aseko

USER MANUAL

# ASIN AQUA **Net** a **Net+**

## CLF, REDOX, DOSE

2025




EN

www.asekopool.com

# Basic safety instructions

This user manual contains essential safety instructions, as well as information on the installation, commissioning, and maintenance of the device.It must be read by all individuals involved with the device—especially those responsible for its installation, commissioning, maintenance, and operation.Please read the manual carefully and follow all instructions.To minimize the risk of injury, this product must not be used by children.Failure to follow the safety instructions may pose a risk to people, the environment, and the device itself. Non-compliance with these instructions will void any claims for damages.

## Inadequate operator qualification

Improper handling of the device can result in serious injury and damage to property.

- The system operator must ensure that all personnel maintain the required level of qualification.
- All work must be carried out by appropriately qualified personnel.
- Insufficiently qualified persons must be prevented from accessing the system, e.g. by means of access codes and passwords.

## Overdose of chemicals

Despite the comprehensive safety features of ASIN AQUA Net, probe failure or other errors may lead to chemical overdoses. This can result in serious injury and property damage.

- Install the device in such a way that uncontrolled chemical dosing cannot occur, and so that any such dosing can be detected in time to prevent damage.
- Uncontrolled dosing of chemicals can cause injury and property damage.Although the device is equipped with multiple safety features, a chemical overdose cannot be completely ruled out in the event of a failure of the measuring probes or the device itself.Install the device in a way that prevents uncontrolled chemical dosing and ensures that any such dosing is detected in time to prevent damage.Chemicals must be used in quantities that do not result in dangerous concentrations, even in the case of an overdose.Avoid using chemicals in excessively large containers or at excessively high concentrations.

## Formation of chlorine gas when dosing chemicals into standing water

If the control flow meter becomes blocked or malfunctions, there is a risk of dosing chemicals into standing water. In such a case, the combination of chlorine disinfectant and pH reducer can produce toxic chlorine gas.Chemical agents must never be dosed into standing water.

## Failure to understand safety instructions and information

Failure to follow safety instructions due to misunderstanding may result in serious injury or damage to property.

- Read the entire user manual carefully.
- Do not handle the device if you are unable to eliminate all potential risks arising from a lack of understanding of the safety instructions and other information.

## Use of new device features

Due to continuous development, the ASIN AQUA Net device may contain features that are not fully described in this version of the user manual. Using these new or extended features without full understanding by the operator may result in damage to the device and other serious consequences, including injury and damage to property.

- Before using a function, make sure you fully understand it, including all related conditions.
- Check for an updated version of the user manual or supplementary documentation for the relevant functions: **http://manuals.asekopool.com**
- Use the integrated help function on the device to obtain detailed information about the functions and their settings.
- If you cannot understand the function in depth and safely based on the available documentation, do not use this function.

## Overdose at incorrect pH value

If disinfection is activated before the pH value has stabilized within the optimum range of 6.8 to 7.5, a severe overdose of chlorine or bromine may occur. This can result in serious injury and damage to property.

- **Do not start chlorine disinfection until the pH value is stable within the optimal range of 6.8 to 7.5.**

## Before using the device

Make sure you have the latest and updated version of the user manual and other documentation for all functions of the device. Use and read the integrated help functions. If you do not understand the information about certain functions of the device, do not use these functions.

## Handling chemicals for pool water treatment

Chemicals used in ASIN AQUA Net must be handled safely to prevent damage or injury. Aseko recommends that you always use personal protective equipment when handling pH and chlorine products. See the Material Safety Data Sheet (MSDS).



# Important notes for proper functioning.

**WARNING:**

**Never mix pH and chlorine agents** During maintenance, always rinse the hoses and valves with clean water to prevent mixing.

**Never use hydrochloric acid** (HCl, hydrochloric acid). HCl is volatile. The use of HCl-based chemicals will damage the equipment.

**Never install the device in unventilated technical shafts with high humidity, as this can seriously damage electronic components, especially the display. Damage caused by high humidity will not be recognized as a warranty defect.** If the ASIN AQUA Net device is located in an environment with high humidity and low temperature (e.g., a garden shed), leave it ON at all times. This helps maintain a higher internal temperature and significantly reduces humidity inside the unit. The same applies when storing the unit in winter.

**The installation must be protected by a residual current device (RCD).**

**CLF probe calibration:** Calibration can only be performed if the pH is stable within the range **6.8–7.5.** After replacing the electrolyte, wait at least **1 hour,** but ideally **24 hours,** for the signal to stabilize before continuing with calibration.

**Never use cyanuric acid stabilizers in the ASIN AQUA Net device.** Cyanuric acid forms a chlorine-cyanurate complex, which rapidly reduces the disinfecting ability of chlorine and prevents the probe from measuring free chlorine. Please note that some chlorine tablets contain cyanuric acid. Make sure that there is no cyanuric acid in your pool.




ASIN AQUA **Net** CLF

# 12036

ASIN AQUA **Net** Redox

# 12035

ASIN AQUA **Net** Redox Salt

# 12128

ASIN AQUA **Net** Dose

# 12034




ASIN AQUA **Net+** CLF

# 13418

ASIN AQUA **Net+** Redox

# 13419

ASIN AQUA **Net+** Redox Salt

# 13448

ASIN AQUA **Net+** Dose

# 13437

# ASIN AQUA Net

**ASIN AQUA Net** ensures crystal clear and hygienically safe water in your pool with minimal chemical content. It eliminates chlorine odors and all the negative effects of overchlorinated water. The touchscreen display provides you with all the information you need about water quality and a simple procedure for setting the control process.

**ASIN AQUA Net** can be equipped with a **CLF**, which directly measures the free chlorine content in the pool water, or a **REDOX**, which measures the oxidation-reduction potential of the water (disinfection capacity).

**ASIN AQUA Net** is equipped with a **LAN** connector for internet connection, a pool water thermometer, and a connector for an external touchscreen display.

**ASIN AQUA Net** now allows filtration control via a potential-free output.
















## Chemical water treatment

### Disinfection

Extremely accurate measurement of free chlorine content using the ASEKO CLF or REDOX probe, connected to **the ASEKO SL control algorithm**, maintains the set disinfection level using the lowest possible amount of disinfectants.

### pH control

Precise pH measurement using the Long Live pH probe, connected to **the ASEKO SL control algorithm**, maintains the set pH value. ASIN AQUA allows you to dose pH MINUS or pH PLUS preparations.

### FLOC+C (ASIN AQUA Net+)

Supports mechanical cleaning. Floc+c ensures crystal clear water thanks to the slow dosing of flocculating and coagulating agents. Its continuous dosing improves the filtration system's ability to capture even the smallest impurities that would normally pass through the filter and back into the pool.

## Technology control

### Filtration control

**ASIN AQUA Net** controls filtration using a set timer or calculates the optimal filtration time based on the morning pool water temperature.

### Electrolyzer control

**ASIN AQUA Net** enables control of an external electrolyzer.

# What you will find in the box




ASIN AQUA Net
or
ASIN AQUA Net+

Peristaltic pumps
AA Net 2 pcs
AA Net+ 3 pcs
#12093

Flow meter
with filter
#12106

Thermometer
#13192

long Life pH Probe # 12012




CLF Probe #12052




or

Long Life Redox Probe # 12016




or

Redox Probe for Salt # 12113



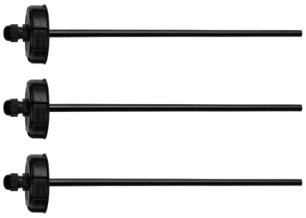
Measuring water valve 2 pcs
#12006



Injection valve AA Net 2 pcs,
AA Net+ 3 pcs
#12005



Suction kit AA Net 2 pcs, AA Net+ 3 pcs
#12023



Thermometer sump 1 piece
#12044



Connecting pipe - 1/4" (6.35 mm)
#13277 15 m AA Net
#13278 20 m AA Net+

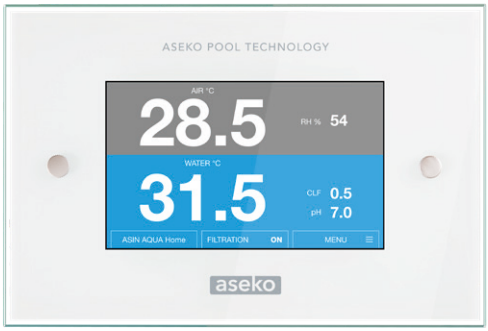


Dowels and screws
#12125



# Accessories available for purchase

External touchscreen display
#12048




Injection manifold 4x 1/4"
#13395



Inserting plug DN50 with 1/4" (6.35 mm) thread
#12134



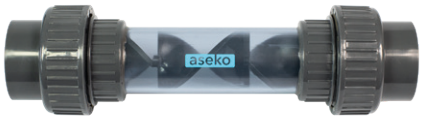
pH 7.00 Buffer #12065
Redox Buffer #12063




Pool Lab photometer for accurate calibration
#13076



Coagulation mixer
#30001




# Original Aseko Chemistry

## Volume 20l

CHLOR PURE #12075




pH MINUS #12130




FLOC+C #12139




## Volume 5l

CHLOR PURE #12059

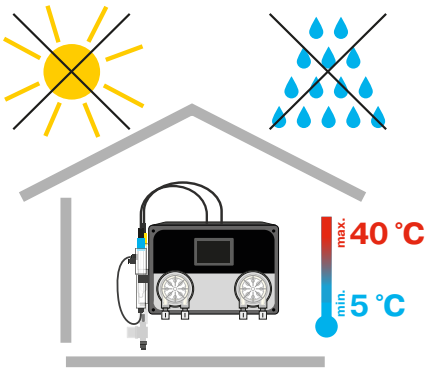



pH MINUS #12131



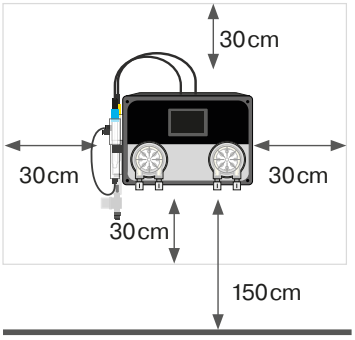

FLOC+C #12138






# ASIN AQUA installation

ASIN AQUA should be installed on a wall in a dry and dust-free environment with a temperature not falling below +5 °C and not exceeding +40 °C. The location should be chosen so that there is at least 30 cm of free space on all sides and the height above the floor is max. 150 cm. Use the screws supplied with ASIN AQUA Net for mounting. Dimensions of ASIN AQUA approx. **28 x 20 x 12 cm**.



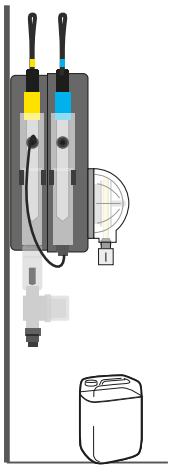

## WARNING

The temperature at the installation site should be consistently between **+5 and +40°C.** Humidity max **70% RH**.

Direct sunlight, high humidity, and dust can damage the ASIN AQUA Net.

## WARNING

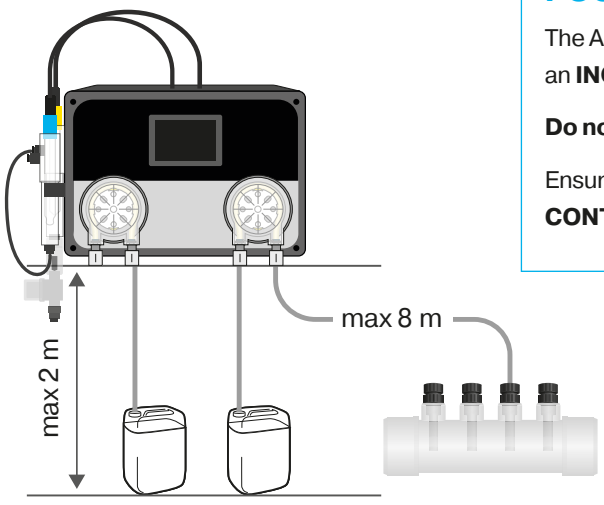
**Never install the unit in unventilated technical shafts with high humidity, as this can seriously damage the electronic components, especially the display. Damage caused by high humidity will not be recognized as a warranty claim.** If the ASIN AQUA Net is in an environment with high humidity and low temperature (e.g., a garden shed), leave it permanently ON. This helps maintain a higher internal temperature and significantly reduces humidity inside the unit. The same **applies when storing the unit in winter.**



**Maximum distance between injection valves** from ASIN AQUA peristaltic pumps must not be greater than **8 m**.

**The vertical distance** between ASIN AQUA and the bottom of the tanks must not exceed **2 m**.

The device must be mounted **vertically on the wall** and positioned above the upper edge of the chemical canisters.




## POOL WATER

The ASIN AQUA must be installed in **freshly filled water** treated with an **INORGANIC** superchlorinating agent (**SUPERCHLOR** #13120).

**Do not use organic chlorine!**

Ensure that the water in the pool is chemically clean and **DOES NOT CONTAIN CHLORINE STABILIZERS, CYANURIC ACID**, or other impurities!

# Probe installation

Probe wrench
#13046



1. **CLF** or **redox probe** into the sump on the left. Tighten by hand or with the plastic probe wrench provided. Connect the connector (marked yellow) and secure by tightening the ring on the connector.
2. **Carefully insert the pH probe** into the sump on the right. Tighten by hand or with the plastic probe wrench provided. Connect the connector (marked blue) and secure by tightening the ring on the connector.

After inserting the probes, gently tightening them, and connecting the connectors, your ASIN AQUA Net is ready to connect to the water to be measured.

**WARNING**

Tighten the probes only by hand or with the plastic key provided. Do not use pliers or other tools!

CLF Probe
#12052

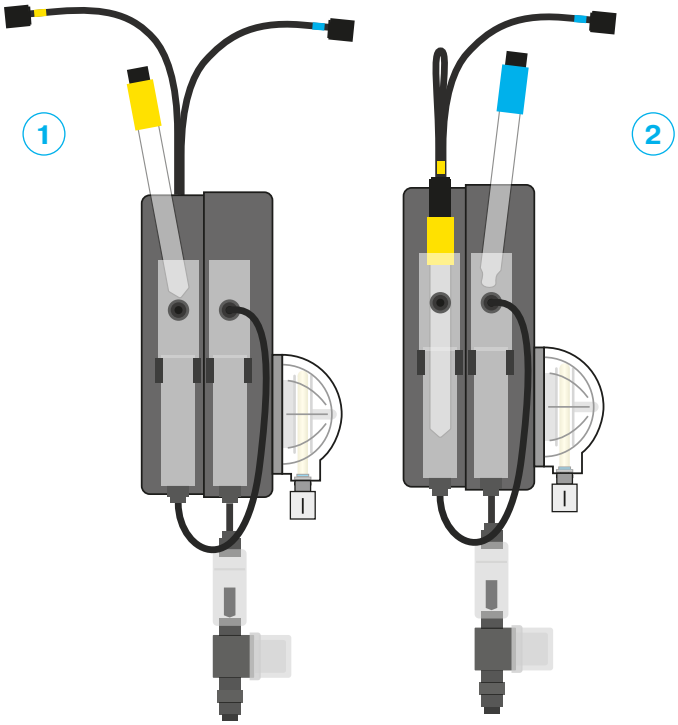



Redox Probe
Long Life
#12016




Redox Probe
for Salt
#12113

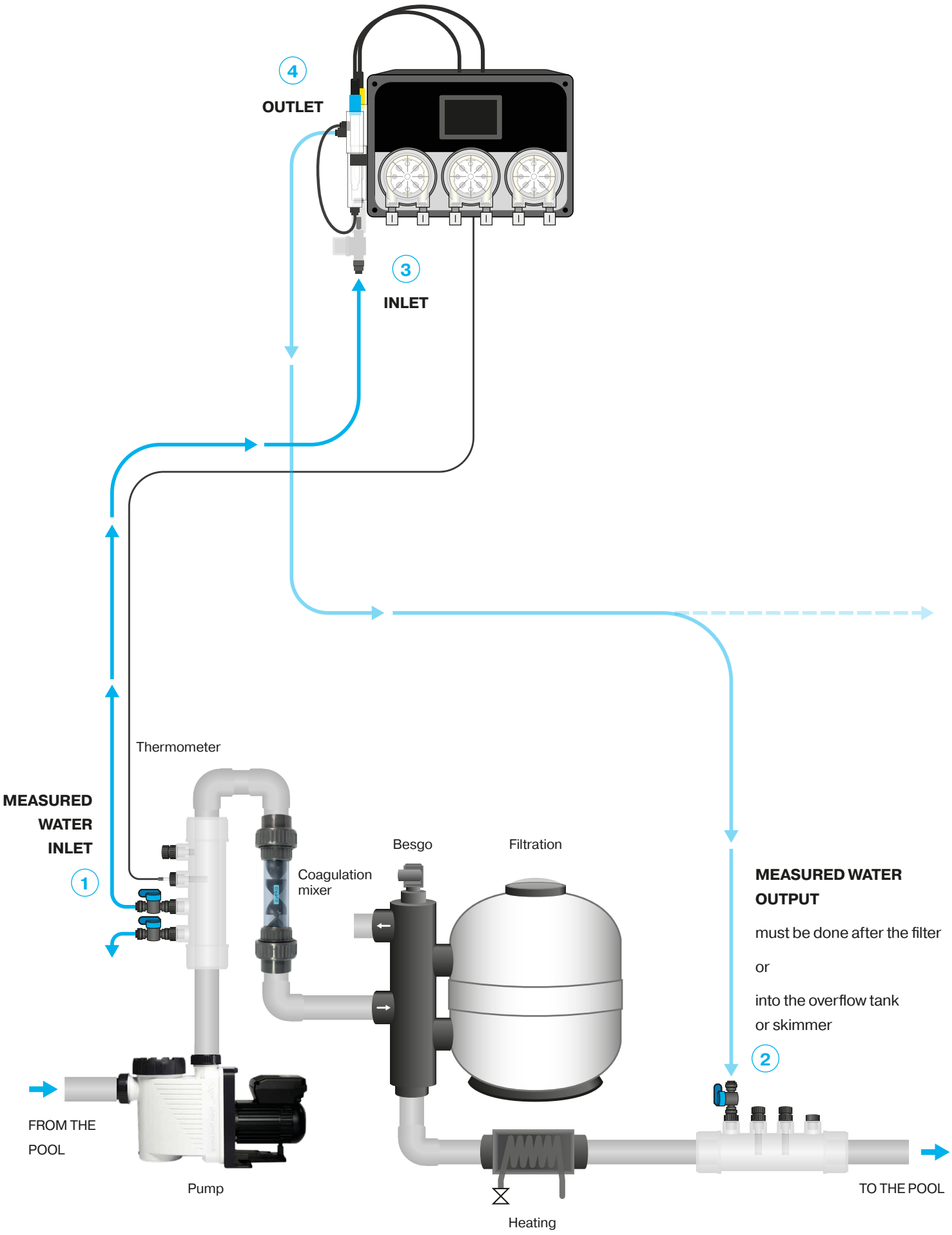





pH Probe Long
Life #12012



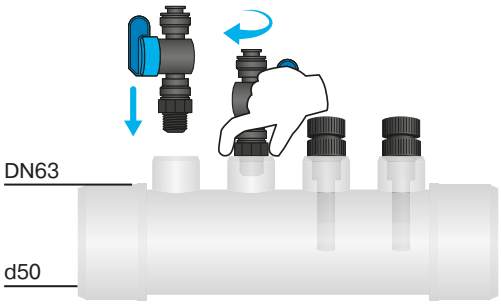
# Connection of measured water



# Connection of measured water

Screw in **the measuring water valve** into the 4x 1/4" adhesive fitting. **Tighten the measuring water valve into the adhesive fitting by hand only. Do not use pliers or other tools.**

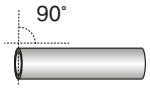
Measuring water valve #12006



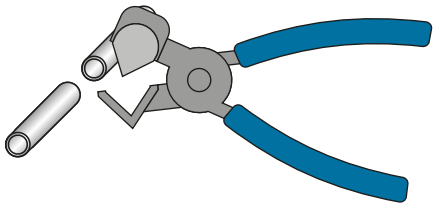

Adhesive fitting d50/DN63 4x 1/4" #13395

1. **CONNECT THE MEASURED WATER SUPPLY** to the pipe **after the pump and before the filter** and the coagulation mixer.
2. **CONNECT THE MEASURED WATER OUTLET** to the pipe **after filtration** and heating or to the overflow tank or skimmer.

To connect the measured water to your ASIN AQUA, use the 1/4" (6.35 mm) #12008 connecting pipe, which is included in the delivery.




Transparent connecting pipe 1/4" (6.35 mm) #13277



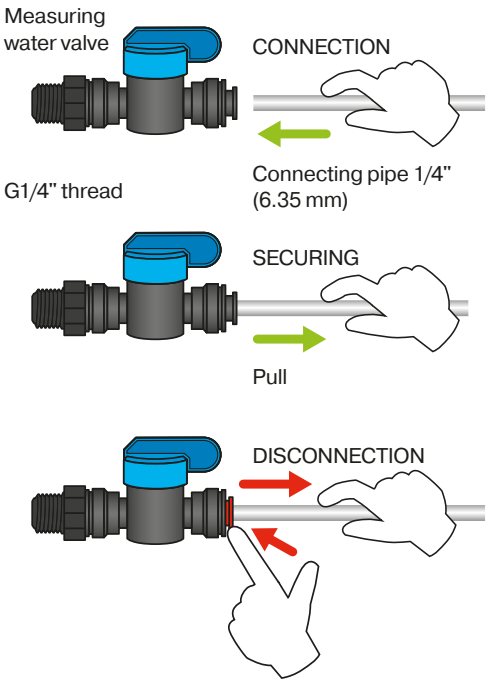
## WARNING

To ensure tight connections, cut the pipe at a 90° angle. Use special pliers #13325 to cut plastic pipes. The cut must be clean and smooth. Do not use ordinary scissors or knives!

The measured water can be easily connected to the ASIN AQUA using **Speedfit** fittings.

**CONNECTION** , push the connecting pipe into the **Speedfit** connector and then secure by pulling on the hose.

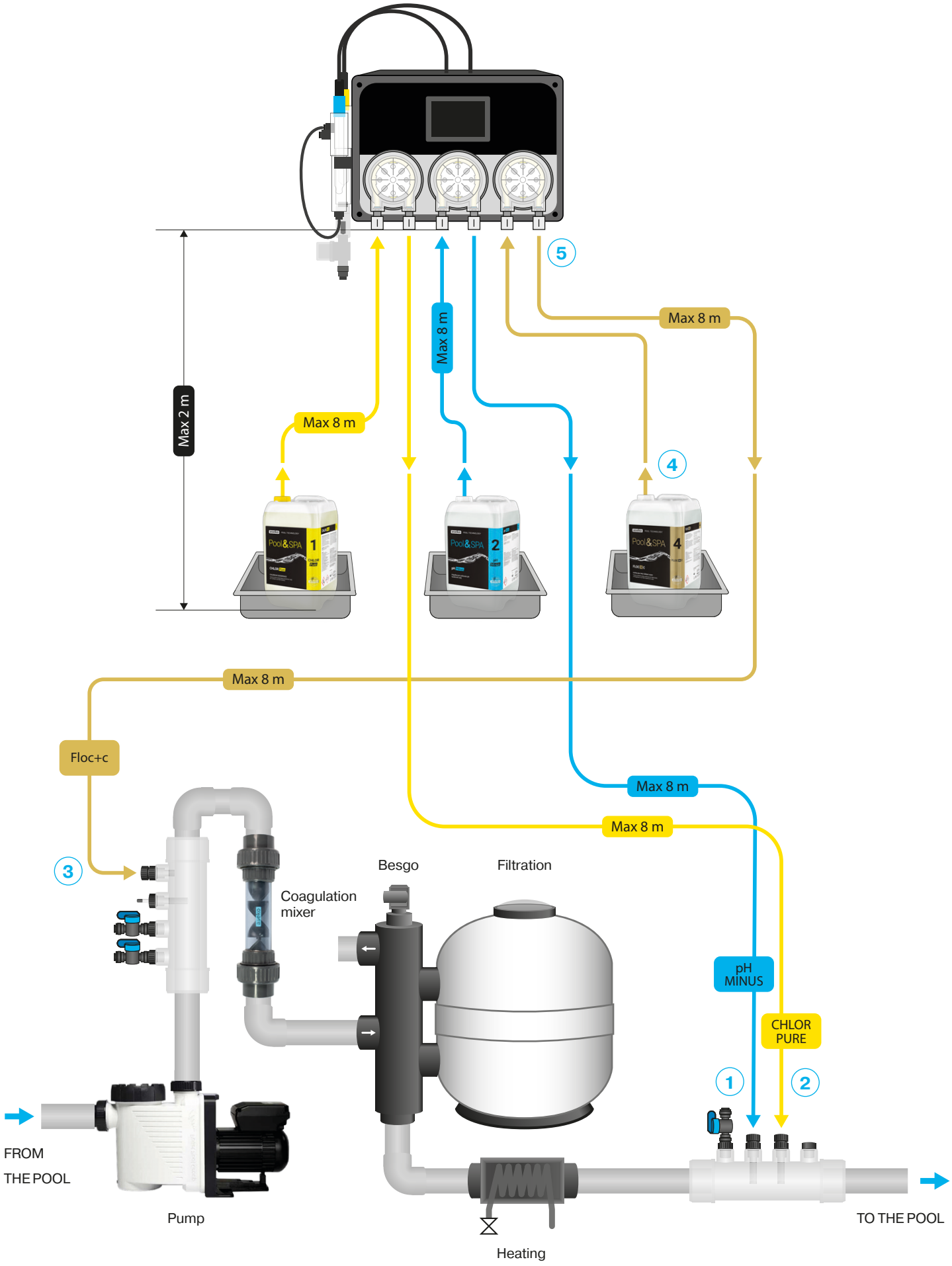
**DISCONNECTION** press and hold the circular clamp **Speedfit** and pull out the connecting pipe.




3. **INLET** of the measured water into the ASIN AQUA using the connecting pipe to the Speedfit fitting on the measuring water filter.
4. **OUTLET** connect the measured water from ASIN AQUA to the Speedfit fitting on the probe well using the connecting pipe.

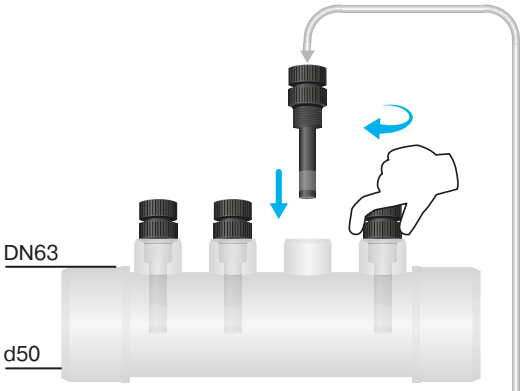
After connecting and opening the water supply, your ASIN AQUA is ready to measure the disinfection content and pH value in your pool so that it complies with hygiene limits.

# Connection for pool chemicals



# Connection for pool chemicals

Screw in **the injection valve** into the adhesive fitting 4x 1/4" #13395.
**Tighten the injection valve into the adhesive fitting by hand.**
**Do not use pliers or other tools.**



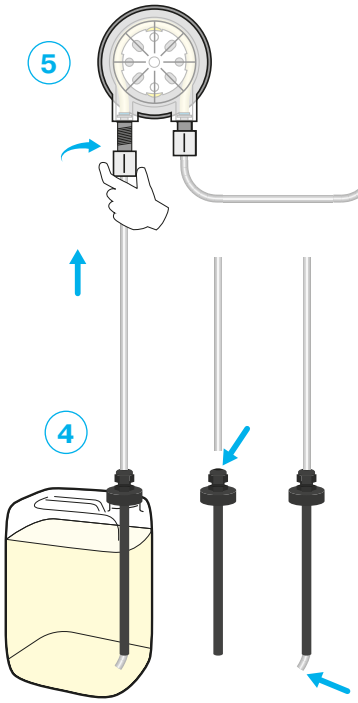
Adhesive fitting d50/DN63 4x 1/4" #13395

1. **INJECTION VALVE pH** connect to the pipe after filtration and discharge of the measured water.
2. **INJECTION VALVE CHLOR PURE** connect to the pipe after filtration and drainage of the measured water and after injection ofH MINUS, This will prevent the formation of limescale.
3. **FLOC+C INJECTION VALVE** connect to the pipe before filtration and before the coagulation mixer.

To connect the dosing agents to your ASIN AQUA, use the 1/4" (6.35 mm) connecting pipe #12008, which is included in the delivery.

## WARNING

To ensure tight connections, cut the pipe at a 90° angle. Use special pliers #13325 to cut plastic pipes. The cut must be clean and smooth. Do not use ordinary scissors or knives!

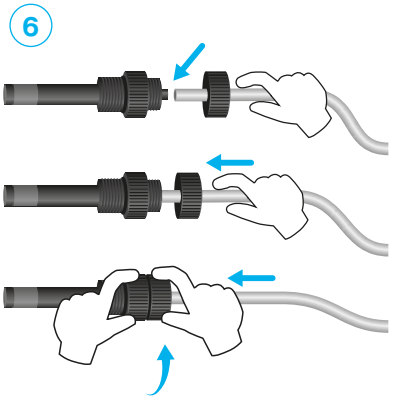


Suction kit for 20 l canister #13415

4. **CANISTER CONNECTION** Use the 20L Canister Suction Kit #13415. Thread the connecting pipe through the suction cap so that it ends directly above the bottom of the container.

5. **PUMP CONNECTION** Connect the pump suction on the left to the canister, and the pump discharge on the right to the injection valve.

6. **CONNECTING THE INJECTION VALVES** Pull the pipe through the nut, thread the pipe onto the injection valve and tighten the nut firmly by hand.




## WARNING

**NEVER connect pH minus agent to the disinfection pump or disinfectant to the pH pump!** In the event of a cross connection, an error message will appear after ten doses of ASIN AQUA. Correct the pipe installation and then you can continue operating your ASIN AQUA.

# Connection of an external electrolyzer

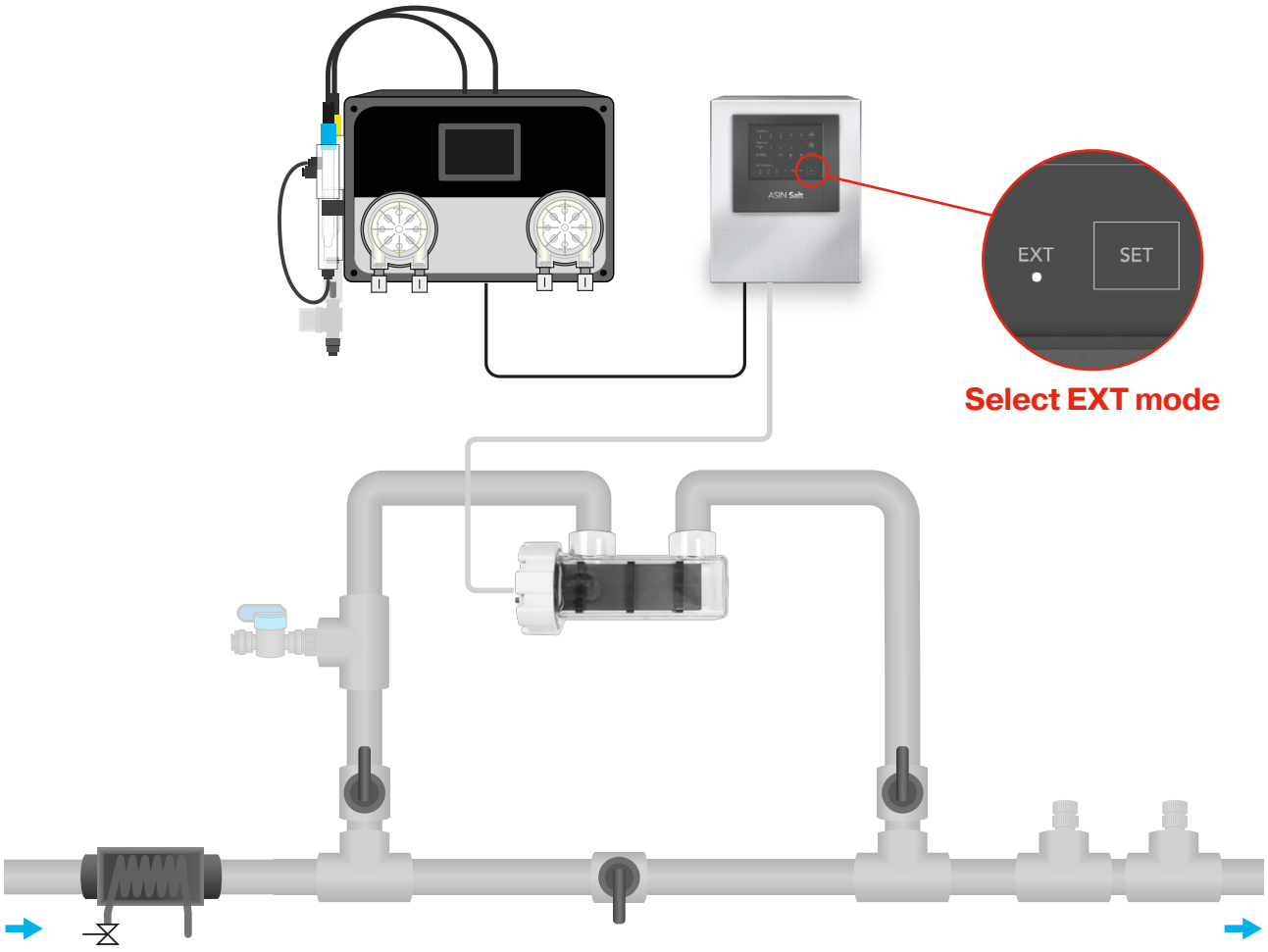
ASIN AQUA Net S and ASIN AQUA NET Hybrid technologies allow control of an external electrolyzer via a 12V output or a potential-free relay.

## Control via 12V output

If you are using an electrolyzer that can be controlled using 12V (ASIN Salt 25), connect the external electrolyzer to the outputs marked SALT ASEKO.

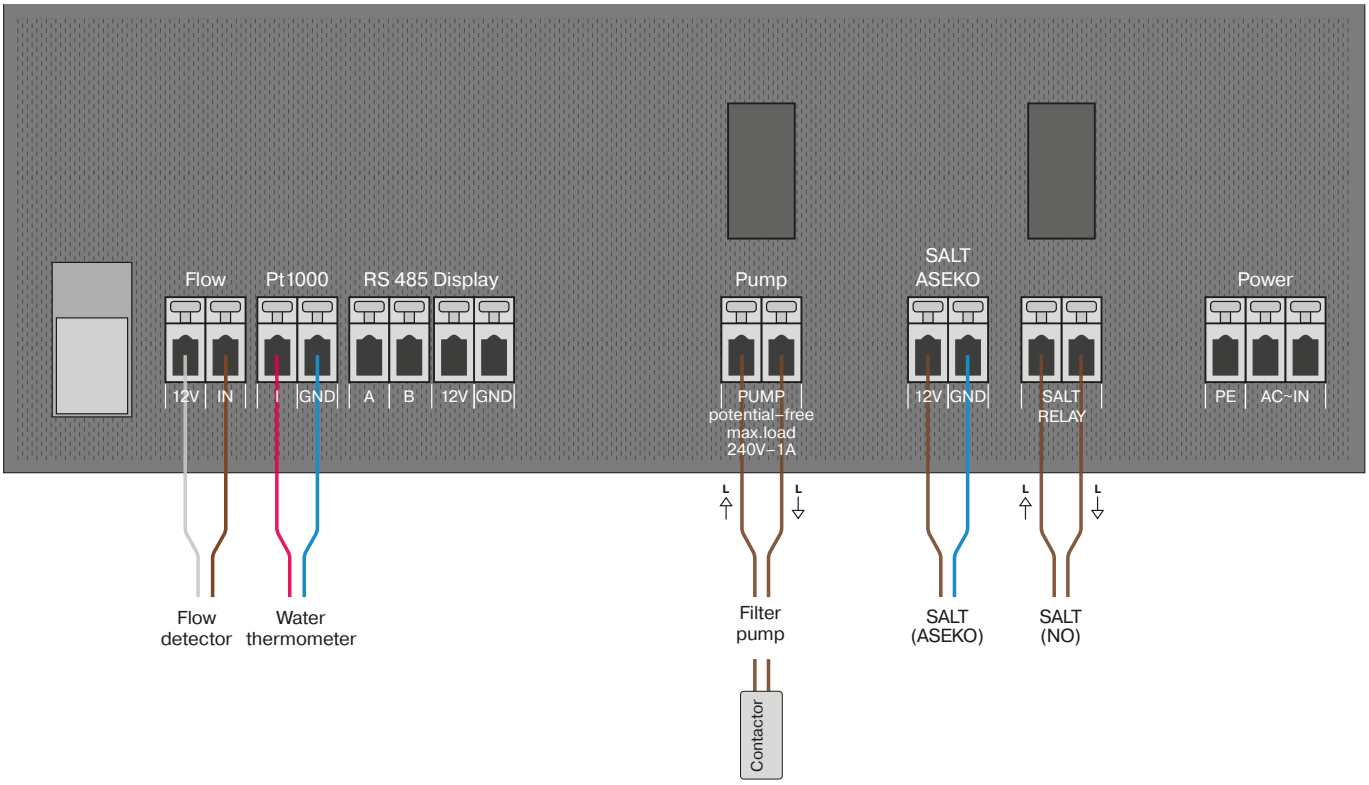
## Control via potential-free rele

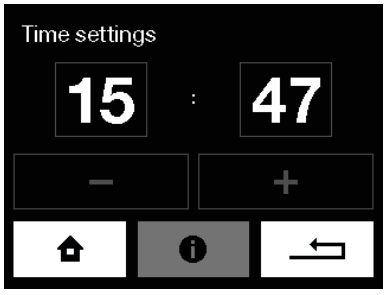
If the electrolyzer cannot be controlled by 12V outputs, it must be connected via a contactor to the potential-free output of the SALT RELAY.

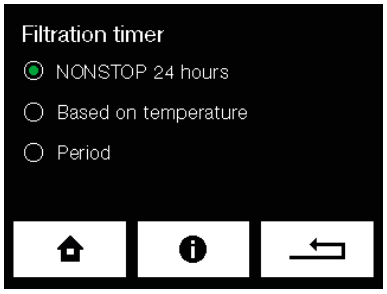


# Connecting the filtration pump

ASIN AQUA Net now allows filtration control via a potential-free output.



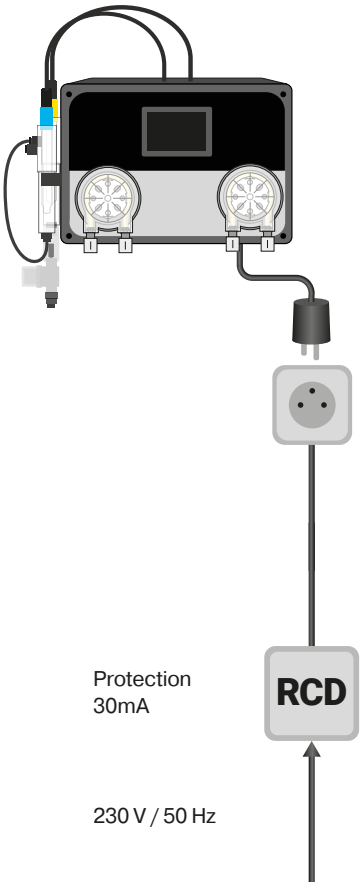




# Setting the filtration timer

1. Set the current time
2. Select one of three types of filtration control

- **NONSTOP 24h** - Filtration will run NONSTOP
- **According to temperature** - ASIN AQUA Net calculates the optimal filtration running time based on the morning water temperature.
  The filtration pump switches on every day at 6:00 a.m. The optimal filtration run is then calculated based on the measured water temperature (water temperature /2 +2; at a water temperature of 26 degrees, filtration will run from 6:00 to 21:00)
- **Period** - Set your own filtration interval




# Electrical connection

**Connecting the device to the mains:**

Connect the 230 VAC +-10% / 50 Hz power cable to a power outlet.

**The mains socket must be protected by a 30 mA residual current device!**

After switching on, the display lights up and the ASIN AQUA start screen appears during startup.

**Disconnecting the device from the mains:**

Disconnect the ASIN AQUA power cord from the 230 VAC +-10% / 50 Hz power outlet.

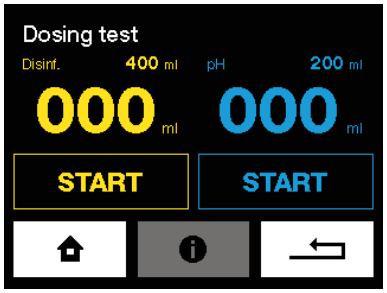
**WARNING**

If the device is used in a manner not specified by the manufacturer, the protection provided by the device may be compromised.

| | |
|---|---|
| Power supply | 230 VAC +-10% / 50 Hz |
| Power consumption | 14 W |
| Fuses | T100 mA |
| Overvoltage category | II |
| Protection | IP40 |
| Climate resistance | +5 to +40°C / RH 70% |
| Degree of contamination | 2 |
| Max. altitude | max 2,000 m above sea level |
| Weight | 2,2 kg |
| Location | Wall |
| Controlled values | Free chlorine or Redox, pH |
| Pump power | 60 ml/min. / max 1 bar |
| Measured water pressure | max 1.5 bar |

The device is intended for indoor use

# Installation test




Before starting operation, test the installation of ASIN AQUA.
Most problems are the result of incorrect installation.

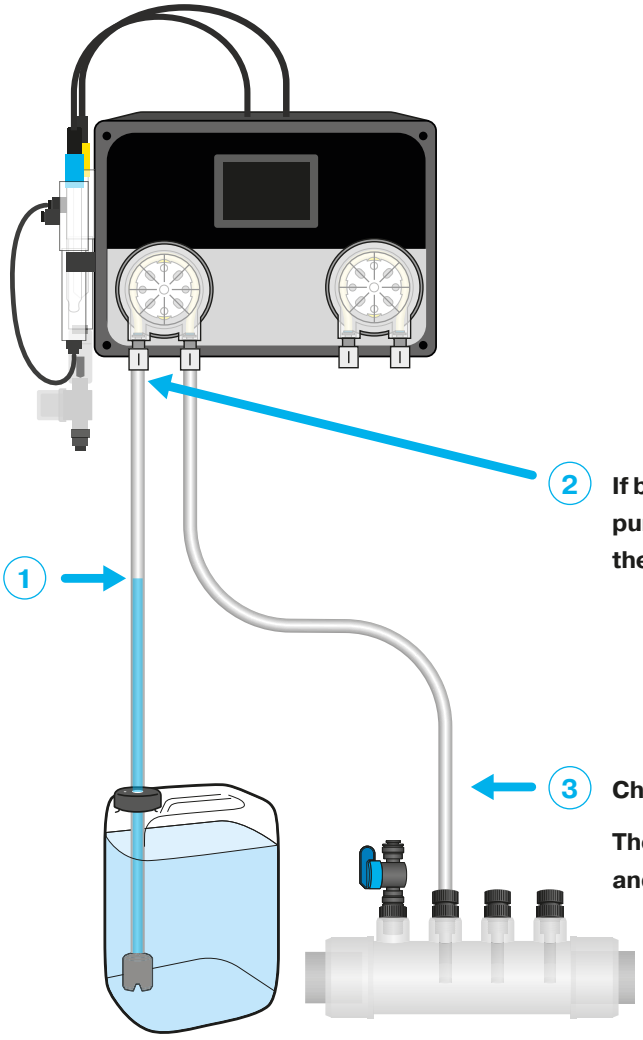
## Test procedure

On the main screen, select the button with the settings symbol.
On the next screen, select "DOSING TEST".

Start both pumps one after the other and check all connections of the connecting pipes for leaks while they are running. Check the injection valves to ensure that they are not blocked and that no air bubbles are forming in the pipes.

**WARNING**

**Any obstructions, bubbles, or leaks in the connecting pipe will prevent the ASIN AQUA from functioning properly!** Clear plastic pipes allow you to monitor the flow of fluid into the injection valves.



**Monitor the level in the transparent plastic pipe.** (1)

(2) **If bubbles form here, the pump is sucking in air. Recut the hose correctly.**

(3) **Check all connections for leaks.**

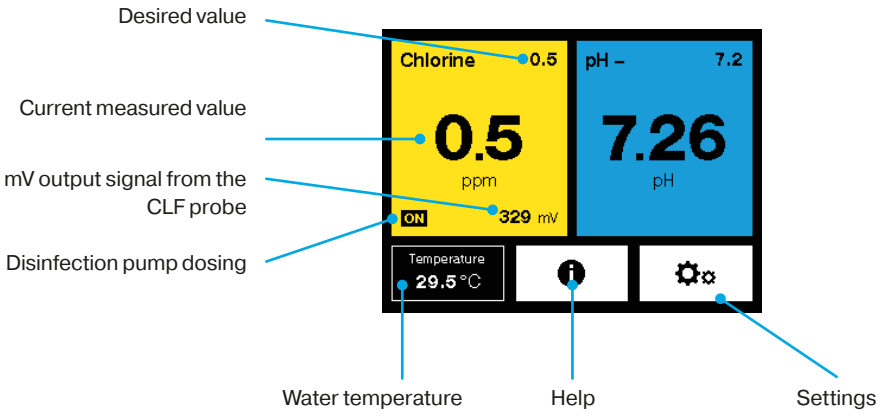
**The liquid must pass to the spray and then into the pipe.**

# Control principles

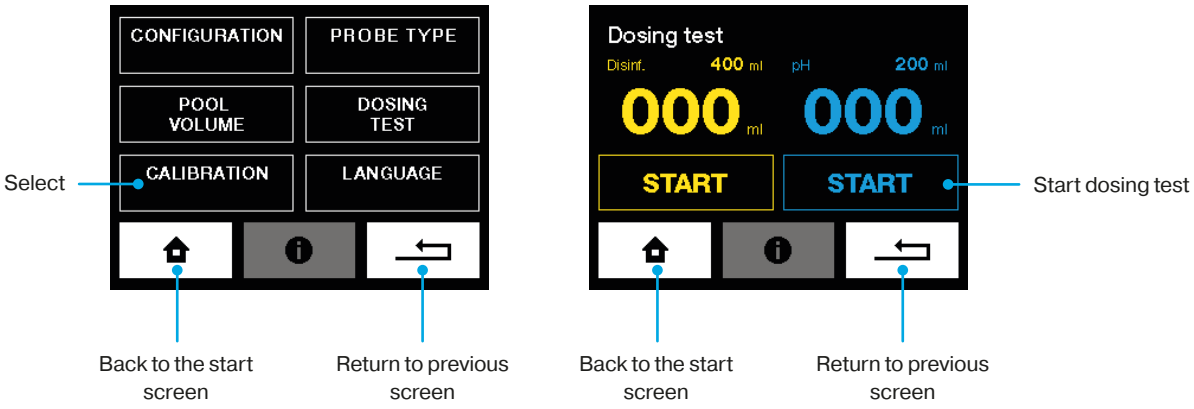
## Basic screen

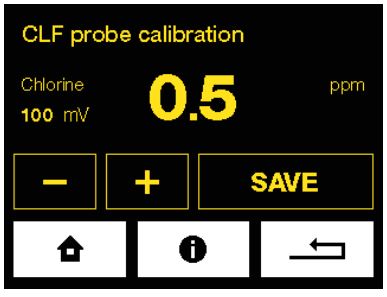
Displays the measured required values and status information.

For example, clicking on the Chlorine field takes you to the settings for the required chlorine value in the pool water.




## Settings







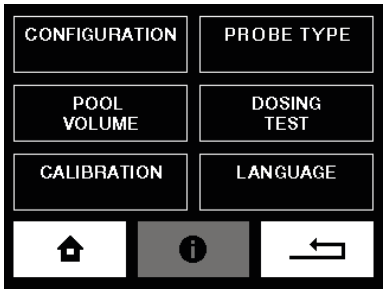
Decreases the value




Increase value



# Settings




**Configuration** – pool volume, pool type, water hardness

**Technology** – dosing, hybrid, salt

**Calibration** – pH probe, CLF probe, thermometer

**Probe selection** – selection of disinfection probe

**Dosing test** – testing pumps and manual dosing

**Language** – setting the language of the ASIN AQUA device

# Pool parameter settings

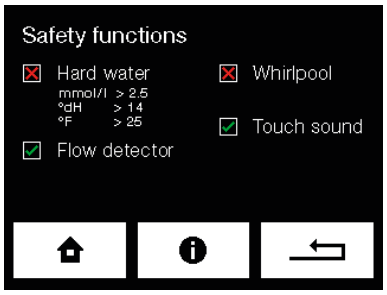
Every pool is unique. Temperature, size, location, and water hardness all affect how ASIN AQUA controls and fine-tunes your pool water. To ensure optimal performance, you must set the characteristics and values of your pool in ASIN AQUA.

## Pool volume

For ASIN AQUA to work properly, you need to set the pool volume correctly. Calculate the volume of your pool: Length (L) times width (W) times depth (D) equals pool volume (V) – (L × W × D = V).
Use the + and – buttons to adjust the value.

**WARNING**

**The volume of the pool affects the maximum safety dose!**




## Pool type

Select your pool type by checking the appropriate boxes ( ✕ pool ✓ whirlpool).

## Hard water

Set the water hardness in your pool in degrees dH, 0-9 is soft,
9-21 is hard and 21+ is very hard.

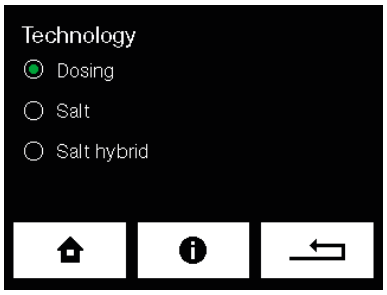
## Flow meter

The flow monitor detects the water flow to the probes. Chemicals will only be dispensed if flow to the probes is detected. Therefore, flush the flow meter strainer regularly.

**WARNING**

**Only switch off the flow meter in the event of a malfunction!**

# Selection of disinfection technology




## Dosing

Allows the use of an ASEKO CLF probe for measuring free chlorine or a Redox Long Life probe for measuring the redox potential of the water. Based on the measured values, it activates the chlorine dosing pump to maintain optimal pool water quality.

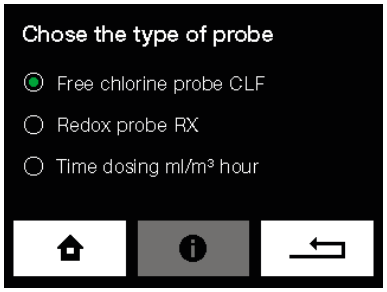
## Hybrid

Recommended for use only with **the CLF probe for measuring free chlorine**. Combines salt water electrolysis with liquid chlorine dosing for effective maintenance of optimal free chlorine levels. Under stable conditions, the chlorine level is regulated exclusively by salt water electrolysis. When electrolysis alone is not sufficient, the system activates the liquid chlorine dosing pump to ensure consistent water quality. This **function requires the connection of an external salt water electrolyzer.**

## Salt

**It is recommended to use only with a redox probe.** Uses salt water electrolysis to produce chlorine and free oxygen radicals for effective disinfection of pool water. This **function requires connection to an external salt water electrolyzer.**

# Disinfection probe selection




## Disinfection probe selection

1. **Free chlorine probe CLF**




2. **RX redox** potential probe

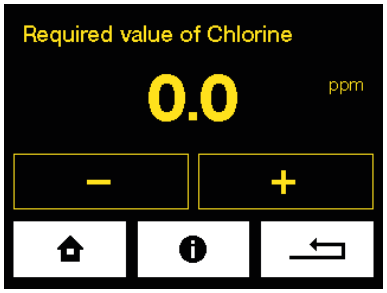





3. **Time DOSE ml/m³ per hour**

- For time dosing ml / m³ / hour

# Commissioning and setting the required values




## Commissioning procedure

**The water in the pool must be clean and free of impurities. Ideally, it should be freshly filled from the mains water supply.**

- Turn on the filtration system to run NONSTOP for 24 hours
- If you have a CLF probe, set the required value to 0.0 mg/l. If you have a REDOX probe, set the required value to 000 mV. If you are using time-based dosing, set the value to 0 ml/m³ / day (hours).

CLOSED



## Close the water supply to the probes

ASIN AQUA will display the warning "No flow to probes".

## Perform superchlorination

Superchlorinate the pool water with Super CHLOR (inorganic active chlorine without stabilizers). Follow the instructions on the package (1 kg = 80m³).

# Before opening the water supply to the probes

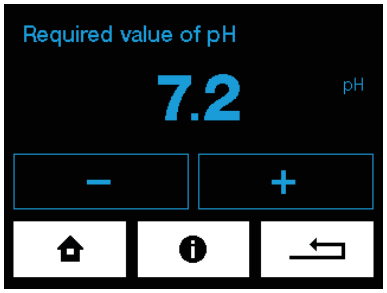
**Before opening the inlet** water to the probes must be **clean water** and **chlorine concentration** measured by a colorimeter or Pool Tester must be within the range **0.3 to 1.2 mg/l.** If it is **lower concentration** repeat superchlorination. If **higher concentration** wait for the chlorine in the water to decrease.

OPEN



## Open the water supply to the probes

The "No flow to probes" warning will disappear from the ASIN AQUA display.




## pH setting

Since the ASIN AQUA water treatment system is effective over a wide pH range, it is advisable to set the desired pH value to the same level as the water you are adding, or slightly lower.

**Desired pH value = pH of the water being added (in the range 6.8 to 7.5)**

The pH may change during operation, but if it is within the range of 6.8 to 7.5, it is not necessary to change the setting

# If you have a CLF probe

**The following conditions must be met for the CLF probe to function properly:**

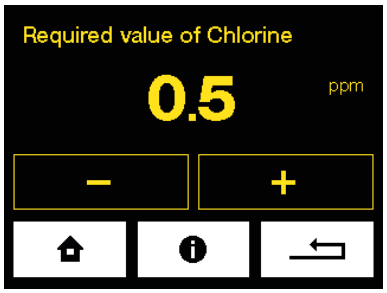
## pH of pool water

**The ideal pH of pool water should be 7.0.**
**The pH value of the pool water must be stable.**
If the pH value fluctuates, the chlorine value in the pool water also changes.

## Required chlorine value

| Chlorine content mg/l | Water temperature |
|---|---|
| 0,3 – 0,5 | 24 – 26 °C |
| 0,5 – 0,8 | 26 – 32 °C |
| 0,8 - 1 | Higher than 32 °C |

The table shows the recommended chlorine levels in pool water. The required chlorine content varies with the temperature of your pool water and should never be lower than 0.3 mg/l.




## Procedure for setting the required chlorine value

Use a photometer to measure the chlorine value in a sample of the pool water.
**If the required chlorine concentration in the pool water (measured with a photometer) is:**

- **MATCHES** to the value on the ASIN AQUA display, your device is ready to maintain the desired chlorine concentration in the pool water.
- **LOWER** than the value required on the ASIN AQUA display, increase the required value by 0.1 to 0.2 mg/l (regardless of the required value according to the table) compared to the current disinfection setting.

After mixing the pool and stabilizing the required value on the ASIN AQUA display, repeat the measurement.

Repeat the procedure until the chlorine concentration in the pool water corresponds to the actual required value, then set the correct required value according to the table. You can then calibrate the CLF probe (see the Calibration of the CLF probe section).

- **HIGHER** than the desired value on the ASIN AQUA display, you can calibrate the CLF probe (see the Calibrating the CLF probe section).

**WARNING:**

Resolve low chlorine levels in the pool water by increasing the required disinfection value.

**RECOMMENDATION:**

Check the chlorine content of the pool water once a week using a photometer or tester.

# If you have a Redox probe

**For the REDOX probe to work properly,**
**the following conditions must be met:**

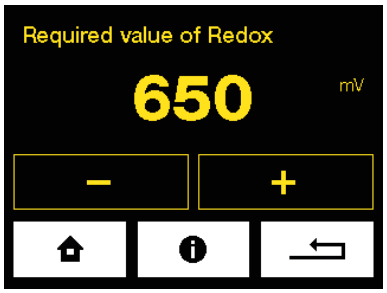
## pH of pool water

**The ideal pH of pool water is 7.0**
**The pH value of the pool water must be stable.**
If the pH value fluctuates, the Redox value in the pool water also changes.

## Required chlorine value

| Chlorine content mg/l | Water temperature |
|---|---|
| 0,3 – 0,5 | 24 – 26 °C |
| 0,5 – 0,8 | 26 – 32 °C |
| 0,8 - 1 | Higher than 32 °C |

The table shows the recommended chlorine levels in pool water. The required chlorine content varies with the temperature of your pool water and should never be lower than 0.3 mg/l.




## Procedure for setting the desired Redox value

Set the desired **REDOX** value to 650 mV.

Use the tester to check that **the chlorine content in the pool water is between 0.5 and 1.2 mg/l.**

## Wait 24 hours for the probe to stabilize.

## Fine-tuning

Use a photometer to measure the chlorine value in a sample of pool water.

- If the chlorine value in the pool water is **CORRESPONDING**, your ASIN AQUA is ready to maintain the desired chlorine concentration in the pool water.
- If the chlorine value in the pool water is **LOW**, increase the the desired REDOX mV value in the menu.
- If the chlorine value in the pool water is **HIGH**, decrease the the desired REDOX mV value in the menu.

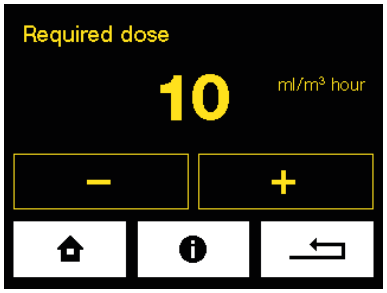
**Every 10 mV corresponds to approximately 0.1 mg/l of chlorine in the pool water.**

**EXAMPLE:**

The chlorine value in the pool water is 0.3 mg/l, the value shown on the display is 650 mV. If you want to have a chlorine value of 0.5 mg/l, you must increase the set redox value by 20 mV to 670 mV.

**NOTE:**

The relationship between the redox potential and the chlorine content in the pool water cannot be determined using a precise table. The correct redox value must be determined by repeated control measurements.



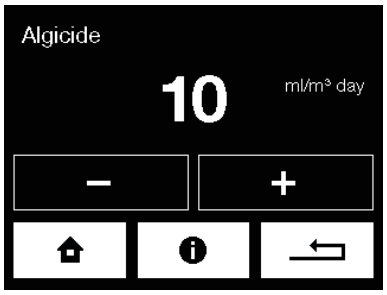

# If using a time-based dosage without a probe

Your ASIN AQUA is installed, connected to the pool water, injection valves, and pool chemicals.

- For chlorine disinfection dosing, set the desired value to 5 ml/m³ per hour.
- Set the desired pH value to 7.0.

**Fine-tuning**

- Use the Aseko manual tester to measure the chlorine value in a sample of pool water taken from your pool.
- Increase or decrease the set dose as needed.




## FLOC+C settings (ASIN AQUA Net+)

The FLOC+C dose depends on the amount of circulating water that flows through your filtration system per hour. Set the FLOC+C dose according to the capacity of your circulation pump (in m³ per hour). For most domestic pools, this value ranges between 10 and 40 ml per hour.

# Operational measurement and calibration

**The pH probe can be calibrated within a pH range of 6.2 to 7.8.**

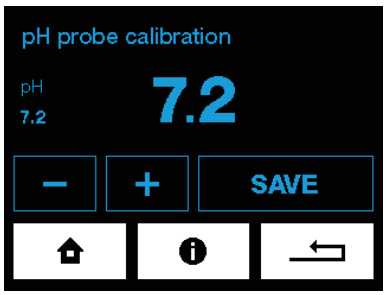
**The pH probe cannot be calibrated if the LOW or HIGH warning (low or high probe signal) is displayed.**

## Calibration of the pH probe

During operation, there may be a difference between the pH value displayed by the ASIN AQUA device and the actual pH value measured directly in the water. Calibration can be performed in two ways:

### 1. Using a buffer

Close the water supply to the probes. Remove the probe from the ASIN AQUA: rinse the probe with clean water and wipe it dry. The probe must remain connected to the device via the cable. Immerse the probe in calibration buffer 7.0 and, once the value has stabilized, enter this value into the ASIN AQUA on the "pH probe calibration" screen.

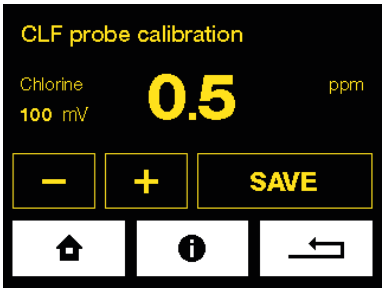



### 2. By measuring the value with a photometer

- **The water supply to the probes must be open**
- Measure the pH value directly in the pool water using a colorimeter.
- Enter the value obtained in this way into ASIN AQUA on the "pH probe calibration" screen. Calibration can be performed within a range of 6.2 - 7.8.

**Warning**: be careful not to dispense automatically during manual measurement or immediately before taking a pool water sample.

## Calibrating the CLF probe




**Do not calibrate the probe** until the water in the pool is thoroughly mixed and the value **on the ASIN AQUA display is stable.**

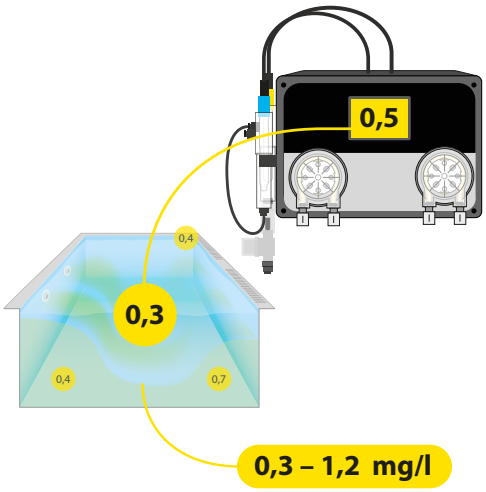
**This may take several hours.**

Calibration is performed by entering the manually measured chlorine concentration value (using a photometer) in the CALIBRATION menu.



Pool Lab photometer
# 13076

If the difference between **the value measured by** the photometer and the value shown **on the display is less** than **0.2 mg/liter,** calibration is not necessary.



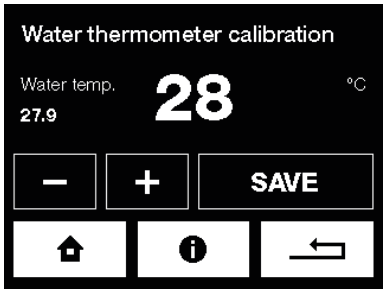

Calibration is best performed when the chlorine concentration in the pool water is between **0.3 - 1.2 mg/l.**

**It is necessary to calibrate to a value equal to or greater than the required chlorine value in the pool water.**

### Calibration limitations

The CLF probe cannot be calibrated if **the**output signal is less than 20 mV.

The CLF probe can only be calibrated in the CL range **from 0.3 to 5.0 mg/l**.




## Calibrating the water thermometer

If the water temperature differs from the temperature displayed by ASIN AQUA, the thermometer can be calibrated in the water thermometer calibration menu.

# Probe test

## pH probe test

The pH probe can be declared functional if it meets the following criteria:

- it is not visibly mechanically damaged
- the measured pH value is within a tolerance of ± 1.0 of the measured value.

Example: the pH of the water is 7.2 and the probe measures 7.9 the tolerance is 0.7, which is less than the permitted 1.0 the probe is OK

- the probe reacts to positive and negative changes in the pH of the water or buffer

**Example:** if we insert a probe with a clean tip into a buffer with a pH of 7.0, the probe must respond to 90% of the range within 1 minute.

pH - Buffer 7.00 #12065




## REDOX probe test

The Redox probe can be declared functional if it meets the following criteria:

- it is not visibly mechanically damaged
- The redox probe ages naturally, so its sensitivity decreases, but it should never fall below a certain limit. The permissible deviation is 15 mV; when tested with a buffer of 650 mV, it should not show less than a minimum of 635 mV
- the probe reacts to both positive and negative changes in the free chlorine content of the water

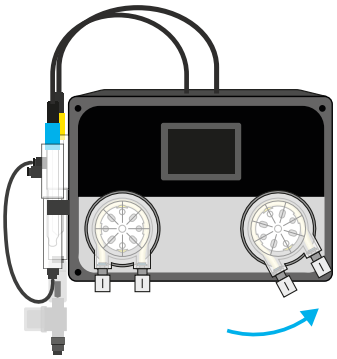
Redox buffer 650 mV #12091




**No manufacturer of pH and redox probes provides a warranty. However, ASEKO has decided to provide its customers with a two-year warranty on probes purchased together with the device, during which you are entitled to free repair of probes if they show deviations greater than those specified above.**

## CLF probe test

At a free chlorine concentration of 0.8 mg/l, the normal signal output from the free chlorine probe should be approximately 80 mV. If the signal at this concentration is lower than 30 mV, it suggests that there may be an issue either with the water quality or with the probe itself. In such cases, please consult the CLF probe manual and follow the recommended troubleshooting procedures to further verify the probe's performance test using clean water that has been left to stand for 24 hours, ensuring it is free of chlorine. In this scenario, the signal should not be above 10 mV. If the signal exceeds this value, the probe may be faulty.



# Maintenance of ASIN AQUA

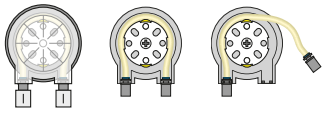
To ensure optimal performance, ASIN AQUA requires regular visual inspection and maintenance. The table on the next page shows the schedule and recommended maintenance steps.

## Replacing the pump hose

To prevent pump failure, we recommend replacing the hose every 24 months.

**Replacement is carried out as follows:**

- Turn off the ASIN AQUA by unplugging the power cord
- Turn the pump cartridge counterclockwise and remove it from the ASIN AQUA
- Loosen both ends of the hose and remove it from the cartridge
- Lubricate the new hose with the special grease provided
- Insert the lubricated hose back into the cartridge
- Replace the cartridge on the ASIN AQUA and secure it by turning it clockwise



#12073 Replacement hose for PP60



#12005 Injection valve



#13087 Replacement tube (rubber band) for the injection valve



## Maintenance of injection valves

Regularly check the injection valves for blockages, ensure that the rubber seals are intact, and remove any limescale.

For private pools, replace the rubber seals of the spray valves every 2 years. For public pools, replace them every year.

## Probe maintenance

Remove the probe from the ASIN AQUA well and clean it of any dirt.

Follow the instructions for the probe used.

## Flow detector with filter

Rinse the flow detector strainer regularly.

# ASIN AQUA Net internet connection

The LAN connector connects to your home router. Data is sent every 10 seconds to pool.aseko.com; the path must not be blocked by a firewall.

**Data consumption** approx. 0.1 GB per month.

Connecting ASIN AQUA Net to your network is not complicated, but it does require basic IT knowledge. If you do not have experience with network setup, it is better to invite an IT specialist to connect it.

## Internet connection options

### Home network

Connect ASIN AQUA Net directly to your router using a LAN cable.

### Mobile network

If you do not have direct access to the internet via Wi-Fi or a local network, you can connect ASIN AQUA Net to a mobile data network using a 3G/LTE router.

### Wi-Fi connection

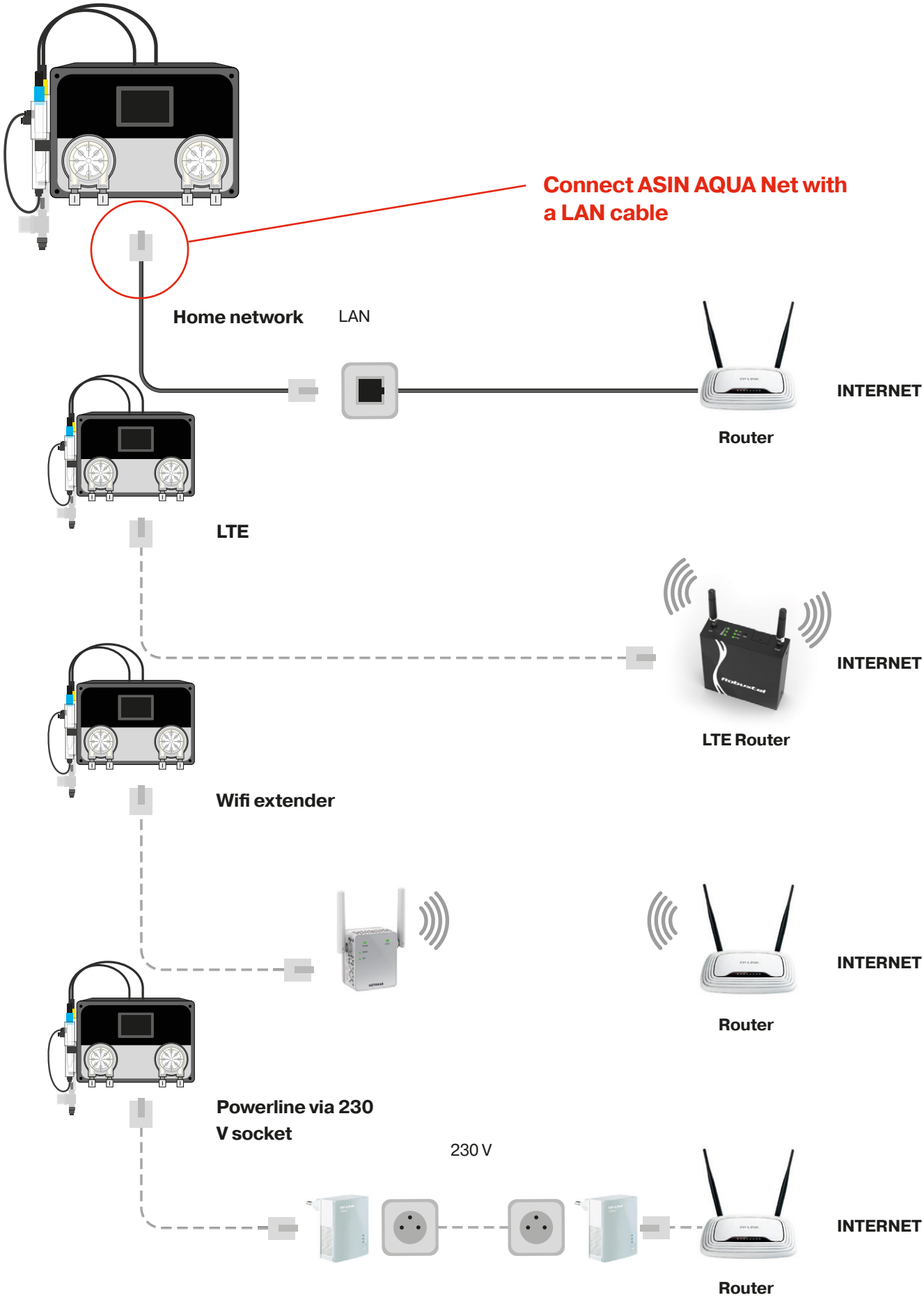
You can connect ASIN AQUA Net to your wireless network using a Wi-Fi extender.

### Connect to a 230V power supply

If the ASIN AQUA Net is installed in a location that is not within range of your local network or Wi-Fi, but you are using the same electrical distribution board operating on the same phase as your household, you can connect to your local network using a 230V Powerline adapter.

### If you have connection problems:

Please turn off ASIN AQUA Net. Restart your router and turn ASIN AQUA Net back on. Your home network must be open for communication on both sides for the URL: **pool.aseko.com**


Connect ASIN AQUA Net with a LAN cable
Home network
LAN
INTERNET
Router
LTE
INTERNET
LTE Router
Wifi extender
INTERNET
Router
Powerline via 230 V socket
230 V
INTERNET
Router

# Aseko Web Services

The ASIN AQUA Net can be connected to the internet using the integrated LAN adapter. You can easily monitor data from your pool at: aseko.cloud or using the Aseko Live app.

## Aseko Live App

An iOS and Android smartphone app that gives you an overview of the status of your pool wherever you are connected to the internet. ASIN AQUA Net automatically sends a warning message to your smartphone if one of the selected limit values is exceeded or if a system error occurs. You can easily check the amount of chemicals in the canisters to order new chemicals in time.



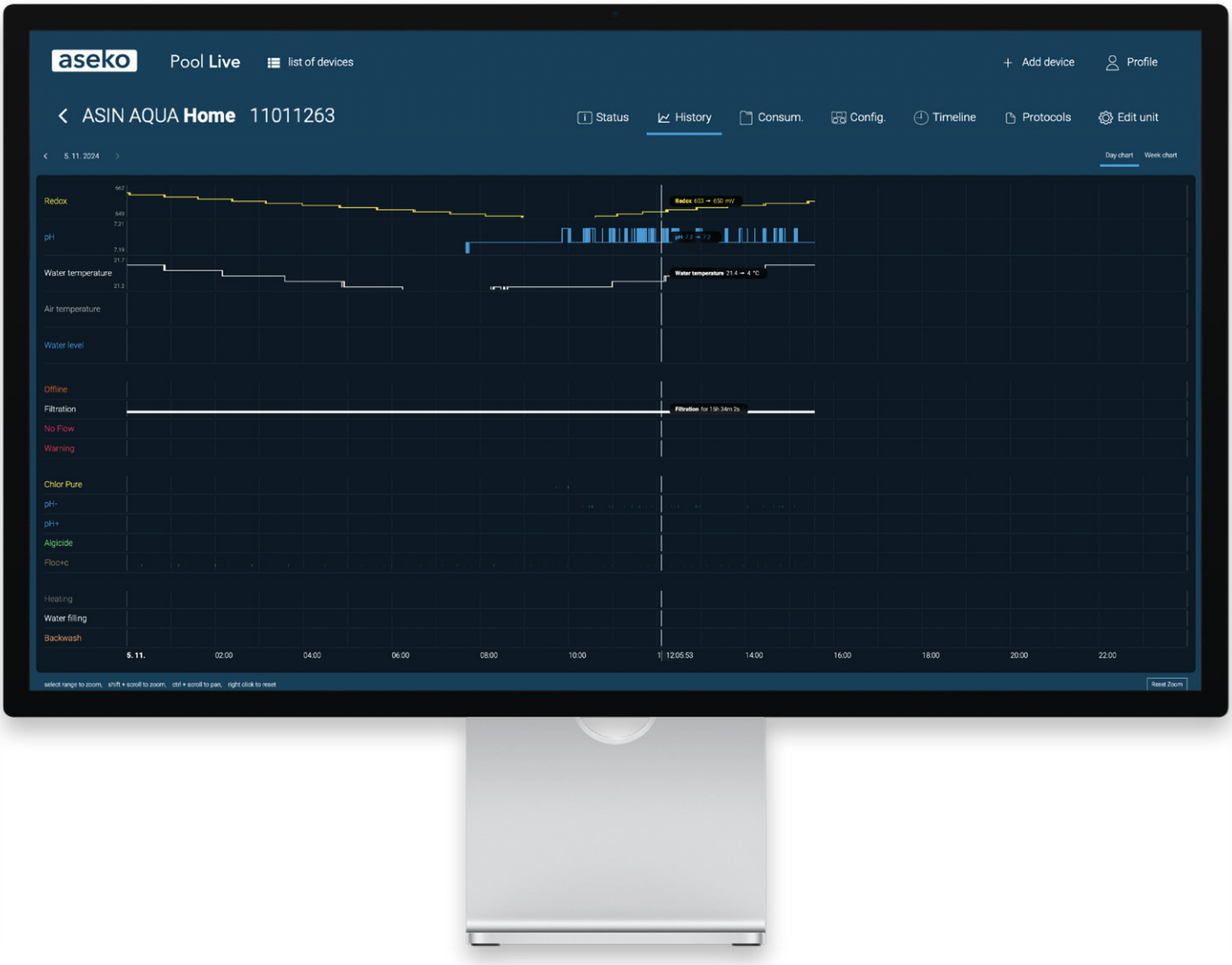

Aseko Live **for iOS**

Aseko Live **for Android**

## http://aseko.cloud

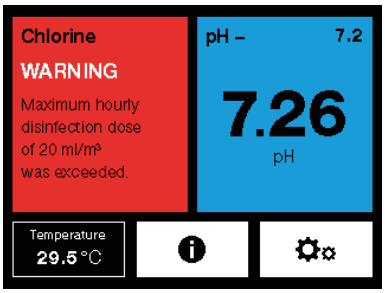
A web application for detailed monitoring of pool water quality using clear graphs. It displays all measured parameters and ASIN AQUA Net interventions up to 30 days back.

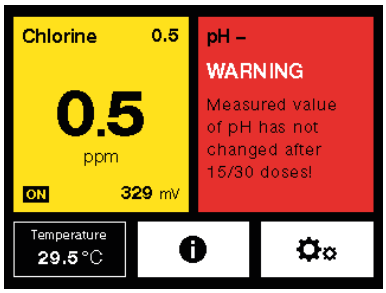
This application provides detailed information about the condition of the pool and a detailed overview of all events, operations performed, and the level of monitored items up to 30 days back. The clear bar chart environment provides quick information and a simple overview of the interrelationships between the monitored values. You can log in using the device serial number or through a simple registration process, where you can set up multiple measuring devices.



# ASIN AQUA error messages

The maximum hourly disinfection dose of 20 ml/m² of³ per hour was exceeded without the target value being achieved.




After 15/30 doses of the liquid, the pH did not change to the desired value!

## These error messages appear when:

### Reagent has run out.

- Check the disinfection and pH levels regularly and refill in good time. The concentration of chlorine disinfectant is 15 to 20%. Chlorine disinfectant loses its effectiveness over time and when exposed to direct sunlight.

### The dosing pump does not dose.

- Leaky or damaged hose connections.
- The injection valve is blocked. Check whether the valve is clogged with dirt or deposits or whether the rubber seal is damaged.
- Dosing pump malfunction. Check whether the pump is rotating. If so, check the hose inside the pump for damage or cracks and replace it if necessary.

### The injection valve is clogged.

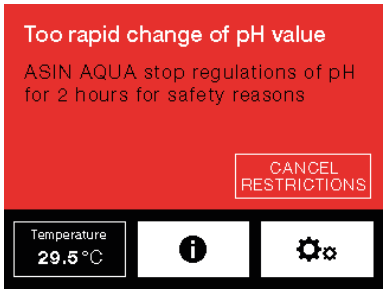
- The injection valve is blocked. Check whether the valve is clogged with dirt or deposits or whether the rubber seal is damaged.
- Dosing pump malfunction. Check whether the pump is rotating.
- If it is, check the hose inside the pump for damage or cracks and replace it if necessary.

### No water is flowing to the probes

- Check the condition of the connecting hoses from the sampling fitting to the probe inlet.
- Check the condition of the sampling fitting and its seal to ensure that it is not clogged and that it is not in the closed position.

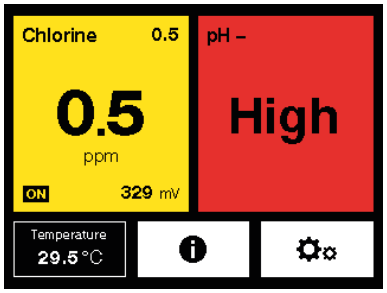
### The probe is not working

- Measure the free chlorine concentration and pH with a handheld tester. If the chlorine concentration is too high or the pH value is too low, the relevant reagent has been overdosed due to a malfunction of the probe (assuming that other reasons mentioned in the previous points have been ruled out).
- Remove the probe and check for mechanical damage.
- Clean the probe using the procedure described above.
- It is important to check the probe regularly using a buffer solution or a pool photometer. If the probe is not functioning properly, it needs to be replaced.



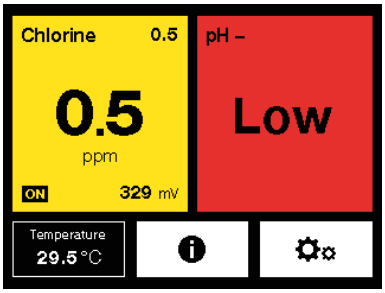

## Too rapid change in pH

A pH change that is too rapid is usually caused by heavy rain, the addition of a large amount of water, or extreme pool load. If this situation occurs, ASIN AQUA will stop regulating for two hours. This restriction can be manually disabled. Once the pH has stabilized or after two hours, ASIN AQUA will return to normal mode.



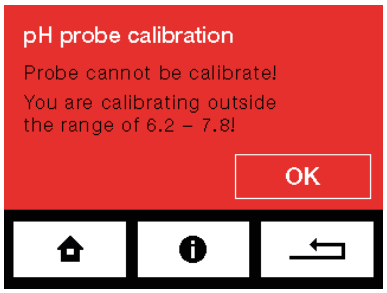

## The probe shows pH > 9

Check the pool water and the probe.




## The probe shows pH < 4

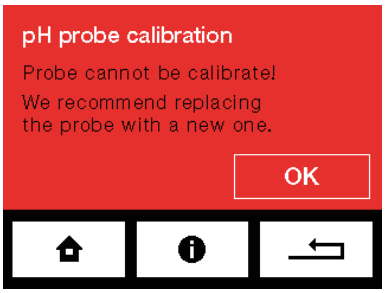
Check the pool water and the probe.




## pH calibration outside the range 6.2 - 7.8

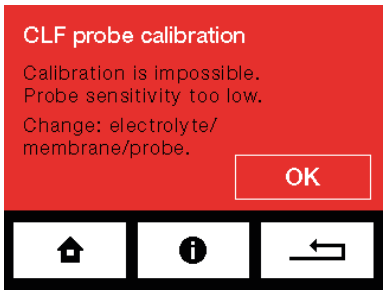
If the pH value in the pool water is outside the range of 6.2 - 7.8, the probe cannot be calibrated.

Adjust the pH of the pool water or use a pH 7.0 buffer.



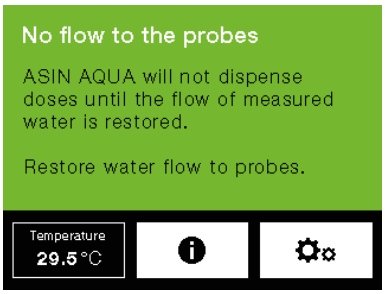

## The probe cannot be calibrated

If the difference between the manually measured value and the currently displayed pH value is greater than 1.0, we recommend replacing the probe with a new one.




## Calibrating the CLF probe

Calibration is not possible! The probe sensitivity is too low. Replace the electrolyte/membrane/probe.

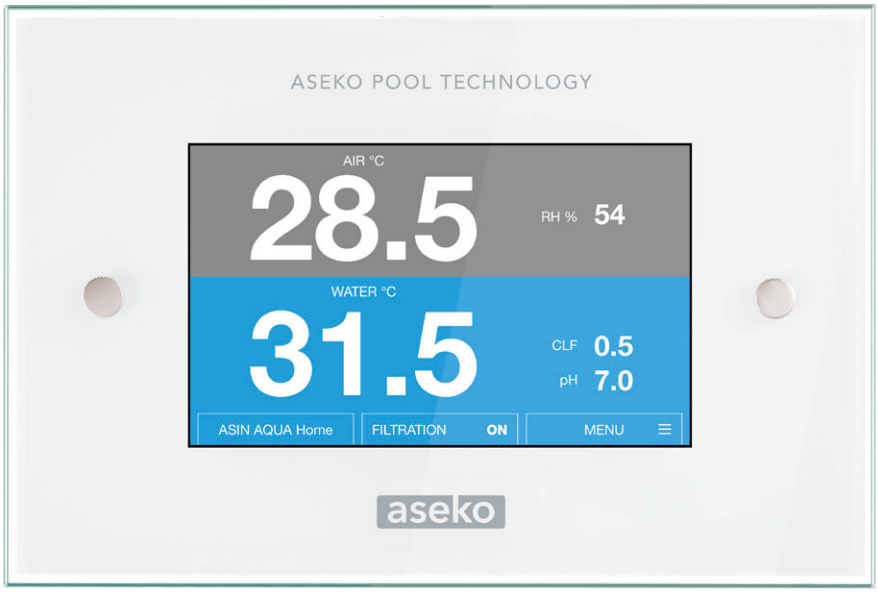



## No flow

There is no flow to the probes.

# ASIN AQUA Net External touchscreen display

Displays measured pool water values, humidity, and air temperature. Allows you to set the disinfection level and pH. Simply touch the screen to select which parameters you want the display to show.




External touchscreen display #12048

aseko

USER MANUAL

# ASIN AQUA **Net** a **Net+**

Manufacturer: ASEKO, spol. s r.o.
Vídeňská 340, 252 50 Vestec u Prahy, CZ40766471

EN

www.asekopool.com