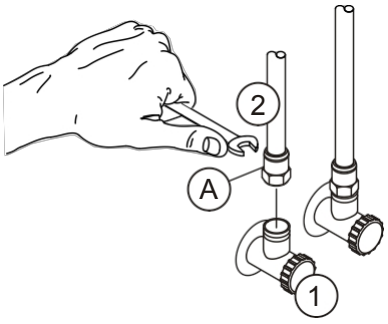
Screw the Aquastop –4– onto the thread of the appliance valve **–3–** and tighten the Aquastop by hand.

Insert the strainer **–5–** into the connector **–6–** and screw the connector onto the thread of the Aquastop.

Turn on the cold-water faucet and let the water run.

Close the angle valve **-1-** on the cold water line **-2-** leading to the faucet by turning the angle valve's handwheel to the right until no more water flows from the faucet. Place a cup under the angle valve.

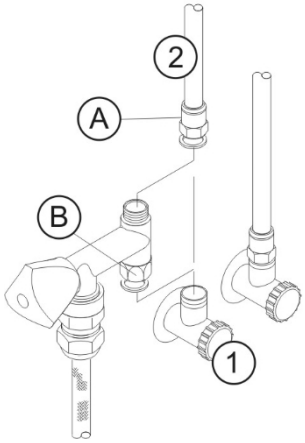
Loosen the connection **–A–** of the cold water line **–2–** and disconnect the cold water line from the angle valve **–1–**.



Place the gasket into the nut **–B–** of the appliance valve and screw the appliance valve **–3–** slightly onto the angle valve **–1–**.

Check to make sure the gasket is still in place and undamaged in nut **–A–**.

Screw the cold-water pipe **-2-** slightly onto the upper thread of the appliance valve **-3**-.



Note!

If the cold-water line consists of a rigid pipe, it may need to be shortened.

Align the appliance valve and tighten the two nuts **–A–** and **–B–**. Close the appliance

valve **-3-** by turning the handwheel all the way to the right.

Open the angle valve **-1**-. Once the water is flowing properly again, close the faucet after bleeding the system.

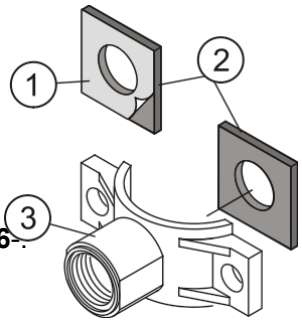
Then check the connections for leaks.

If the pipe is leaking, use a wrench to retighten the leaking connection. If the leak cannot be eliminated, close the angle valve again and loosen the connection.

Check that the pipe is seated properly in the connection and that the gaskets are in place.

2.4. Installing the Concentrate Line

Installing the Tapping Clamp

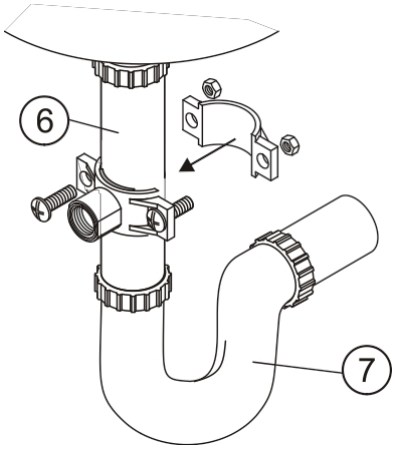


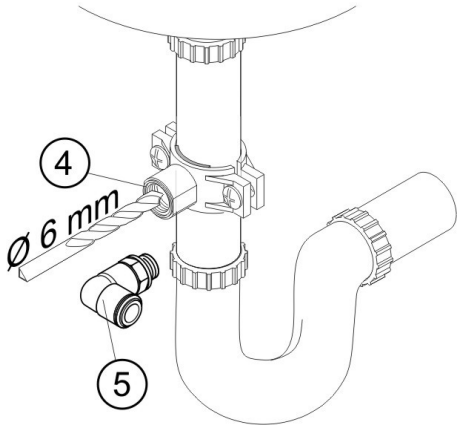
Separate the tap-in clamp. Peel the protective film **-1-** off the gasket **-2**-. Adhere the gasket to the tap-in clamp –3–.

Then place the tap-in clamp above the drain elbow **-7-** on the wastewater pipe **-6**-.

Note!
Position the tapping clamp on the wastewater pipe so that you can easily reach the opening of the tapping clamp.

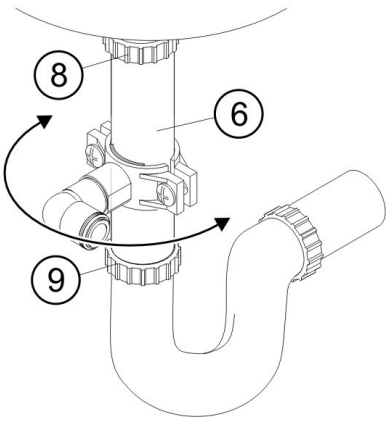
Assemble the parts of the tapping clamp and tighten the screws.





Drill a 6 mm diameter hole through the opening of the tapping clamp **-4-** into the sewer pipe **-6**-.
Screw the connector **-5-** into the opening of the tapping clamp.

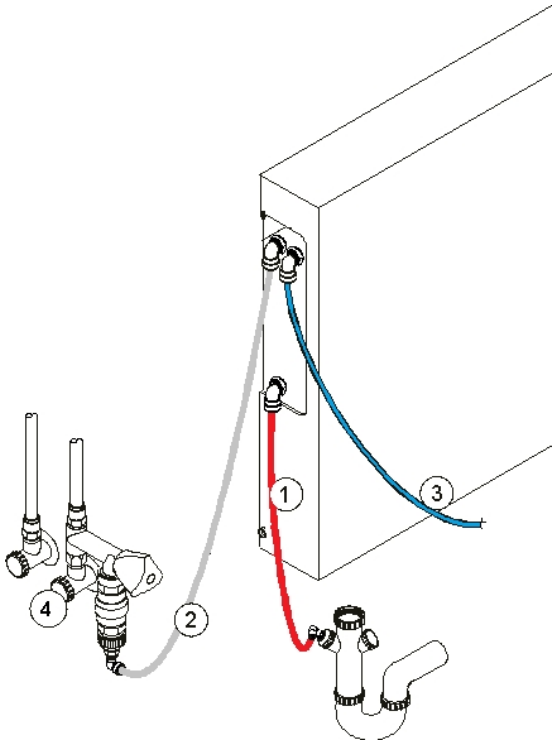
Caution!
Do not use a drill bit with a larger diameter, as this will damage the thread of the connector!
The opening of the tapping clamp has a smaller diameter at the end than at the beginning. Before drilling, make sure that the drill bit is positioned directly on the sewer pipe.



Loosen the screw connections **-8-** and **-9-** on the drain line **-6**-. Rotate the drain line until the tapping clamp points toward The Local Water *TLW 2* or, if necessary, toward an open space. Tighten the screw connections on the drain line again.

2.5. Connecting the Hose Lines

Hose connections for The Local Water *TLW 2:*



Use the red PE hose **-1-** to connect the concentrate inlet of The Local Water *TLW 2* to the elbow fitting of the drain pipe. Before connecting, remove the red retaining rings that are factory-installed on the fittings. Reinstall the retaining rings after the hose is installed (see also Section 2.1.6).

Use the silver reinforced hose **-2-** to connect the inlet port of the The Local Water *TLW 2* to the cold water line (appliance valve).

Insert the black elbow of the blue plastic hose -3- into the permeate connection of the The Local Water *TLW 2*. Connect the free end of the hose to the permeate tap's connector and then secure it with a red ring.

Open the angle valve **–4–** and check the system for leaks.

3. Flushing

Caution!

Before flushing the filter system, make sure the ultrafilter has been removed from the permeate faucet!

During flushing, air is simultaneously displaced from the lines and filter cartridges. The system must be in an upright position when venting takes place.

Hygiene Note!

For hygiene reasons, the membranes are supplied with preservatives.

This preservative is not suitable for human consumption and can cause health problems!

- Make sure the angle valve is open so that the The Local Water *TLW 2* is continuously supplied with raw water.
- Open the permeate tap and let the system run for half an hour to completely flush the preservative out of the filter system.

After flushing, install the ultrafilter. Only then may the permeate be used!

Note
You can check the electrical conductivity of the permeate using a conductivity meter (available from us) (see Chapter 10*, "Optional Accessories"*).

4. Operation

To put the The Local Water *TLW 2* into operation, the system must be properly connected. The housing cover must be securely seated on the filter system, and the angle valve must be open.

To dispense the treated permeate, simply open the permeate faucet.

If tap water is not needed for an extended period, the The Local Water *TLW 2* must be taken out of service.

5. Decommissioning

Vacation or company holidays:

- Release any residual pressure (see Chapter 6.4).

Hygiene Note!
To ensure flawless drinking water quality upon restarting the system, the first permeate must be allowed to flow for at least one hour and then discarded.

If the system has been idle for 4 weeks or more:

- Relieve the residual pressure (see Chapter 6.4).
- Remove the prefilter, the ultrafilter, and the membranes.
- Dispose of the filters.
- Place the membranes in a plastic bag filled with preservative solution (available from us).
- Be sure to store the bag and its contents in a cool, dark place (e.g., in the refrigerator).

Before restarting the system, the filters (new ones) and the membrane must be reinstalled.

Hygiene Note!
To ensure perfect drinking water quality after restarting the system, the first permeate must be drawn and discarded within half an hour

6. Maintenance

6.1. Safety Instructions

Caution
Perform maintenance work conscientiously at regular intervals according to the maintenance schedule.
If maintenance is neglected:

- the filter cartridges will become clogged, which can lead to malfunctions or damage to the device
- the filter cartridges may become contaminated with germs
- the warranty may be voided under certain circumstances

Hygiene Notice!
After each filter cartridge replacement or a period of inactivity lasting more than one week, the filter system must be flushed for at least 30 minutes. Only then will the tap water be of optimal quality.
Wear clean disposable gloves to avoid contaminating the system.
Make sure that the water-carrying parts do not come into contact with dirty, greasy, or oily objects.

6.2. Maintenance Intervals

The service life of the filter cartridges, membranes, and concentrate flow restrictors depends on the quality of the raw water. It may be advisable to replace these components sooner than specified:

- if the quality of the raw water deteriorates
- if the quality of the permeate deteriorates
- if the permeate flow rate decreases.

Water quality can be checked using a conductivity meter.

We recommend the following maintenance intervals:

Core+ OS prefilter:	Replace every 6 months
TLW X membrane:	Replace after 4–7 years (depending on raw water quality)
Flow restrictor:	Replace every 5 years
Optional leak detector:	Check the detector's function at regular intervals . Replace a dead or low-power battery immediately.
Service check:	every 5 years

Properly maintaining the maintenance log is part of the warranty!

> After replacing consumables, note the model number and replacement date, as well as the date of the next replacement.

The customer is required to inspect the unit at least once a day for visible external damage and defects and to clean it if necessary.

Every 5 years, we recommend having the system undergo a complete service check by the manufacturer. As part of this service, the water-carrying system are disinfected. All filters, membranes, and the concentrate flow limiter are replaced.

6.3. Leak Test

- Remove the housing cover of the The Local Water *TLW 2* (see chapter **Error! Reference source not found.**) and check that all hose connections are secure.
- Open the angle valve.
- Check the hose connections for leaks.

If water is dripping from the connections, the screw or push-fit connections are not properly connected. To fix the leak, close the angle valve and reconnect the hose connections correctly.

Once all hose connections are properly connected:

- Open the angle valve again.
- Visually inspect the system to see if water is leaking anywhere.

6.4. Relieving the built-up pressure

- Open the Permeate Valve.
- Close the device valve on the inlet line.

  Once water stops flowing from the permeate tap, the system pressure has been relieved.

6.5. Replacing a filter cartridge

General Notes

Filter cartridges are subject to natural wear and tear and must be replaced regularly.

It is not always advisable to replace the filters strictly according to the maintenance interval specifications, as the prefilter, for example, may become exhausted after only a short time due to heavy contamination in the pipes or following a municipal pipe flush.

Note
The procedure for removing all filter cartridges from the housing is the same.
The hose lines do not need to be disconnected to replace the filter cartridges.

Caution!
Check the filter housing for contaminants and any remnants of the filter cartridge (e.g., O-ring fragments) before inserting a new filter cartridge. Foreign objects can damage the new filter cartridge or adversely affect the performance of the The Local Water *TLW 2*.

Note
Depending on the raw water quality, the filter cartridges may not come out of the filter housings easily. In this case, use pliers.
Grasp the filter cartridge with the pliers and twist the pliers back and forth. If the filter cartridge can be turned, pull it out of the filter housing while continuing to twist it.

Removing a Filter Cartridge

- Relieve the pressure (Chapter 6.4).
- Remove the housing.
- Hold the housing with one hand and pull the filter cartridge forward, first out of the lower retaining clip and then out of the upper retaining clip (see Figure 5). Make sure that the short hoses of the upper connection fittings remain connected to the system.
- Open the bayonet lock by holding the cap in place and turning the lower part to the left (see Figure 6).
- Now hold the lower part loosely in your hand. You can let the cap hang down. If the filter insert gets stuck in the cap, pull it out carefully.
- Remove the filter cartridge from the filter housing (see Figure 7).

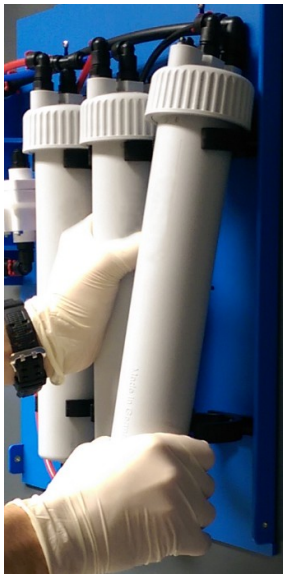


Figure 5

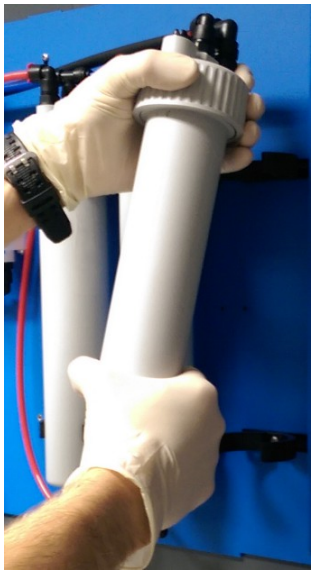


Figure 6

Figure 7

Installing a Filter Cartridge

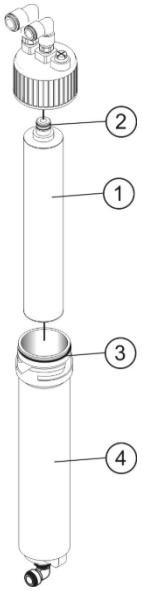


Figure 8

- Before installation, check the filter housing for deposits and other contaminants. Remove these contaminants if necessary (see Chapter 7).
- Check the cap gasket –3–. If the gasket is damaged, it must be replaced; otherwise, the system will not be leak-tight.
- Insert the filter cartridge **–1–** into the filter housing **–4–**.

Pay attention to the installation orientation of the filter cartridge. Incorrect installation orientation will cause malfunctions. The side with the two *O-rings* **–2–** must face *upward*!

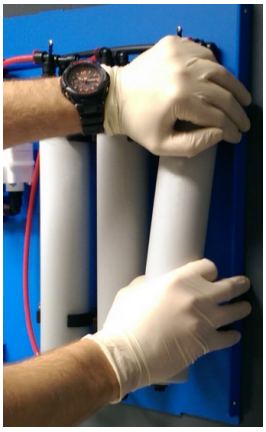


Figure 9

- Screw the filter housing into the filter cap.
- Press the filter housing back into its mounts (see Figure 9).
- Flush the filter system.
- Check for leaks.
- Put The Local Water *TLW 2* back into operation.
- Record the filter change in the maintenance log.

6.6. Replacing the Flow Limiter

The flow restrictor is located in the concentrate line (see Figure **10-1**). Because salts and impurities accumulate on the concentrate side, it can become clogged over time. The restrictor should be replaced as part of a service check no later than 5 years after installation. If an earlier replacement is necessary, please proceed as follows:

- Relieve the pressure (see Chapter 6.4).
- Remove the housing.

Figure 10: Connections of the flow limiter "1"

- The replacement flow restrictor is supplied pre-installed in a concentrate hose, including an elbow fitting (see Figure 11).
- To remove the old flow restrictor, disconnect the existing hose connections as described in Section 2.1.7 and indicated in Figure 10.
- Connect the new flow restrictor. Follow the instructions in Section 2.1.6.
  - Remove the retaining ring from the concentrate connection
  - Disconnect the hose connection.
- Loosen the connection on the diaphragm housing by pressing the black ring downward and pulling out the elbow. If necessary, use a clean screwdriver to assist (see Figure 12).
- Install the new flow restrictor. Then reattach the retaining ring to the concentrate connection.
- Perform a leak test (see Chapter 6.3).

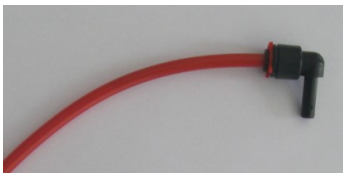


Figure 11: Replacement flow restrictor

Figure 12: Removing the flow restrictor

7. Cleaning

Clean the housing with a mild household cleaner.

Caution!
Do not use cleaners containing solvents or abrasive/gritty cleaners. These cleaners will scratch the housing.

Hygiene Note!
These cleaners will scratch the interior, and contaminants and bacteria can adhere to the roughened surfaces.

8. Disinfection

As a precaution, the system should be disinfected when the membrane is replaced or after a prolonged period of inactivity (more than 3 months) to prevent bacterial growth in the water-carrying parts.

We recommend using our proprietary disinfectant. When handling this product, please observe the following safety instructions.

Wear tight-fitting safety goggles!

Wear protective gloves!

To disinfect the system, please proceed as follows:

- Flush the system for approximately 5 minutes if the system has been out of service.
- Close the inlet valve and relieve the pressure buildup inside the system (see Chapter 6.4 for instructions).
- Unscrew the ultrafilter from the faucet and dispose of it.
  Note: If the system is out of service, the ultrafilter has already been removed.
- Remove the housing of the The Local Water *TLW 2*.
- Remove the prefilter as described in Section 6.5. Dispose of the filter cartridge.
  Note: If the system is out of service, the filter cartridge has already been removed.
- Remove the two TLW X membranes when it is time to replace them. Then screw the membrane housing back together and secure it to the brackets.

Note: If the system is out of service, the two membranes have already been removed and preserved.

- Pour 100–150 ml of the disinfectant into the lower section of the prefilter housing. Screw the filter housing (without the filter cartridge) back together and insert it into the brackets.
- Start the reverse osmosis system by opening the raw water inlet and the permeate valve. The permeate valve must be opened slowly, as the full line pressure is present and the water now contains the disinfectant solution. As soon as approximately 1 liter of water has drained out, close the permeate valve. The disinfectant solution must now be allowed to act on the water-carrying for 15 minutes.
- After waiting 15 minutes, open the permeate valve for at least 5 minutes and let the disinfectant solution flush out.
- Close the inlet valve, relieve the pressure in the system, and install a new prefilter cartridge (as described in Chapter 6.5).
- Install a new or preserved membrane.
- Flush the system for at least half an hour, as described in Chapter 3, to remove fine particles from the filter and the preservative from the membranes.
- After flushing, a new ultrafilter must be installed. Discard the first batch of permeate (approx. 2 liters). Only then may the permeate be used!
- Check the conductivity of the permeate using the meter (see optional accessories). The measured value should not exceed 10% of the raw water value.

As part of a service check, the manufacturer can arrange for disinfection.

9. Disposal

Dispose of all replaced parts in accordance with applicable local guidelines and regulations.

Note
Filter cartridges that are no longer usable can be disposed of with household waste.

10. Replacement Parts/Optional Accessories

If you need replacement parts as part of maintenance or to troubleshoot issues, contact your dealer or our service department. We offer our proprietary disinfectant as well as a suitable conductivity meter.

Use only original parts, as these are designed specifically for the The Local Water *TLW 2* and ensure the safe operation of the device.

11. Troubleshooting

Problem	Possible Cause	Troubleshooting
No water is coming out of the permeate faucet.	The system is not receiving water.	Check the inlet connection and make sure tap water is flowing into the system.
	The filter insert on the reinforced hose is clogged.	Reduce the inlet pressure (see Chapter 6.4), unscrew the reinforced hose from the Aquastop, check the filter insert in the union nut for blockages and clean it, or replace it if necessary.
	The prefilter is clogged.	The prefilter must be replaced.
	The ultrafilter is clogged.	Unscrew the ultrafilter from the water tap adapter and check the water flow. Replace the ultrafilter.
	The membranes are clogged.	The membranes must be replaced. First, check the concentrate flow.
	Water shortage	Increase the inlet pressure (on-site pressure reducer).
	Backpressure shut-off valve does not open	The backpressure shut-off valve is defective and must be replaced. Contact the
System produces less permeate than specified	Water temperature < 15°C	This can occur in winter.
	The filter insert on the reinforced hose is clogged.	Reduce the inlet pressure (see Chapter 6.4), unscrew the reinforced hose from the Aquastop, check the filter insert in the union nut for clogs and clean it, or replace it if necessary.
	The prefilter is clogged.	Replace the prefilter.
	The ultrafilter is clogged.	Replace the ultrafilter.
	The membrane is starting to clog.	Replace the membrane.
The conductivity in the permeate is too high: retention is too low	Poor raw water quality (high conductivity). Membranes are starting to clog (possibly due to a clogged flow restrictor).	Pre-treat the raw water Replace the membrane; check the concentrate flow.
Concentrate is flowing even though the permeate valve is closed.	The backpressure shut-off valve is not closing.	The backpressure shut-off valve is contaminated or defective and must be replaced.
Concentrate flow rate is lower than the permeate flow rate.	A decrease in concentrate flow indicates that the flow restrictor is clogged (e.g., due to scale deposits or dirt particles).	The flow restrictor must be replaced. The permeate and concentrate flow rates can be determined by volumetric measurement (measuring volume over a specific period of time).
The system has a leak.	Defective component	Check the system and components for leaks.
	Hose connections are not installed correctly.	Check that the hose connections are secure. Replace defective parts.

12. Warranty

The Positive Business Company UG provides a 12-month warranty on *The Local* Water systems. This excludes wear-and-tear parts such as filter cartridges, seals, and flow restrictors. The warranty claim is void in the event of damage caused by forceful impact or improper handling.

Under no circumstances shall The Positive Business Company UG be liable for any direct, indirect, incidental, or consequential damages, in particular for lack of marketability or fitness for a particular purpose, or for losses resulting from lost profits, etc. Warranties exceeding the mere value of the goods are excluded.

This agreement also applies if The Positive Business Company UG was informed of the possibility of such damages caused by defects or errors in the product or in the user manual.

The Positive Business Company UG assumes no liability for the accuracy and completeness of these instructions for use.

In all other respects, the General Terms and Conditions of The Positive Business Company UG apply.

A prerequisite for a warranty claim is the regular replacement of the filters and the flow restrictor, compliance with the maintenance instructions, and raw water quality that meets the following values:

- Salinity: < 1000 mg/l;
- Blockage index: < 3.0,
- Iron content: < 0.1 mg/l,
- Manganese content: < 0.05 mg/l
- Strontium and barium: not detectable
- Concentration of oxidizing agents: < 0.1 mg/l
- Electrical conductivity: < 2000 µS/cm.

Conscientious maintenance of the maintenance log is an integral part of this warranty.

13. Product Labeling

General Information
The *The Local Water TLW 2* drinking water system, which features a filtration system for water treatment, does not have a DVGW (German Technical and Scientific Association for Gas and Water) certification mark—just like all other systems from other manufacturers currently on the market—because there are no testing regulations (testing procedures) for these systems.
See also the following page: **DIN / DVGW certification marks for water treatment systems and devices**

Nameplate: The nameplate is located on the inside of the unit.

DIN/DVGW certification marks for water treatment systems and devices

Connection of non-DIN/DVGW-certified water treatment systems to the public water supply network

The “Regulation on General Conditions for Water Supply” (AVBWasserV) governs the rights and obligations of water supply companies and their customers. Section 12(4)(a) of this regulation, titled “Requirements for Materials and Equipment,” stipulates that “only materials and equipment that comply with recognized technical standards may be used.”

Furthermore, it states that for materials and equipment bearing the mark of a recognized testing agency (e.g., DIN/DVGW, DVGW, or GS marks), it is presumed by regulation that the generally accepted rules of technology have been observed.

Section 12, Paragraph 4(b) states: “However, Paragraph 4 does not mandatorily stipulate that only materials and equipment bearing the mark of a recognized testing body may be used. The connection customer therefore also has the option of using other materials and equipment.” This applies provided that evidence is provided that equipment or materials without the listed certification marks meet the safety requirements.

The distributor must document these requirements for food safety (LMBG, KTW recommendations) and fitness for use upon request.

The installer therefore has no right to reject water treatment systems solely because they do not bear the mark of a recognized testing agency.

The installation of devices without a test mark must be permitted simply because no approval procedure is required by law for water treatment devices.

Since the water utility has a duty to supply all customers with safe drinking water, it has the right to inspect the household plumbing system on a case-by-case basis. However, it may only intervene in private household plumbing to the extent that its condition is likely to have adverse effects on the drinking water network.

The property owner is, in principle—not least out of respect for their property rights—free to choose their plumbing fixtures, including water treatment devices.

The customer is merely obligated to prevent any disruption to the public water supply system as a whole or to other customers (Administrative Court of Freiburg, June 12, 1990, Case No.: 6 K 195/89).

This requirement is met in all cases by installing appropriate backflow prevention measures. For this purpose, in accordance with DIN 1988 Part 4 and DIN EN 1717, a suitable backflow preventer must be installed downstream of the water meter and upstream of the system, which, in combination with pipe aerators of types C, D, or E, prevents water backflow. If pipe aerators are not available on site, a pipe separator must be installed in place of the backflow preventer. If untested water treatment systems are to be connected to a private water supply (e.g., a well), the installation of the aforementioned safety measures is not required.

DIN/DVGW certification marks certainly represent a certain state of the art, and they are considered particularly important for installations in Germany. While certification marks from similar associations are also issued in Austria and Switzerland based on comparable criteria, such regulations do not exist in other European countries. The fact that thousands of water treatment systems (water softeners, water dispensers, etc.) have been operating there without any problems for decades—even without the DVGW certification mark—suggests that this mark is not the be-all and end-all.

To ensure consistently hygienically safe water in the drinking water sector, the regeneration of ion-exchange systems (water softening, nitrate reduction) should be performed every 4 days or twice a week, in accordance with DVGW regulations, using the appropriate settings. Necessary maintenance and filter changes for water treatment systems must be performed at least every 6 months.

Systems we offer that do not bear the DVGW certification mark are likewise constructed from materials that comply with generally accepted state-of-the-art standards, so that the above-mentioned requirements are met provided our installation and operating instructions are followed.

14. Maintenance Log

Note:
Properly maintaining the maintenance log is an integral part of the warranty.

Enter the replacement date and the corresponding model number in the table!

Replacement: Months after date of purchase	Prefilter Core+ OS	Post-filter Core M OS	TLW X membranes	Flow restrictor	Service check	Date
6						
12						
18						
24						
30						
36						
42						
48						
54						
60						

15. Service

Manufacturer:
The Positive Business Company UG Am Kaiserkai 69
20457 Hamburg
+49 (0)40 2263252 214

The Authorized Dealer:

The Local Water *TLW 2*

Year of manufacture:

Serial number:

Customer

Name:

First Name

Street:

ZIP Code:

City:

State:

Phon

e:

Date of Purchase:

16. Copyright

The distribution, reproduction, and disclosure of the contents of this user manual are prohibited without the express permission of The Positive Business Company UG.

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