aseko

USER'S MANUAL EN

ASIN AQUA PRO

2025

PROFESSIONAL POOL MANAGEMENT SYSTEM FOR PUBLIC AND PRIVATE POOLS



www.asekopool.com



General safety information

This user manual contains basic information that should be observed during assembly, start-up, operation, and maintenance. Therefore, this user manual must be read by installers and operators prior to assembly and start/up, and must be accessible to every user of this unit. Additionally, all further safety information in this document must be observed. Read and follow all instructions. In order to minimize the danger of injury, do not allow children to use this product. Non-compliance with safety information can result in hazards to persons, the environment and the equipment. Non-compliance with safety information will result in a forfeit of any potential right to damage compensation.

Insufficient personnel qualification

Hazards in the event of insufficiently qualified personnel, potential consequence: Injury, heavy material damage.

- The system operator must ensure compliance with the required qualification level.
- Any and all work may only be performed by correspondingly qualified personnel.
- Access to the system must be prevented for insufficiently qualified persons, e.g. via access codes and passwords.

Potential overdosing of chemical agents

Despite ASIN AQUA Pro comprehensive safety functions, it is possible that a probe failure and other errors could lead to an overdosing of chemical agents. Potential consequence: Injury, heavy material damage.

- Design your installation such that uncontrolled dosage is not possible in the event of a probe failure or other errors, and/or such that uncontrolled dosage is recognized and halted before damage is incurred.
- Uncontrolled overdose of chemicals can cause harm to health and property. Even though the device contains a number of security elements can not be ruled out that in case of failure of the measuring probes, or the whole device may result in overdose of chemical agents. Install the equipment so that uncontrolled overdose of chemicals was not possible and that uncontrolled overdose has been detected in time before causing any harm. It is necessary to use chemicals in such quantities that an overdose will not cause dangerous concentration of chemical agents. Do not use chemicals in too large packages or with too high concentration.

Gaseous chlorine produced from dosing in standing water if dosing outputs are not closed via the filter pump

If the flow switch is stuck or experiences another error, there is a risk of dosing into standing water. Poisonous chlorine gas can be yielded when sodium hypochlorite and pH minus come together.

Non compliance with informational text

Not observing informational text may lead to hazards. Potential consequence: gravest degree of injury, heavy material damage.

- Read all informational text carefully.
- Cancel the process if you are unable to exclude all potential hazards.

Use of new functions

Because of the continued development, a ASIN AQUA Pro unit may contain functions, which are not completely described in this version of the user manual. The use of such new or extended functions without a profound and secure understanding by the operator may result in malfunctions and severe problems. Potential consequence: Injury, heavy material damage.

- Make sure to get a profound and secure understanding of a function and relevant boundary conditions, before you start to use it.
- Check for an updated version of the user manual or additional documentation available for the relevant functions: **http://manuals.asekopool.com**
- Make use of the integrated help function of the ASIN AQUA Pro to get detailed information on functions and their parameter settings.
- In case it is not be possible to get a profound and secure understanding of a function based on the available documentation, do not use this function.

Overdosing if pH value is wrong

If disinfection is enabled before the pH value is stable in the ideal range of 6.8 to 7.5, then it may lead to heavy overdosing of chlorine or bromine. Potential consequence: Injury, heavy material damage.

- **Do not start disinfection with chlorine until the pH value is stable in the ideal range between 6.8 and 7.5.**

Conditions before using

Make sure you have a newest and updated version of the user manual and other documentation for all functions of the unit. Use and read the integrated help features. In case of not understanding the information about certain features of the unit, do not use these features.

Handling chemicals for pool water treatment

The chemicals used with the ASIN AQUA Pro must be handled in a safe manner to prevent damage or personal harm. Aseko recommends you always use personal protective safety equipment when handling the pH and chlorine agents. Refer to the Materials Safety Data Sheet (MSDS).



Important notices for proper functioning.

WARNING:

Never mix pH and chlorine agents.
Always rinse tubes and valves with clean water during maintenance to prevent mixing.

Never use hydrochloric acid (HCl, muriatic acid, spirits of salt, hydronium chloride, chlorane).
HCl acid is fuming. Using a chemical based on HCl will cause damage to the device.

Never install the unit in unventilated technical shafts with high humidity, as this can severely damage electronic components, especially the display.Damage caused by high humidity will not be accepted as a warranty claim. If the ASIN AQUA Pro is in a high-humidity and low-temperature environment (e.g., garden house), keep the device permanently ON. This helps maintain a higher internal temperature, significantly reducing humidity inside the unit. The same applies when storing the unit during winter.

Installation must be protected by a residual current device (RCD).

The pool and pool technology must be properly grounded.

CLF Probe Calibration: Calibration can only be done when the pH is stable in the range of **6.8–7.5.**
After changing the electrolyte, wait at least **1 hour,** but ideally **24 hours,** to allow the signal to stabilize before proceeding with calibration.

Never use stabilizers with cyanuric acid in ASIN AQUA devices.
Cyanuric acid forms a chlorine-cyanurate complex, which rapidly decreases the disinfecting power of chlorine and makes it impossible to measure with a free chlorine probe. Be aware that some chlorine tablets contain cyanuric acid. Ensure there is no cyanuric acid in your pool.



ASIN AQUA Pro

ASIN AQUA Pro is the most advanced system for Pool Water Treatment and pool technology management of all types of pools with all types of technologies. The pool water disinfection with liquid chlorine dosing, electrolysis or gaseous chlorine controlled with unique ASEKO CLF Probe or by the redox probe long life. Precise pH regulation controlled with pH probe, dosing of Algaecide and Flocculant. Combination of these chemicals assure the crystal-clear pool water by use of the lowest necessary amount of chemical aids. The Pool Technology Management functions automate the operations of your pool and minimize the requirements for manual maintenance. The touchscreen shows all information about water quality and allows easy setup of the entire system. With internet connectivity, you can monitor your pool with Aseko Live App and aseko.cloud or web application and control the system remotely with the Aseko Remote app.

MAX POOL VOLUME
2000 m³





Pool water treatment

Precise dosing algorithm. Control of external dosing pumps.

Chlorine control

Through an extremely precise measurement of the chlorine content in the pool water using an ASEKO CLF-free chlorine membrane probe and Redox probe Long Life in together with the digital intelligence of the system, ASIN AQUA Pro is able to carry out a highly effective disinfection treatment of the pool water using any type of technology – liquid chlorine, salt water electrolysis, gaseous chlorine. Optional total (bounded) chlorine measurement.

pH control

Acurrate measuring by pH probe long-life in combination with the dosing algorithm assures the required water quality. Dosing of pH MINUS or pH PLUS.

Never use hydrochloric acid

(HCl, muriatic acid, spirits of salt, hydronium chloride, chlorane). HCl acid is fuming. Using a chemical based on HCl will cause damage to the device.

ALGICIDE

The effective polymeric biocide protects water against algae, fungi, moulds and bacteria.

FLOC+C

FLOC+C contains flocculation and coagulation components. Its continual dosing improves filtration capability of removing even the smallest impurities.

Filter Sanitization

Optional filter pump disinfection for sanitizing the filter during backwash using liquid chlorine.

Pool technology management

Filtration Time Control

Daily, automatic start of the filtration system in 4 individually pre-set periods.

Water Level - Refilling

Water level can be monitored by optional **level sensor**. System can be programmed to control four different water levels at your pool and switch the water refilling or automatically use the excessive water for filter backwash.

Filter Backwash

The system can control the filter backwash time interval and periods this function requires an optional **5-way Besgo valve**.

Filter disinfection

ASIN AQUA Pro disinfects the filtration system during filter backwash.

Smart Heating Control

The system is equipped by intelligent control of pre-set water temperature. It can switch and control the heating (**solar heating, electrical heating, gas heating, heat exchanger**) by logic of integrated smart heating functions.

Winter mode

The Winter mode ensures the pool remains at a safe temperature during cold weather conditions.

Variable speed pump control (VS pump)

In the settings, select the type of your variable speed pump. ASIN Aqua allows to use 4 speeds:
Speed 0 (OFF)
Speed 1 (LOW)
Speed 2 (MEDIUM)
Speed 3 (HIGH)

Switching BOTTOM / OVERFLOW

The ASIN AQUA Pro system allows you to precisely configure whether you want to use the overflow or bottom drain in your pool. In auto mode, there are four periods where you can individually select BOTTOM or OVERFLOW for each period.

The pool cover does not affect the BOTTOM / OVERFLOW switching.

During filter backwashing, water flows through the BOTTOM DRAIN.

In case of an alarm LEVEL TOO HIGH the flow will be switched to OVERFLOW until the alarm level expires.

This function requires optional **3-way Besgo valve.**

Pool cover position (relay closed)

If the pool cover is closed during the set TIMER times, the speed of the VS pump will automatically change to 1 (LOW).

Control by External touch display

ASIN AQUA Pro can be monitored and controled by external touch display this function requires an optional **External touch display.**

Mode settings

Six adjustable automatic modes for easy pool control.

Programmable relays

ASIN AQUA Pro has one integrated programmable relay to control an extra accessory. Also brings the possibility to connect optional **RL module** (relay module) to connect 4 extra relays.

Solar heating control

ASIN AQUA Pro monitors the temperature of solar panels. When solar panels reach a set threshold, the water is automatically redirected to the solar panels. This function requires an optional **4-way Besgo valve**.

What is in the box

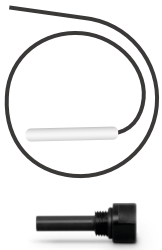
ASIN AQUA Pro



Probe holder for 4 probes
#13013

Flow detector with filter
#12106

Water thermometer PT1000
with holder
#13066



CLF probe
#12052



REDOX probe Long Life
#12016



pH probe Long Life
#12012



Measuring water valve 2 pcs
#12006



PE Tube 1/4 (6,35mm) 15m
transparent #13277



Mounting rail
#13430



Dowels and screws
#12125



Optional accessories

Injection valve
#12005



Injection manifold d50/DN63
4x 1/4“ #13395



Suction kit for 20l canister
#13415



Coagulation mixer d 50, L 195 mm
#30001



CLT probe – OPTIONAL
#12079



Optional accessories

PP10 PRO (12V) 0,6 l/h
#13263
PP60 PRO (12 V) 3,6l/h
#12053



Membrane pump DDE-5l/h
#13265
Membrane pump DDE-5l/h pH+
#13266



Membrane pump DDE 7,5l/h
#13267
Membrane pump DDA 30l/h
#13222



External touch display
#12048



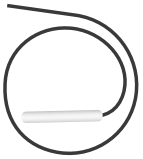
#13364
FlowVis d63mm flow meter
with non-return valve



Electronics set for connecting
FlowVis flowmeter
#13365



Air / Solar thermometer
#13193



RL Module
#13065



Inserting DN50 plug
1/4” threaded #12134



Level sensor (pressure-type)
#12086



Digital Photometer Aseko
#13449



pH 7.00 Buffer #12065
Redox Buffer #12091



BESGO 5-way
#83103
BACKWASH



BESGO 3-way
#83130
OVER /BOTTOM



BESGO 4-way
#83150
SOLAR



Filter pressure meter
#13426



ASEKO original chemicals

20 l or 5 l volume

CHLORPURE #12075



pH MINUS #12130



pH PLUS #12120



ALGICID #12156



FLOC+C #12139



Package 10 kg

BALANCER #13345



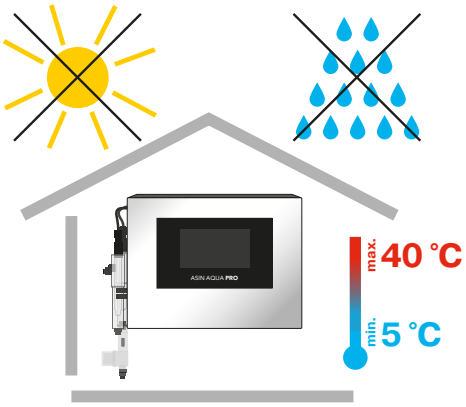
MAGNESIUM #13346



Bottle 1 kg

SUPER CHLOR #13120





ASIN AQUA Pro Installation

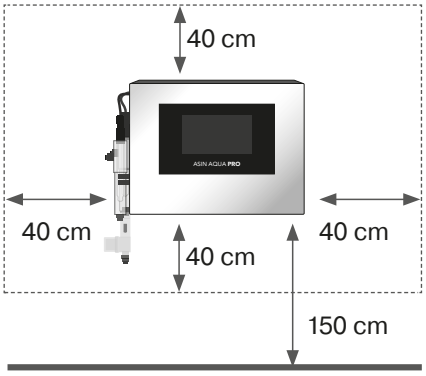
The ASIN AQUA Pro must be operated in indoor environment with a temperature range of +5 to +40 °C, and the relative humidity must not exceed 70 %. Direct sunlight, high humidity, and dust may damage the ASIN AQUA Pro.

- Before installing, ensure that pool water is chemically clean and without dirt.

Install the mounting rail and attach the ASIN AQUA Pro to the wall. Choose a location with a free space of at least 40 cm in all directions, and a height above the floor must not be higher than 150 cm.

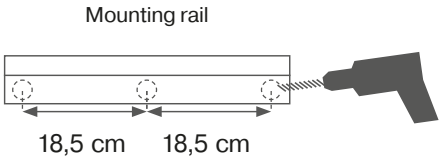
- The vertical distance between ASIN AQUA Pro and the bottom of containers must not exceed 2 m.
- The maximum distance from injection valves to peristaltic pumps must not exceed 8 m.

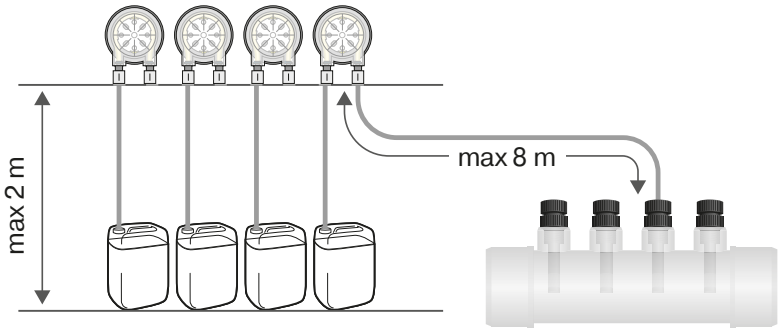
RECOMMENDATION: Install the ASIN AQUA Pro so that even in case of leakage of chemicals from the pumps or pipes, there is no damage to other equipment or spillage on the floor. Use drip trays.
Do not install any other devices under ASIN AQUA Pro.



WARNING:

Never install the unit in unventilated technical shafts with high humidity, as this can severely damage electronic components, especially the display.Damage caused by high humidity will not be accepted as a warranty claim. If the ASIN AQUA Pro is in a high-humidity and low-temperature environment (e.g., garden house), keep the device permanently ON. This helps maintain a higher internal temperature, significantly reducing humidity inside the unit. **The same applies when storing the unit during winter.**





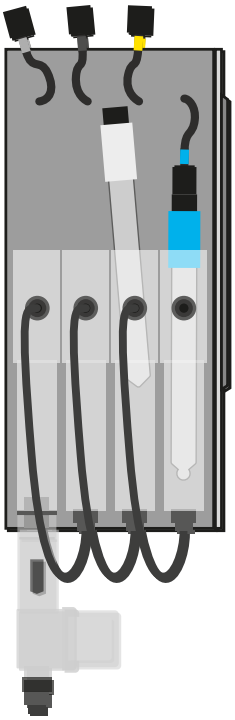
Installing the Probes

1. Carefully insert the pH, CLF and REDOX probe into the housing.
2. If you have the optional CLT probe insert it into the 4th probe housing.
3. Hand tighten or use the plastic wrench socket for probes.
4. To connect the probe tighten the connector on the probe connection cable.

After probes have been inserted, slightly tightened and connectors have been connected, ASIN AQUA Pro is ready for connection to the water system of your pool.

WARNING: Only hand tighten the probes or use the plastic wrench socket for probes. Do not use pliers or steel wrench.

Probe housing #13013



CLF probe #12052



REDOX probe Long Life #12016



pH probe Long Life #12012



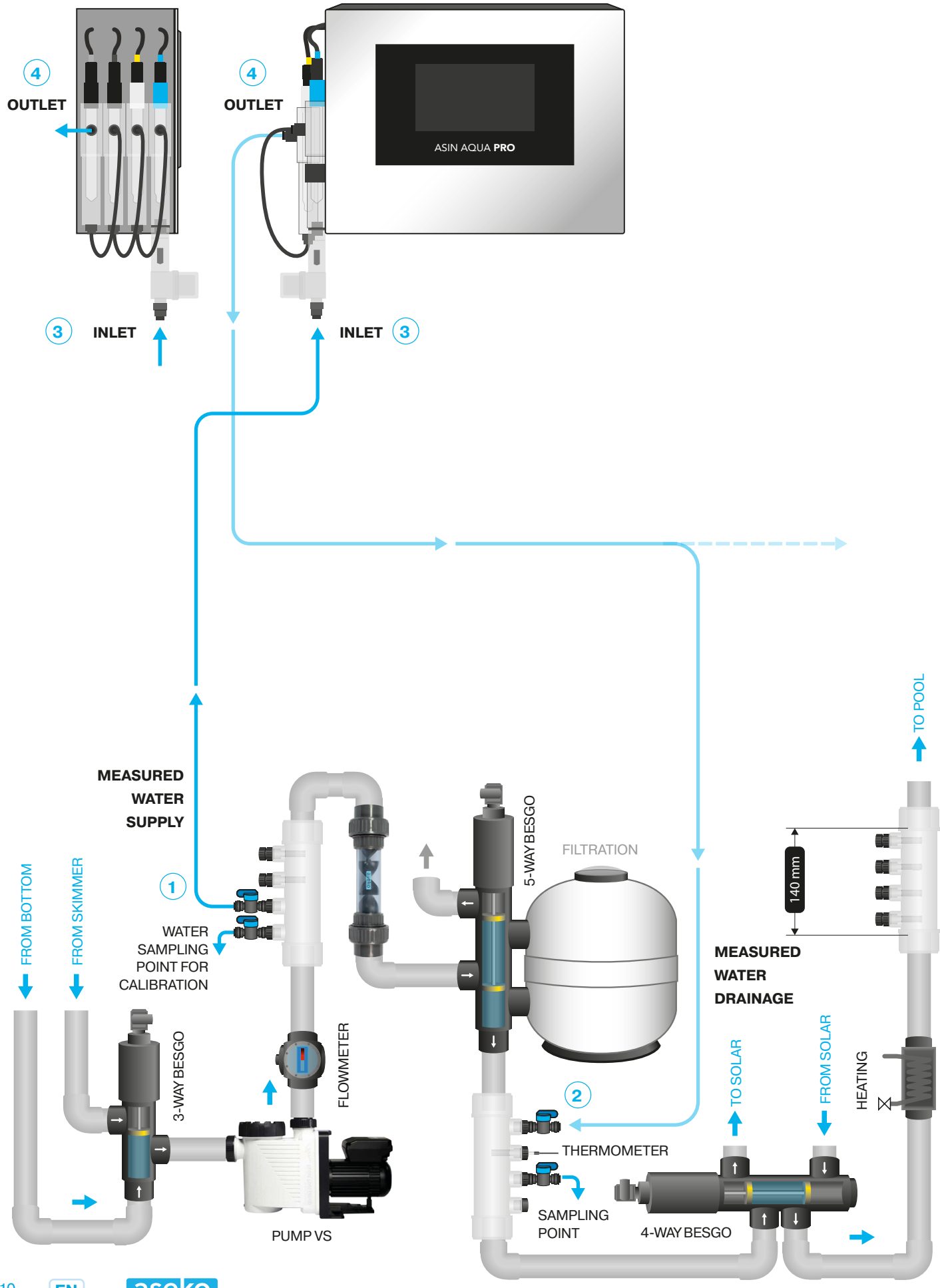
Probe wrench #13046



CLT probe for total chlorine (optional) #12079



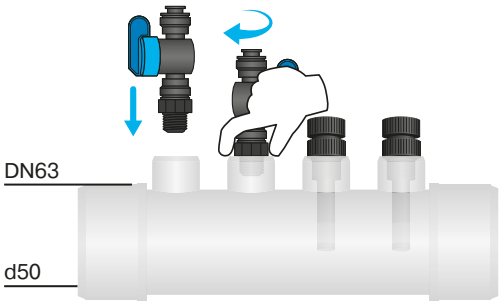
Pool Water Connection



Pool Water Connection

Screw the **measuring water valve** in the injection manifold 4x 1/4“.
Tighten the measuring water valve into the injection maninfold by hands only. Do not use pliers or other tools.

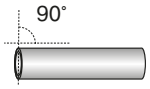
Measuring Water valve #12006



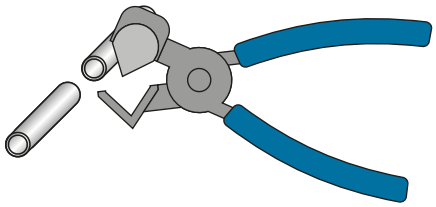
Injection manifold d50/DN63 4x 1/4“ #13395

1. Connect the **MEASURED WATER SUPPLY** to the pipe **behind the pump, and before the filter and before the coagulation mixer.**
2. Connect the **MEASURED WATER DRAINAGE** to the pipe **behind the filter** and behind the heating or into the overflow tank or skimmer.

To connect the measured water to the ASIN AQUA use PE tube 1/4 “(6.35 mm) #13277, which is part of the packaging.



PE tube 1/4 “(6.35 mm)



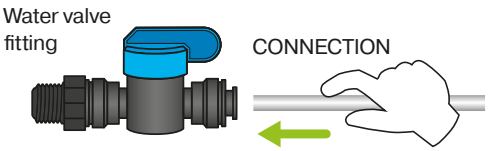
WARNING

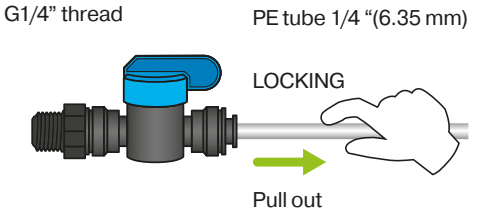
Cut the PE tube at an angle of 90 ˚ to ensure tight joints. The cut must be clean. Use special pliers #13325 to cut plastic tubes. Do not use common scissors or knives!

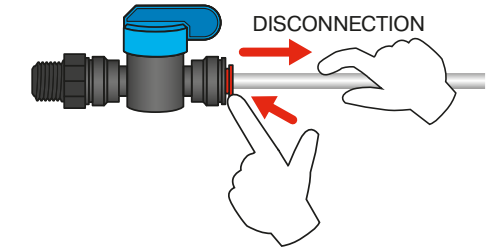
The measured water is easily connected to ASIN AQUA using the **Speedfit** push-in fitting.

CONNECTION Push the connecting pipe into the Speedfit fitting and pull out the hose to secure.

DISCONNECT push and hold the Speedfit round collet and pull out the connecting pipe.







3. **INLET** of the measured water to the ASIN AQUA
   Connect the tube to the bottom Speedfit of the measured water filter.
4. **OUTLET** of the measured water from ASIN AQUA
   Connect the tube to the side Speedfit on the probe housing.

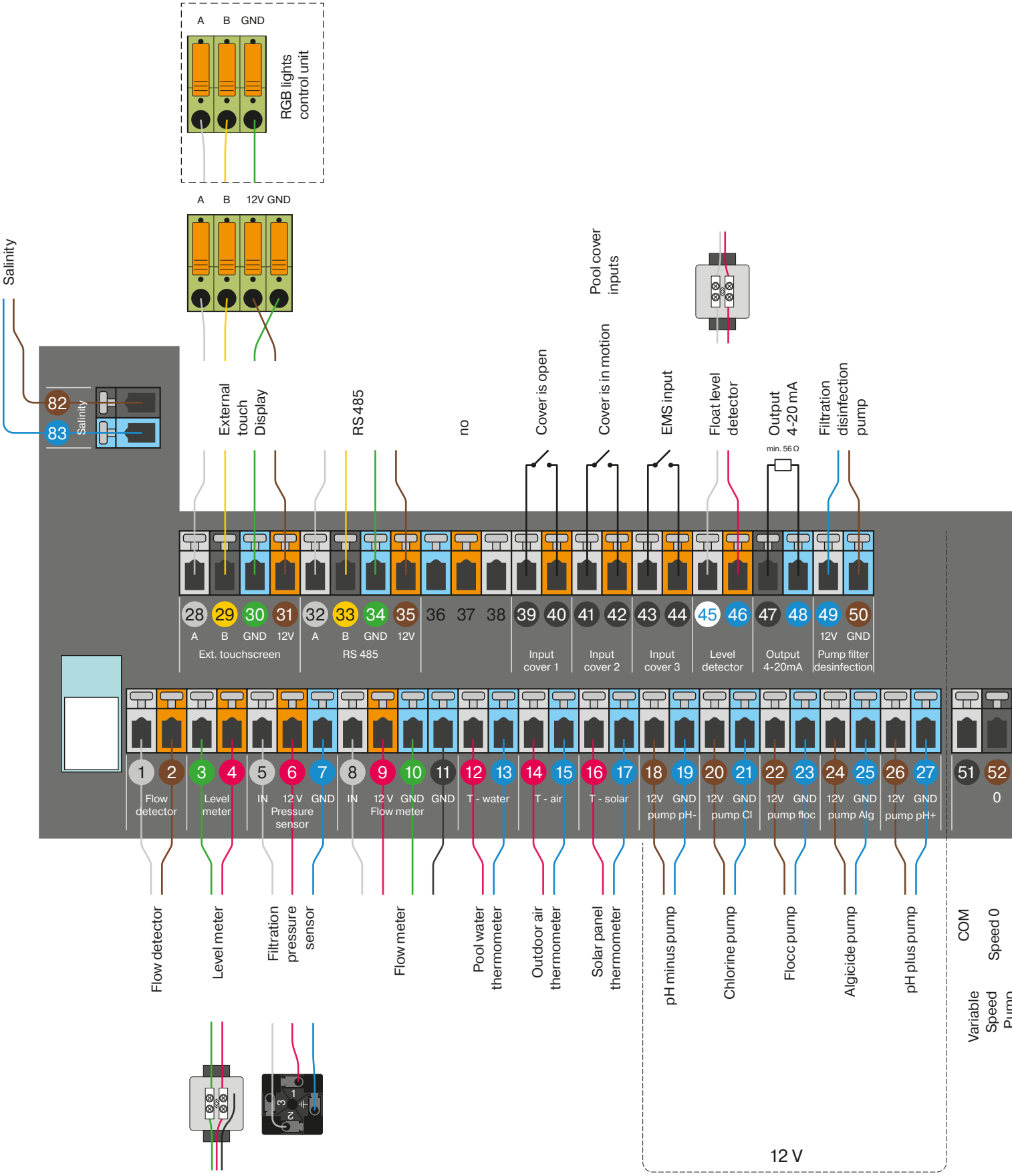
Once connected, ASIN AQUA is ready to measure disinfectant content and pH value in your pool.

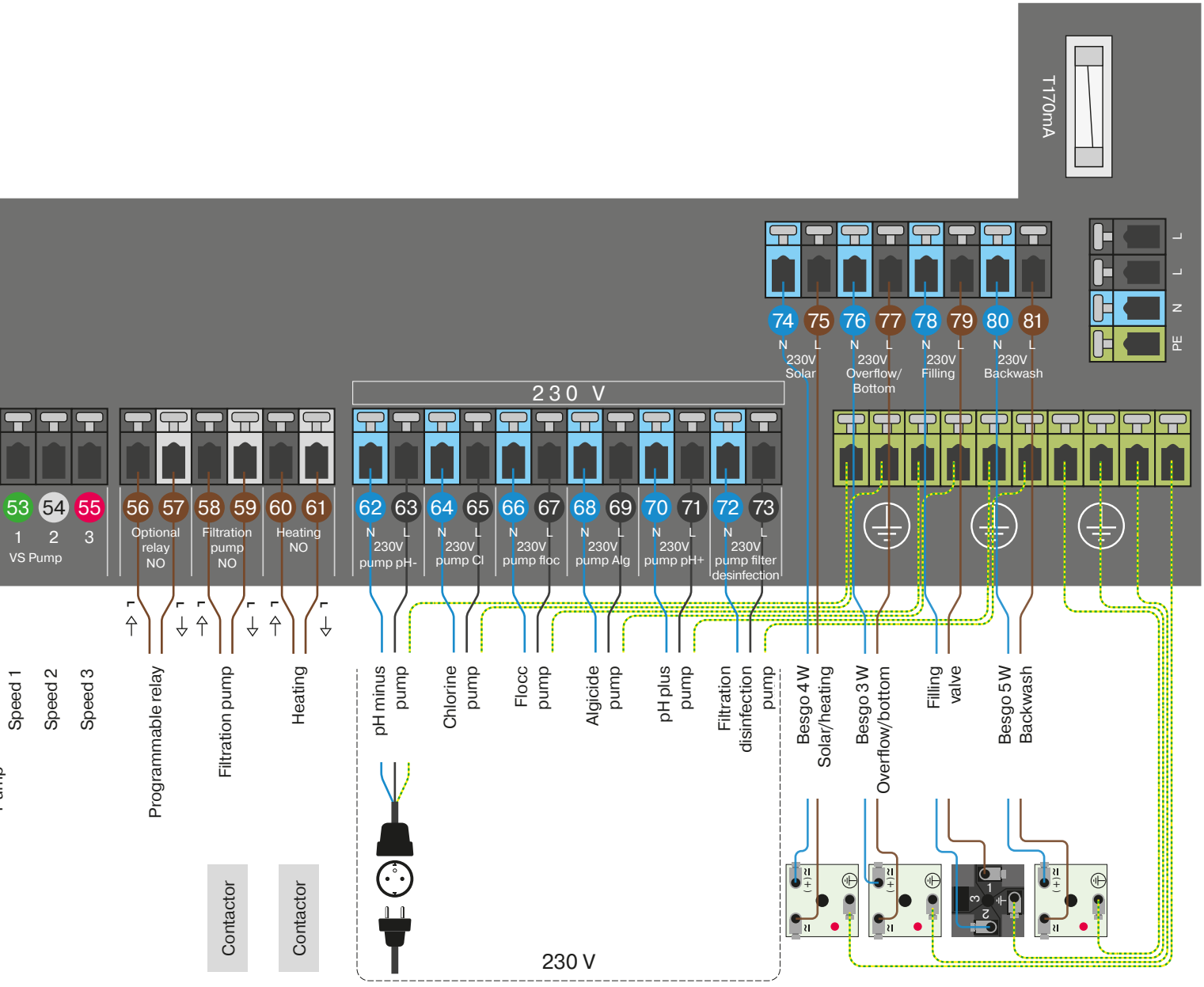
Place a Plug with 1/4” thread (#13082) on unused threads of Injection manifold.

WARNING

Do not connect water supply to probes after the filter and return before the pump. Negative pressure significantly affects measurement.

Connection


A B GND
RGB lights control unit
A B 12V GND
Salinity
82
83
Salinity
External touch Display
RS 485
no
Cover is open
Cover is in motion
Pool cover inputs
EMS input
Float level detector
Output 4-20 mA
min. 56 Ω
Filtration disinfection pump
28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
A B GND 12V A B GND 12V
Ext. touchscreen
RS 485
Input cover 1
Input cover 2
Input cover 3
Level detector
Output 4-20mA
12V GND
Pump filter desinfection
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 51 52
Flow detector
Level meter
IN 12 V GND
Pressure sensor
IN 12 V GND GND
Flow meter
T - water
T - air
T - solar
12V GND
pump pH-
12V GND
pump Cl
12V GND
pump floc
12V GND
pump Alg
12V GND
pump pH+
0
Flow detector
Level meter
Filtration pressure sensor
Flow meter
Pool water thermometer
Outdoor air thermometer
Solar panel thermometer
pH minus pump
Chlorine pump
Flocc pump
Algicide pump
pH plus pump
COM
Speed 0
Variable Speed Pump
12 V


T 170mA
74 75 76 77 78 79 80 81
N L N L N L N L
230V Solar
230V Overflow/ Bottom
230V Filling
230V Backwash
L L N PE
230 V
53 54 55
1 2 3
VS Pump
56 57 58 59 60 61
Optional relay NO
Filtration pump NO
Heating NO
62 63 64 65 66 67 68 69 70 71 72 73
N L
230V pump pH-
230V pump Cl
230V pump floc
230V pump Alg
230V pump pH+
230V pump filter desinfection
Speed 1
Speed 2
Speed 3
Programmable relay
Filtration pump
Heating
pH minus pump
Chlorine pump
Flocc pump
Algicide pump
pH plus pump
Filtration disinfection pump
Besgo 4W Solar/heating
Besgo 3W Overflow/bottom
Filling valve
Besgo 5W Backwash
Contactor
Contactor
230 V

Dosing pump connection

PP60 PRO 12V
#12053



PP10 PRO 12V
#13263



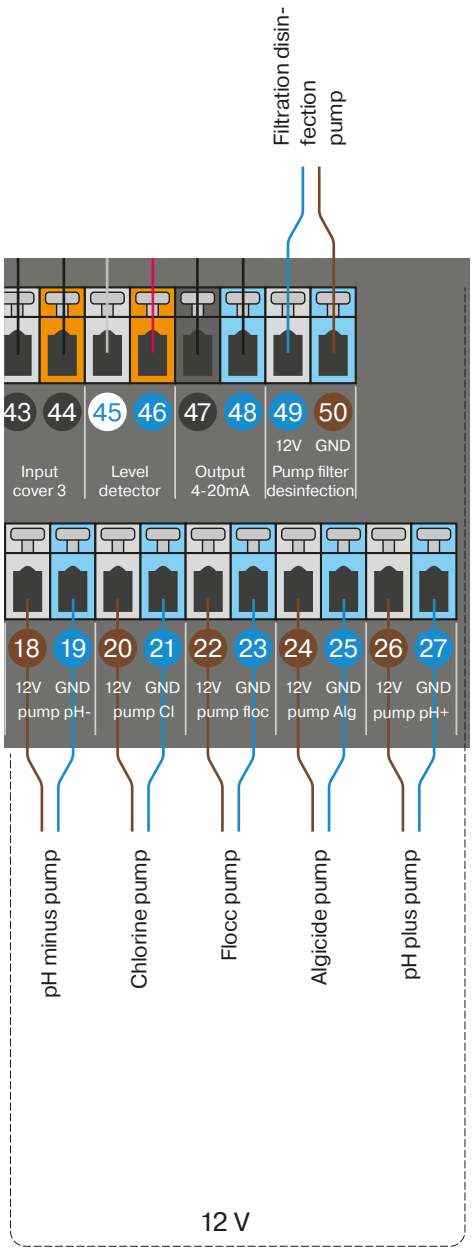
ASIN AQUA Pro controls external dosing pumps.
It is possible to directly connect 6 dosing pumps.

Connection of Peristaltic Pumps 12 V 3,6 l/h

ASEKO peristaltic pumps PP60 and PP10 12 V are suitable for dosing of aggressive chemicals e.g. acids, lyes and disinfection agents, especially for the treating of the pool water.
These pumps are suitable for pools up to 250m³.

Connect the 12 V pumps to the outputs:

Chlorine dosing pump	**20** (brown 12V) and **21** (blue GND).
pH- dosing pump	**18** (brown 12V) and **19** (blue GND).
pH+ dosing pump	**26** (brown 12V) and **27** (blue GND).
Algicide dosing pump	**24** (brown 12V) and **25** (blue GND).
Floc+c dosing pump	**22** (brown 12V) and **23** (blue GND).
Filter disinf. dosing pump	**49** (brown 12V) and **50** (blue GND).



Membrane pump DDE-5l/h
#13265



Membrane pump DDA 30l/h
#13222



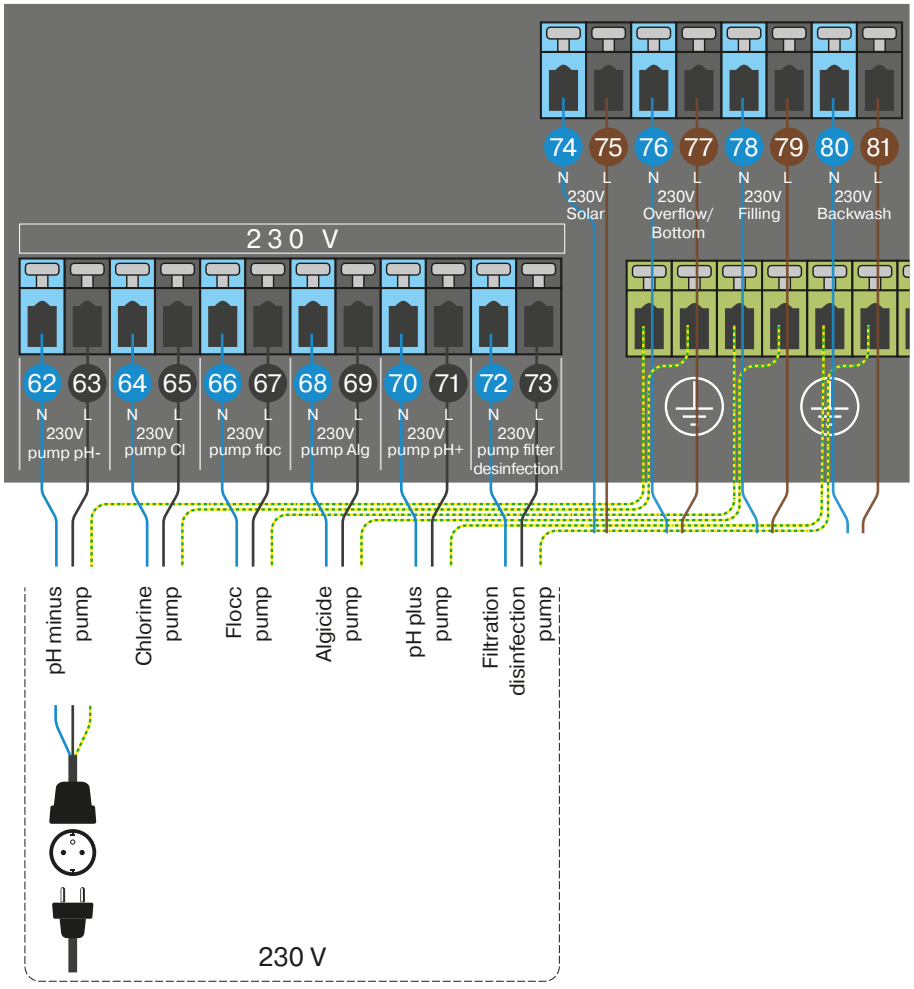
Connection of Dosing Pumps 230V

Membrane pump DDE 5 l/h, DDE 7.5 l/h and DDA 30 l/h are suitable for dosing of aggressive chemicals e.g. acids, lyes and disinfection agents, especially for the treating of the pool water.

These pumps are suitable for pools over 250m³.

Connect the 230 V pumps to the outputs:

Chlorine pump	**64** (blue N) and **65** (black L) and (green).
pH- pump	**62** (blue N) and **63** (black L) and (green).
pH+ pump	**70** (blue N) and **71** (black L) and (green).
Algicide	**68** (blue N) and **69** (black L) and (green).
Floc+c	**66** (blue N) and **67** (black L) and (green).
filter disinfection pump	**72** (blue N) and **73** (black L) and (green).

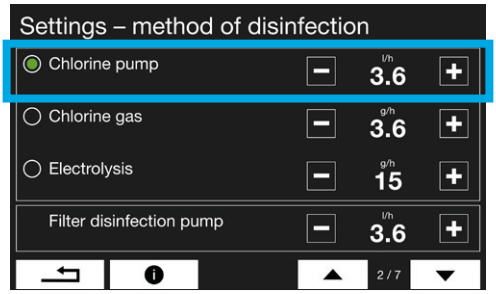


Membrane pump DDA 30l/h
#13222



Dosing pump connection 4-20 mA

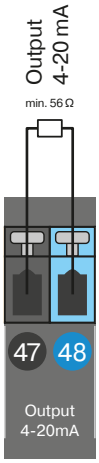
Control of the dosing pump via 4-20 mA.
In the settings, set the power of your pump. The ASIN AQUA Pro algorithm then operates with two values: 4 mA means the dosing pump is off, and 20 mA represents the pump running at maximum power.



Connection

Membrane pump DDA 30 l/h are suitable for dosing of aggressive chemicals e.g. acids, lyes and disinfection agents, especially for the treating of the pool water.
These pumps are suitable for pools over 250m³.

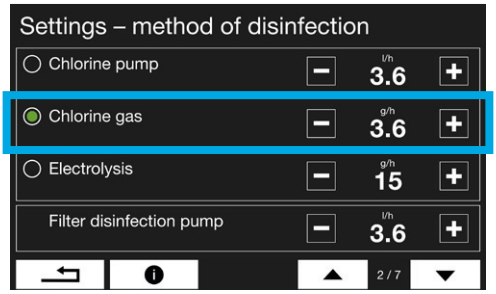
Connect the membrane pump to terminals **47** and **48**.



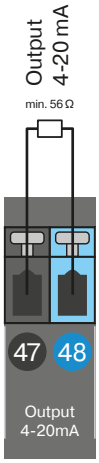


Gaseous chlorine dosing

Control of the gaseous chlorine device via 4–20 mA
In the settings, select **gaseous chlorine** as the dosing method and configure the **power of the fully open valve.** The ASIN AQUA Pro algorithm controls the **electric regulation valve via a 4–20 mA** signal: **4 mA keeps the valve closed, while 20 mA fully opens it,** allowing maximum chlorine dosing.



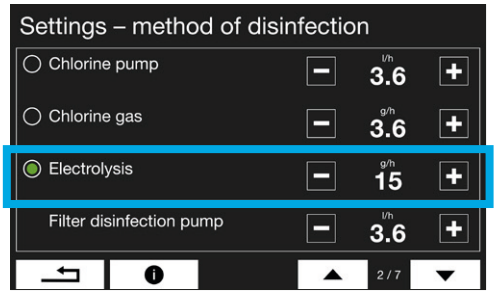
Connect the gaseous chlorine device to terminals **47** and **48**.



ASIN Salt 25
#13209-25







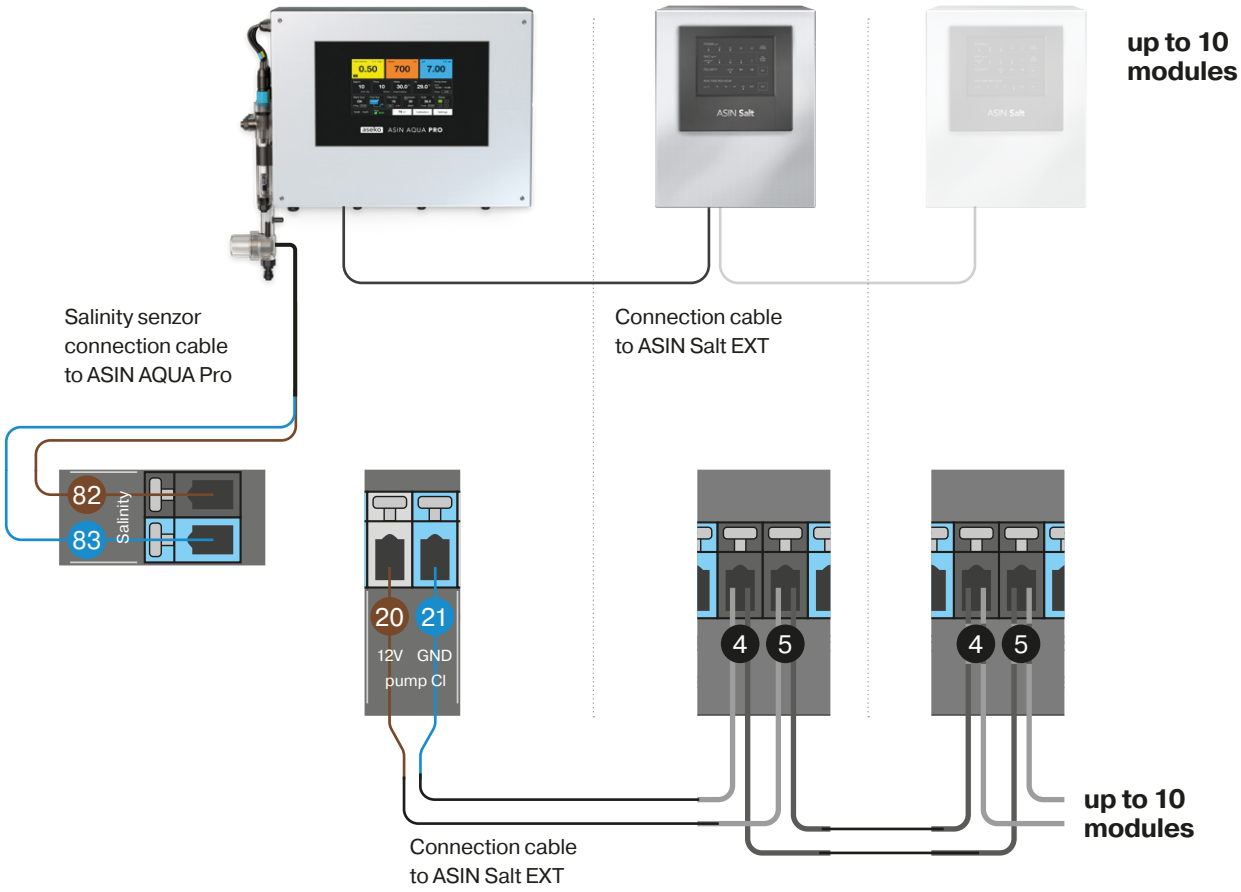
External salinator ASIN Salt

The ASIN Salt expansion module must be connected to the ASIN AQUA Pro control unit with a cable. To activate the external control, select the EXT mode on the display.

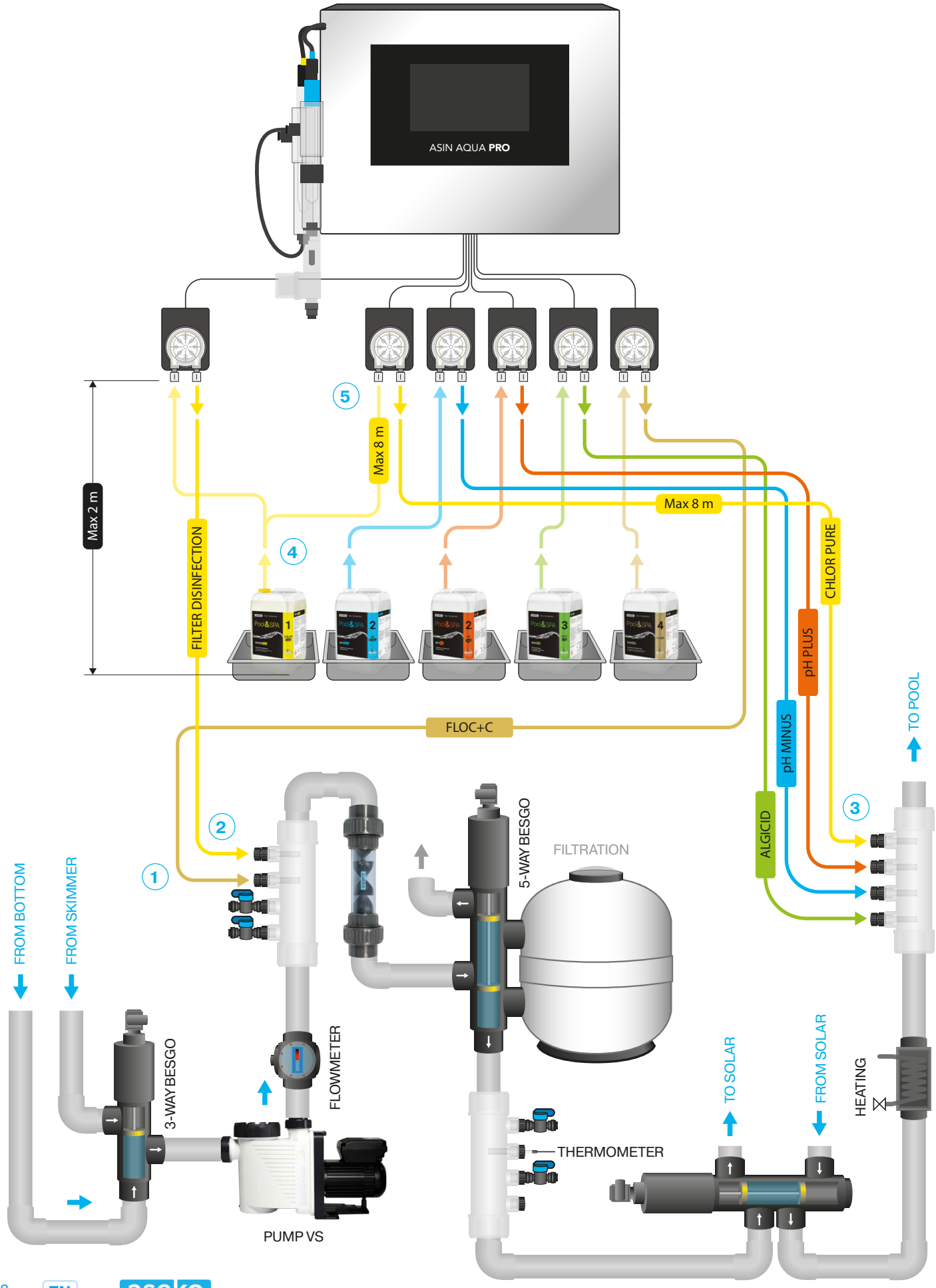
Connection

Connect the ASIN Salt to terminals **20** and **21**.

Connect the Salinity sensor to terminals **82** and **83**.

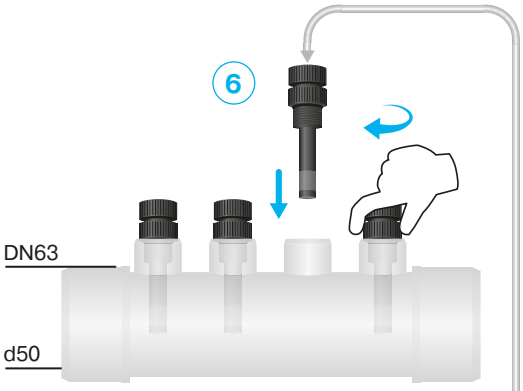


Pool Chemicals Connection



Pool Chemicals Connection

Screw the **injection valve** in the injection mainfold 4x 1/4" #13395.
Tighten the injection valve into the injection maninfold by hands only. Do not use pliers or other tools.



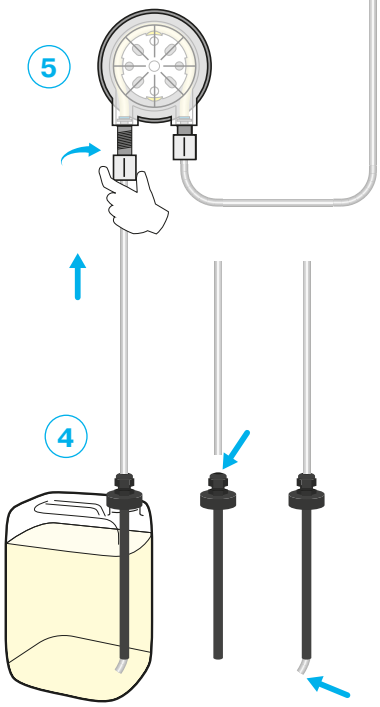
Injection manifold d50/DN63 4x 1/4"
#13395

1. Connect the **FLOC+C INJECTION VALVE** to the pipe **before the coagulation mixer and before the filter and after the MEASURED WATER SUPPLY**.

2. Connect the **FILTER DISINFECTION INJECTION VALVE** to the piping **before the besgo 5 way valve and before the filter and after the MEASURED WATER SUPPLY**.

3. Connect the **ALGICIDE, pH-, pH+ and CHLOR PURE INJECTION VALVE** to the pipe **behind the filter and behind the MEASURED WATER DRAINAGE**. Connect injection valves in this order to prevent formation of lime scale.

To connect reagents from cans to the dosing pumps and from the dosing pumps to the injection valve use PE Tube 1/4 "(6.35 mm) # 13277, which is part of the packaging.



Suction kit for 20l canister
#13415

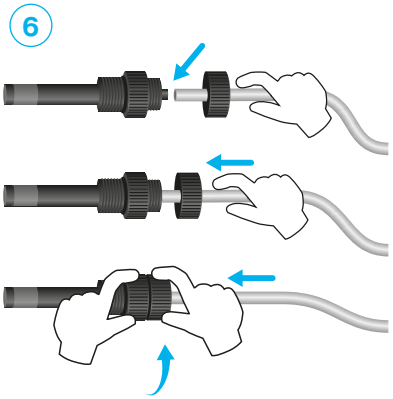
WARNING

Cut the PE tube at an angle of 90 ° to ensure tight joints. The cut must be clean. Use special pliers #13325 to cut plastic tubes. Do not use common scissors or knives!

4. **CANISTER CONNECTION** Use the Suction kit for 20l canister #13415. Put the PE tube through suction cap so it ends right over bottom of the canister.

5. **PUMP CONNECTION** Connect the can with the left (suction) connector of the pump using a PE tube from the can.

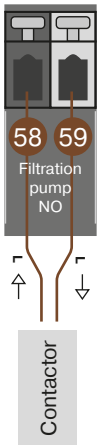
6. **INJECTION VALVE CONNECTION** Pass the tube through the injection valve nut, connect the tube into the injection valve and tighten the nut firmly by hand. Connect the tube from injection valve with the right (discharge) connector of the pump.



WARNING

NEVER CONNECT pH minus reagent to disinfection pump or disinfectant to pH pump! In the case of a cross-connection, after ten doses ASIN AQUA displays an error message. Repair the piping installation and then you can continue to operate your ASIN AQUA.

Filtration pump



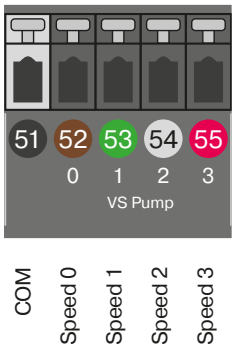
WARNING

Always check the connection according to the current user manual of your pump manufactureru.

1) Filtration pump

Connect the filtration pump to outputs **58** and **59**.

Connect the pump through a contactor.



2) Variable speed filtration pump

Connect to outputs **51** to **55**, connection depends on the type of variable pump.

Speed

TYP A

COM	S1	S2	S3	STOP
n1	ON	OFF	OFF	OFF
n2	OFF	ON	OFF	OFF
n3	OFF	OFF	ON	OFF
S	OFF	OFF	OFF	ON

Relay status

TYP B

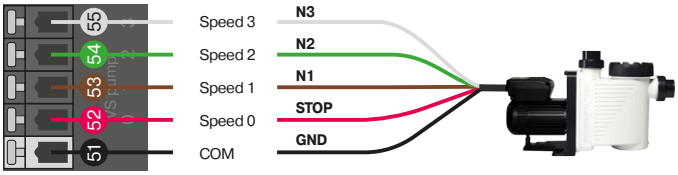
COM	S1	S2	S3	S4
n1	ON	OFF	OFF	OFF
n2	OFF	ON	OFF	OFF
n3	OFF	OFF	ON	OFF
S	OFF	OFF	OFF	ON

TYP C

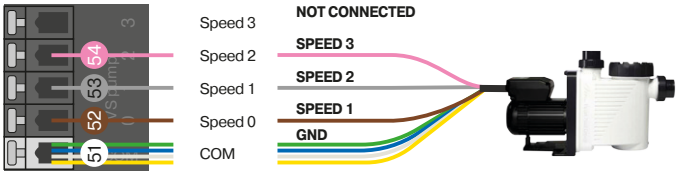
COM	S1	S2	S3	STOP
n1	ON	OFF	OFF	OFF
n2	OFF	ON	OFF	OFF
n3	OFF	OFF	ON	OFF
S	ON	ON	ON	OFF

TYPE A

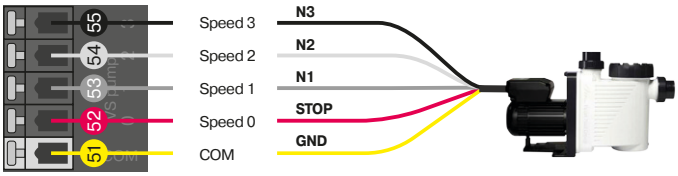
SPECK — TYP A



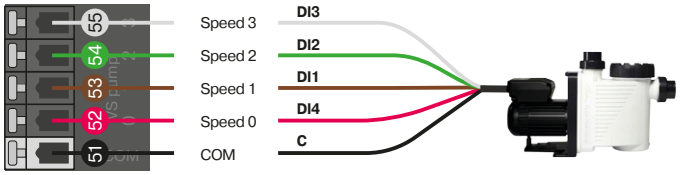
UWE EO PM — TYP A



AQUAGEM INVERPRO — TYP A

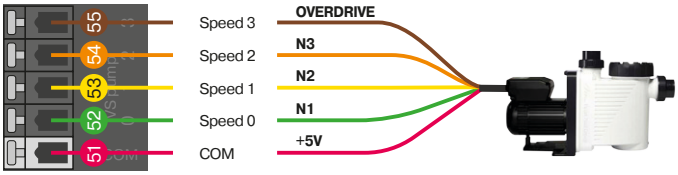


HAYWARD KS Evo VS — TYP A

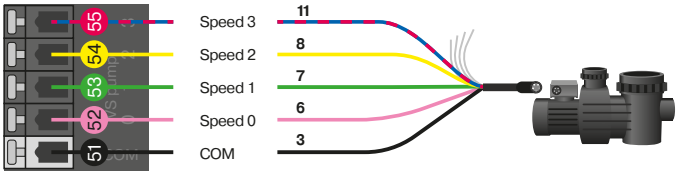


TYPE B

PENTAIR — TYP B

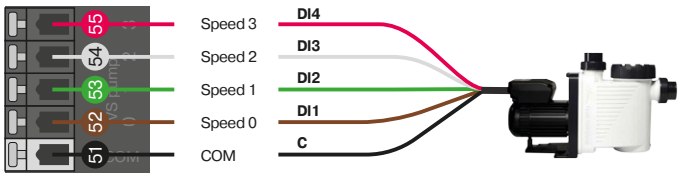


DAB E.SWIM - E.PRO — TYP B

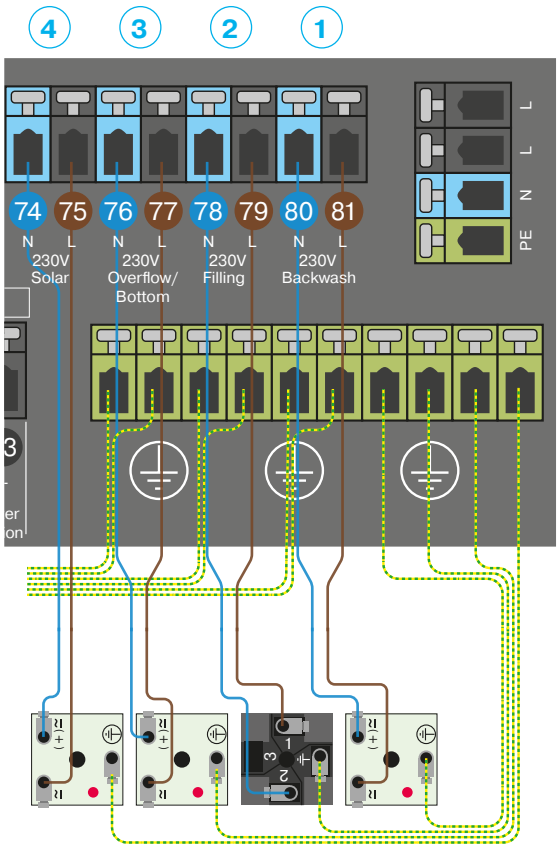


TYPE C

HAYWARD (older type) — TYP C



Equipment connection



1) Filter backwash (5 way Besgo valve)

Connect to the 230 V outputs **80** (blue N) and **81** (brown L).

2) Filling solenoid valve

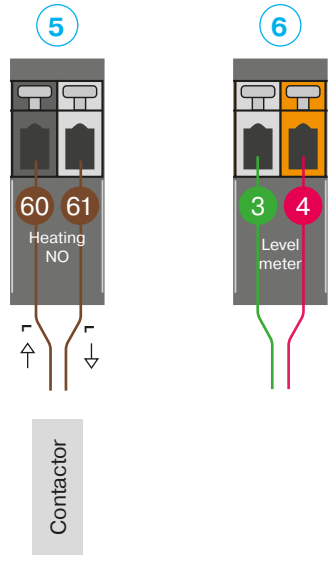
Connect to the 230 V outputs **78** (blue N) and **79** (brown L).

3) Overflow/Bottom (3 way Besgo valve)

Connect to the 230 V outputs **76** (blue N) and **77** (brown L).

4) Solar (4 way Besgo valve)

Connect to the 230 V outputs **74** (blue N) and **75** (brown L).

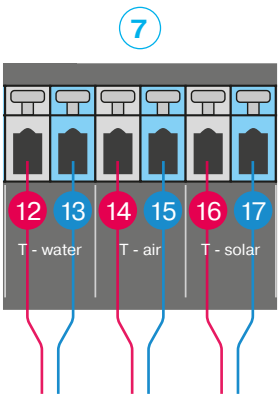


5) Heating

Connect to the non potential outputs **60** and **61**.
To connect the heating system, it is recommended to use a contactor.

6) Water level meter (pressure)

Connect to the green wire to the terminal **3** (green)
and red wire to the terminal **4** (red).

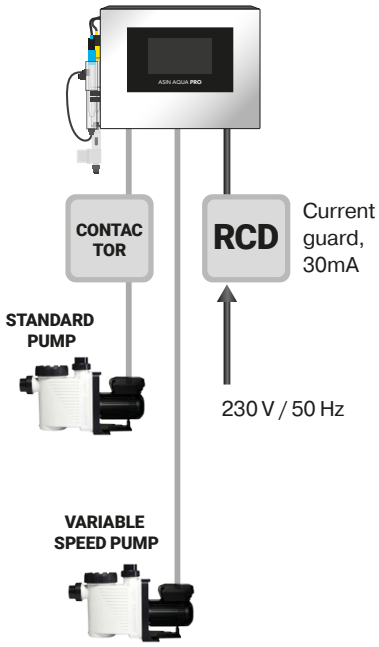


7) Thermometers

T – water connect to the terminals **12** (red) and **13** (blue).
T – air connect to the terminals **14** (red) and **15** (blue).
T – solar connect to the terminals **16** (red) and **17** (blue).

Power Supply

Installation must be protected by a residual current device (RCD).



Connection to the mains:

1. Leave the mains switch in the OFF position.
2. Connect the 230 V/50 Hz mains cable to ASIN AQUA Pro. The mains socket outlet must be protected by a residual current device (RCD).
3. Change the mains switch over to the ON position.

After Device has been switched on, the display will come on and the ASIN AQUA Pro starting screen will appear.

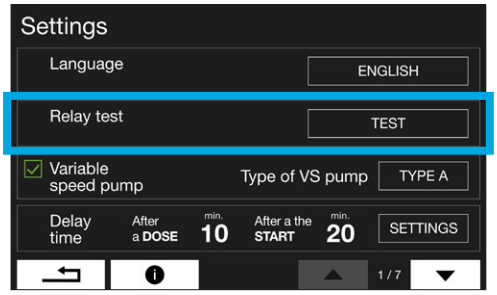
Disconnection from the mains:

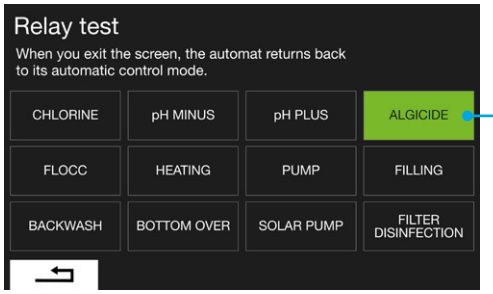
1. Change the mains switch over to the OFF position.
2. Disconnect the ASIN AQUA Pro mains cable from the 230 V/50 Hz.

WARNING: If Device is used in the manner different from that specified by the manufacturer, protection provided by Device may get damaged.

Power supply	230 V/50 Hz
Power consumption	24 VA
Fuse	T1 A; T125 mA or T170 mA
Over-voltage category	II
Ingress protection	IP40
Operating temperature	+5 to +40 °C
Weight	6,7 kg
Installation	wall mounted
Measured water pressure	max. 1 bar (must not be vacuum)
Dimensions	430 x 330 x 160 mm

Installation Test





WARNING: Any obstacles, bubbles or leaks in the connecting tube will prevent ASIN AQUA Pro from correct operating. The clear plastic tube allows you to monitor flow of liquid to the injecting valves.

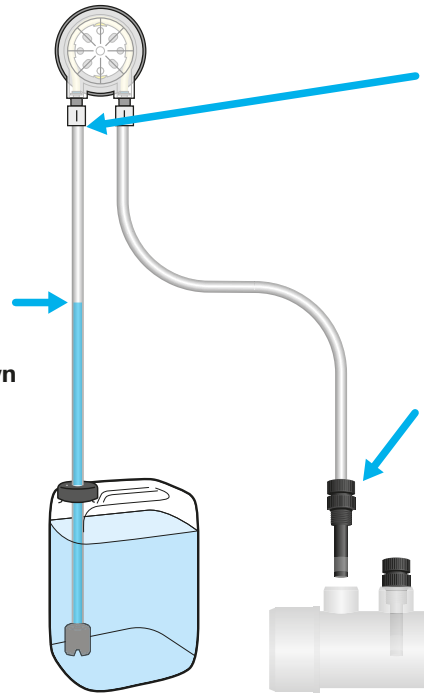
Before commencing the operation, test ASIN AQUA Pro installation. **Most problems result from incorrect installation.**

Test

In the "Relay Test" menu, start pumps one by one and while they are running, check tightness of all the PE tube connections. Check the injecting valves for blockage and air bubbles in the PE tube.

Press to **TURN ON (GREEN)** and press again to **TURN OFF**.

DON'T FORGET! After you complete the test, stop all accessories in the menu. Do not dose in this step!



1.

Monitor level in the transparent plastic tube.

If after STOP level goes down there is error in connection.

2.

If bubbles occur here, the pump sucked air. Repair the connection - disconnect the tube, cut the end carefully at a 90° angle, and plug it back.

3.

Check tightness of all connections.

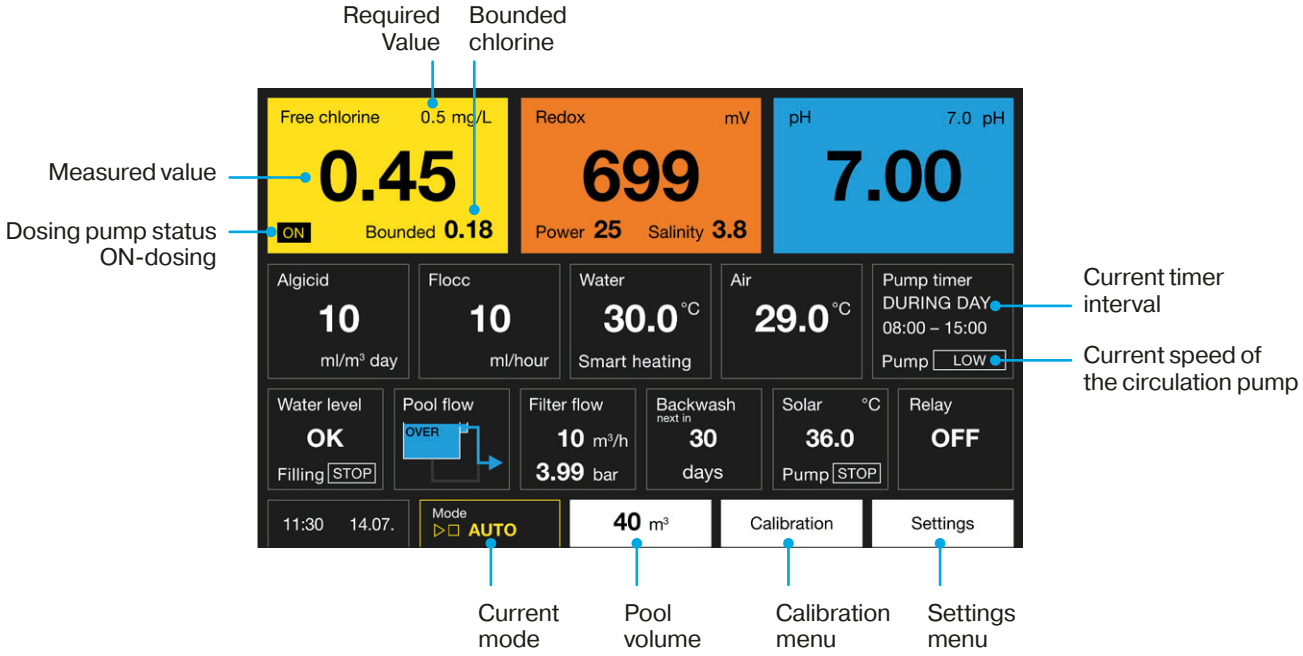
Liquid must reach injection valve and the pipe.

Touch screen description

Home Screen

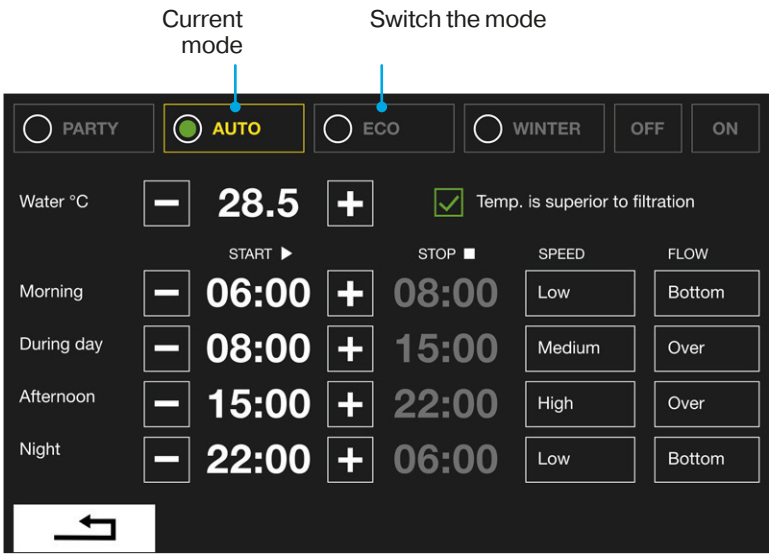
The home screen displays measured values, required values and status information.

E.g. click on the **Chlorine** to enter the setting of the required chlorine value.

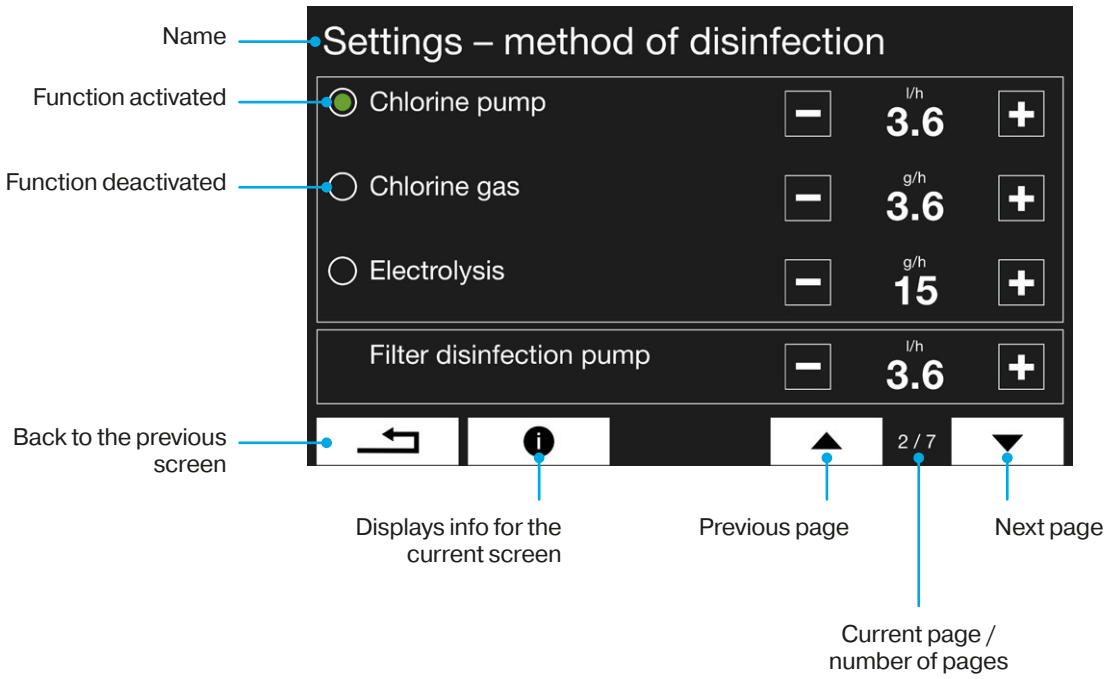


Mode selection

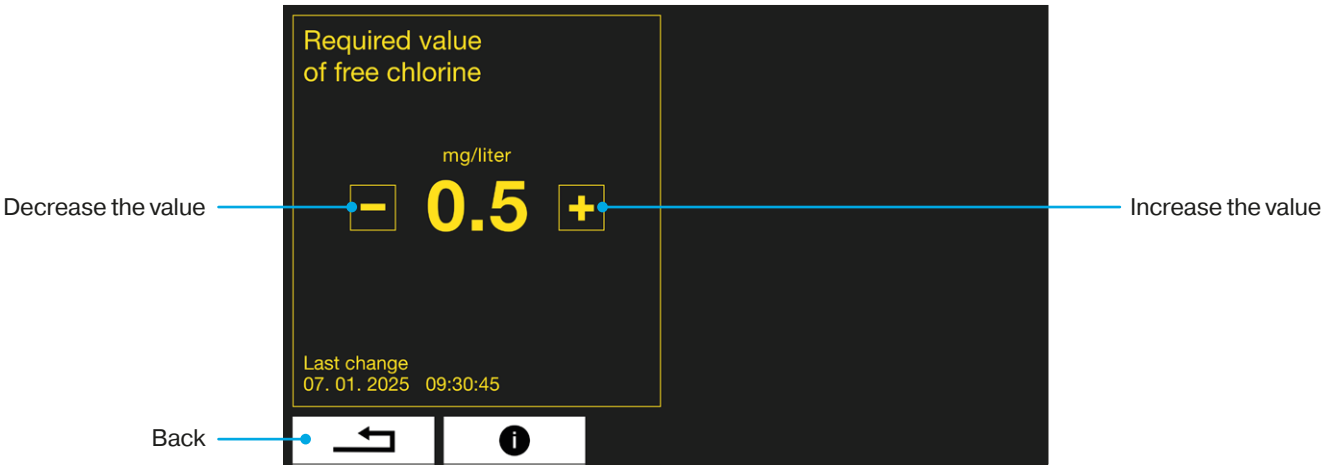
Mode selection and setting.



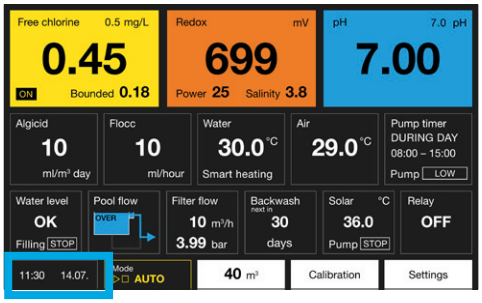
Movement in the menu



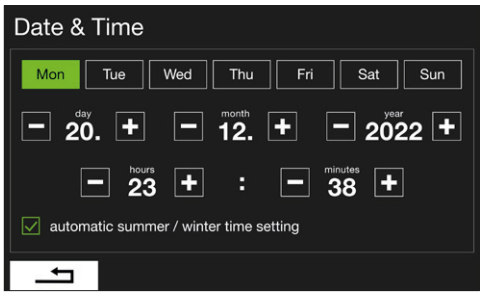
Value setting



Configuration

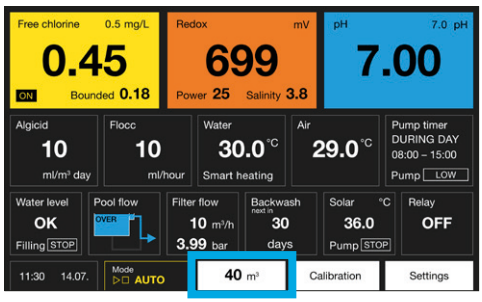


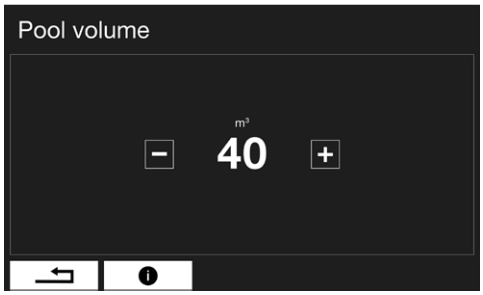




Date and Time

To ensure the correct function of timers, set the current date and time. Enter this menu by clicking on the date on the home screen or through the settings.





Pool Volume

Pool Volume

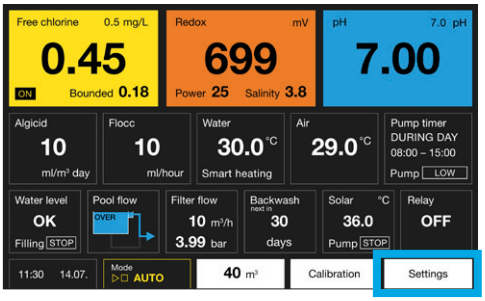
To ensure the correct function of ASIN AQUA Pro, enter the correct volume of your pool. Enter this menu by clicking on the volume in the middle of the home screen.

Calculate your pool volume in m^3:

Length (L) times width (W) times depth (D) is volume (V) - (L × W × D = V).

Enter the value using + and - buttons.

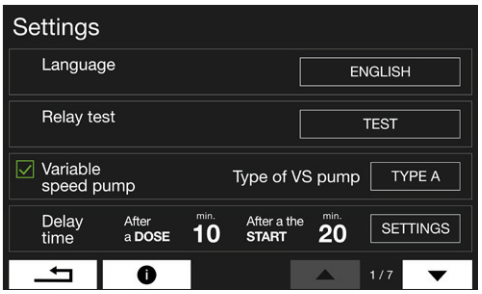
WARNING: The pool volume has effect on the dosing algorithm and maximum safe dose, enter the value correctly.

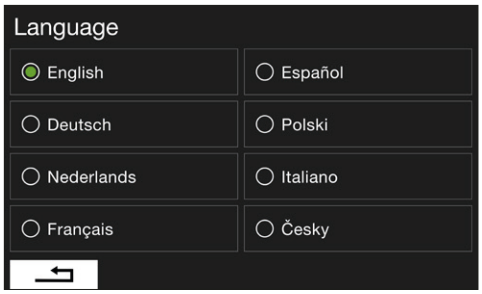


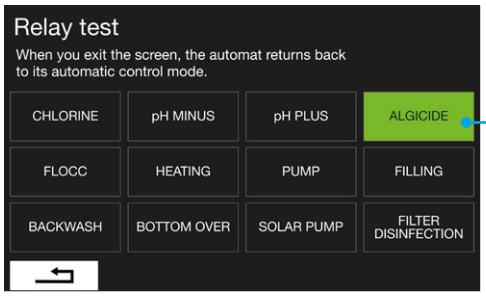
Settings

Language

Choose one of available languages.





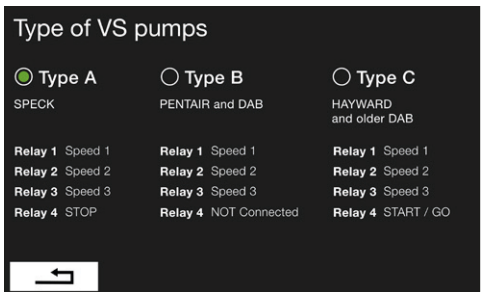


Relay test

Test of the installation.

Press to **TURN ON (GREEN)** and press again to **TURN OFF**.

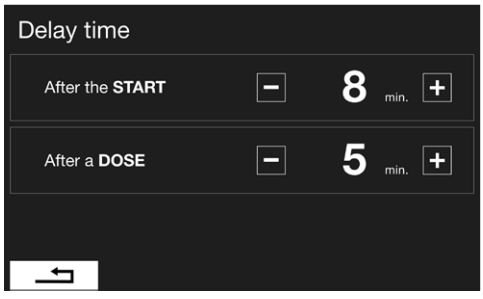
DON'T FORGET! After you complete the test, stop all accessories in the menu. Do not dose in this step!



Variable speed pump

Activate the functuion in the settings, and in the VS pump menu select the type of your variable speed pump.

Individual speeds are set directly on the pump according to the pump manufacturer's manual.

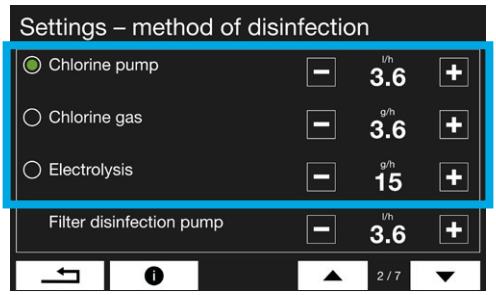


Delay

Delay time after dose is time for which ASIN AQUA Pro does not dose and wait for the response of probes. The average response time is 4 to 10 min.

Delay time after start of the filtration pump (upon timer switching ON) is time after start for which ASIN AQUA Pro does not take any action and waits for stabilization of a signal from probes.

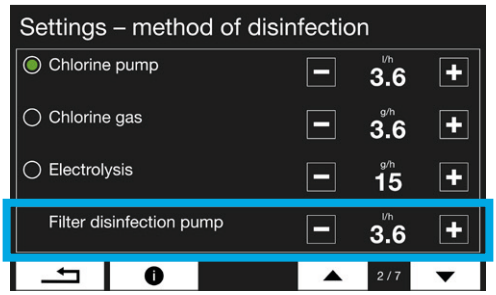
Method and power of disinfection



Choose the type of disinfection

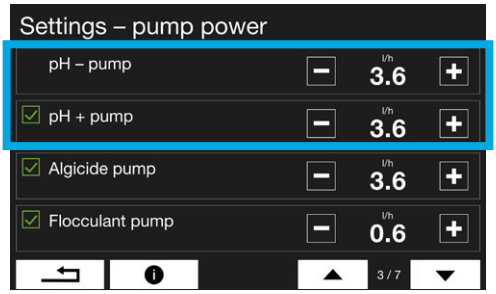
Choose the type of disinfection and enter it‘s power.

Liquid chlorine dosing pump
Chlorine gas
Electrolysis of salt pool water



Filter disinfection pump

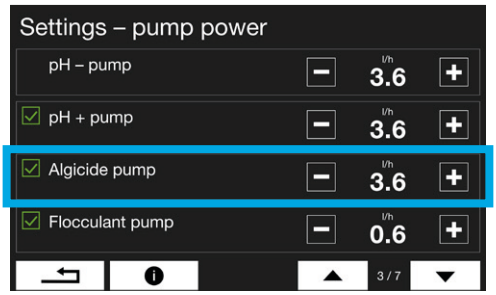
Turn ON if you use the separate filter disinfection pump.
Enter the power of the filter disinfection pump in l/h.
Standard power of the PP60 filter disinfection pump is 3,6 l/h.
Turn ON only pumps you are using.



Pump power

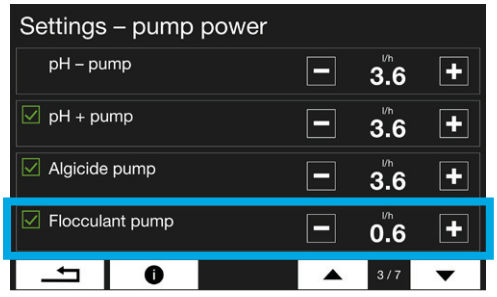
pH- and pH+ pump power

Turn ON and enter the power of the pH- and pH+ pumps.
Turn ON only pumps you are using.



Algicide pump power

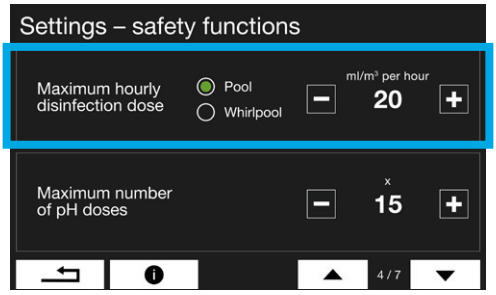
Enter the power of the algicide pump.
Turn ON only if you are using algicide pump.



Flocculant pump power

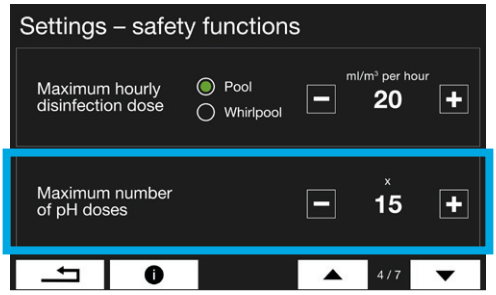
Enter the power of the algicide pump.
Standard power of the floculant pump is 0,6 l/h.
Turn ON only if you are using floculant pump.

Safety functions



Maximum hourly disinfection dose

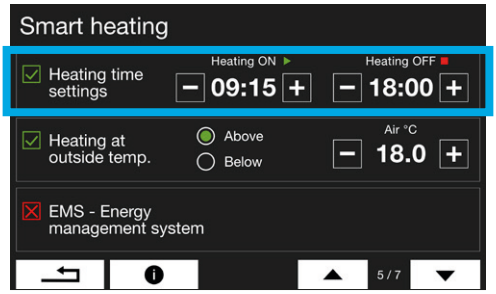
Overdose protection.
We recommend leaving the factory value of 20 ml per m³ per hour.



Maximum number of pH doses - without probe response

If the measured pH value does not change after preset maximum number of doses (according to the settings), ASIN AQUA Pro stops pH dosing and an error message appears on the display. Other ASIN AQUA Pro functions are not limited.

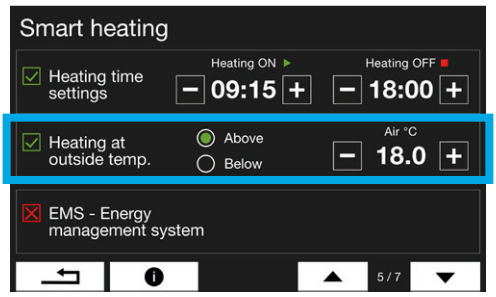
The error message must be canceled manually.



Smart heating

Heating time settings

This function allows to set a time for which the heating will be in operation. The heat pump has higher efficiency during the day when outdoor temperature is higher.



Heating at outdoor temperature (above or below)

This feature allows to set the outdoor air temperature, at which or below which ASIN AQUA Pro starts heating. To use this feature, an outdoor air thermometer must be installed.

Above

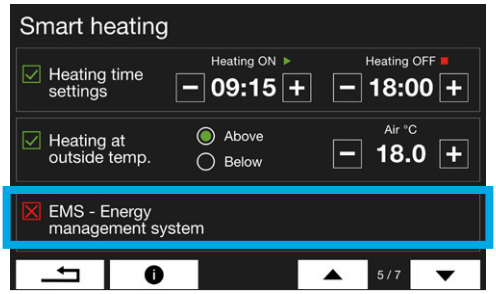
This function is used to optimize the efficiency of heat pump, which is higher with higher air temperature.

Below

When using the solar heating and the heat pump simultaneously, the below gives an option to automatically deactivate the heat pump and prioritize the solar heating which optimizes electric consumption.

- Check the BELOW option. Set the temperature between 30 and 40. Put the outside thermometer to solar. When the temperature drops below the set value, the heat pump starts heating. When it rises above the set value, the heat pump stops, and heating is done only through the solar panel.

NOTE: Other heating functions can be set individually for each mode in the **MODE Settings** (ref. to the chapter MODE settings).



EMS - Energy Management System

This feature allows the efficient use of surplus energy generated by a home solar power plant to heat and filter pool water. Once activated, the device will monitor the incoming signal from the photovoltaic system and, upon detection, automatically start the pool's heating and filtration system.

Outside the filtration period: The circulation pump automatically starts at speed 1 and the heat pump is activated at the same time. The heat pump will remain in operation for at least 1 hour to prevent excessive switching and to prolong its life.

During the filtration period: The heat pump is activated automatically, regardless of whether the target temperature has already been reached.



LCD brightness

Set the LCD brightness.



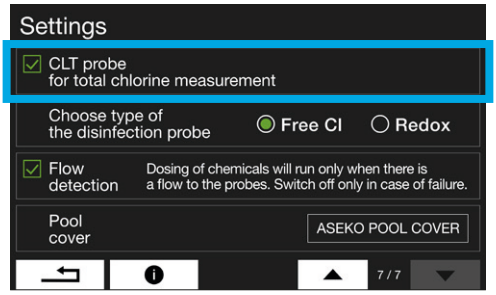
LCD dimming

If enabled, after 60 minutes without interaction ASIN AQUA Pro will reduce the brightness of the screen.



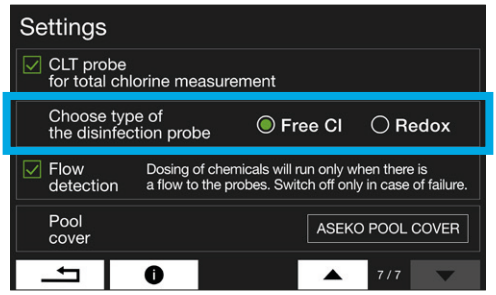
Touch sound

If enabled, every touch on the touchscreen will make a sound.



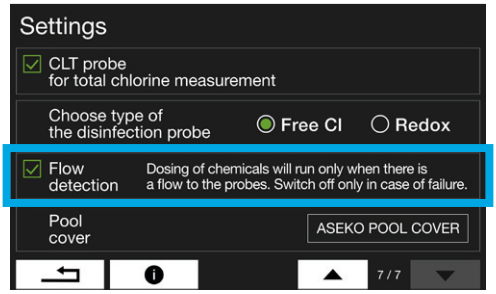
CLT probe

Check if you use the CLT probe for measuring of the total and bounded chlorine.



Choose the type of the disinfection probe

Choose the probe which controls the dosing of disinfection.

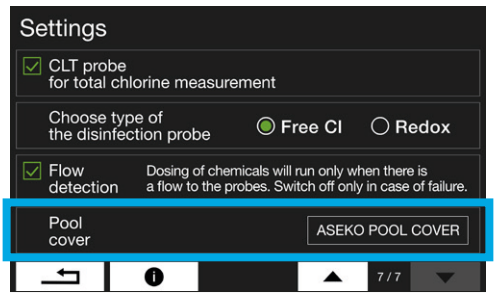


Flow detection

The flow detector detects flow of measured water. Dosing of chemicals will take action only if the water flow to probes is detected to prevent dosing in standing water.

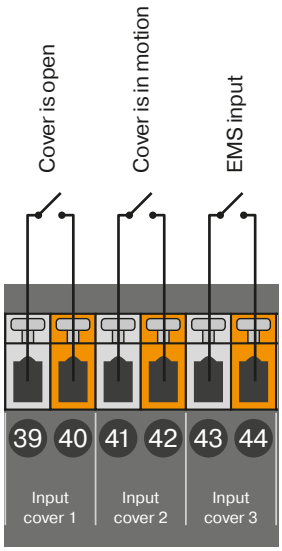
Wash the strainer on the measuring water filter on a regular basis.

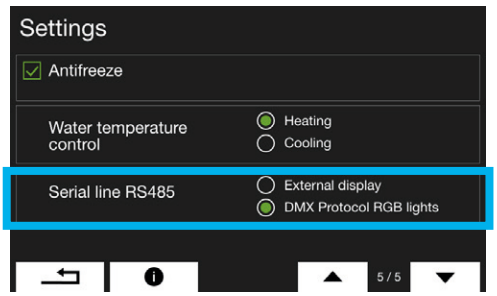
Warning: Only switch off the flow detection in case of Flow detector failure.



Pool Cover position detection

If the pool cover is closed during the filtration time set by the timer, the VS pump will change the speed to the Speed 1 (LOW).



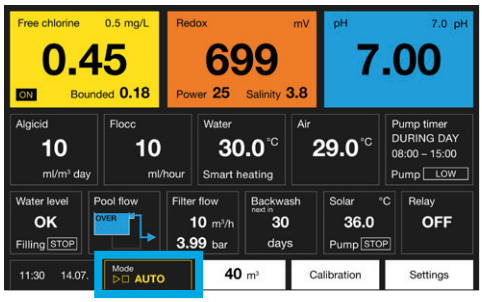


DMX Protocol RGB Lights

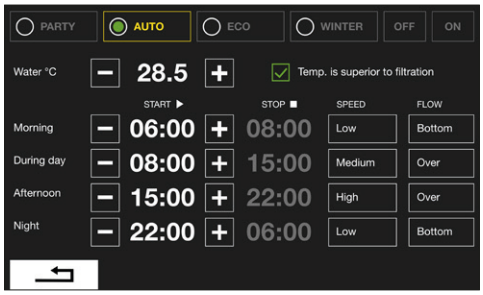
In the menu of the device, select the Serial line RS485 to be in DMX Protocol RGB lights mode (more info in chapter RGB lights).



Mode settings



Automate your pool with 6 adjustable modes.
Party | **Auto** | **Eco** | **Winter** | **Off** | **On**
Change modes through ASIN AQUA Pro screen, external touchscreen, or smartphone app Pool REMOTE.

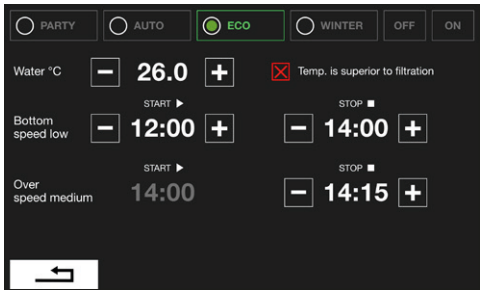


AUTO

The Auto mode for regular use of the pool. It uses all functions in a balanced way to achieve comfort and economic operation.

Set the filtration times: **morning** | **durin day** | **afternoon** | **night** and desired temperature. For each filtration time set the pool water flow, and the speed of the circulation pump.

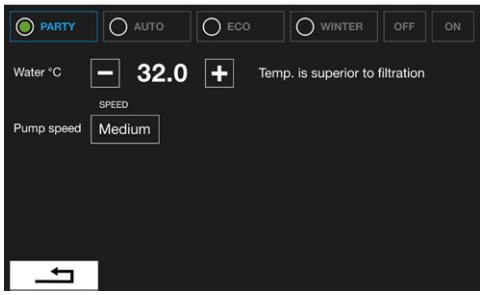
Temperature is superior to the filtration timer
Enabling this function will keep both the heating and the circulation pump operational until the desired water temperature is reached.



ECO

The ECO mode is designed to operate the swimming pool in your absence or when you want to operate economically. Keeps the pool ready for a switch to normal operation.

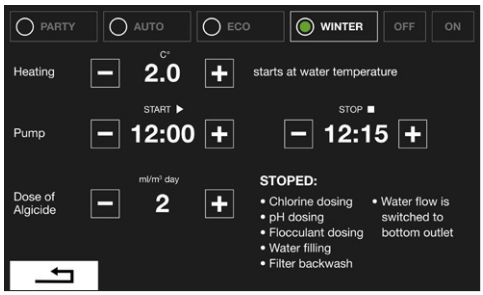
Allows to set the desired temperature, the pool water flow, the speed of the circulation pump, and one filtration time.



PARTY

This mode switches ON the circulating pump on preset speed and heating to the required temperature.

This mode has no time functions. To switch OFF the circulation pump and the heating change the mode.



WINTER

Activating this function set the device into the special Winter mode. This mode prevents the pool water from freezing and keeps the water clean with dosing of algaecide. **In the Winter mode following function are deactivated:** chlorine dosing, pH dosing, flocculant dosing, water filling, filter backwash. **Water flow is set to the bottom drain**.

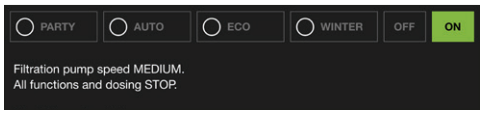
Every day the filtration pump runs in preset filtration timer.

Outside of the filtration timer the filtration pump remains OFF but is automatically activated for the prioed of 15 minutes when the outdoor temperature drops below 0 °C.

- If, after this period, the water temperature is under the required value (0 - 6 °C), the filtration pump stays ON, and the heating is activated until the water temperature exceeds 2 °C.
- If, after this period, the water temperature is higher than the required value (0 - 6 °C), the circulation pump is turned OFF.

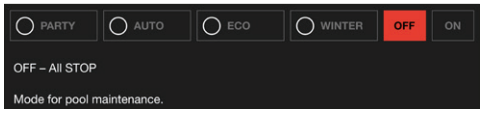
If the outdoor temperature stays below 0 °C this cycle is repeated every 6 hours.

When using the Winter mode without the **outdoor air thermometer**, the system acts as it always detects 0 °C outdoor temperature.



ON

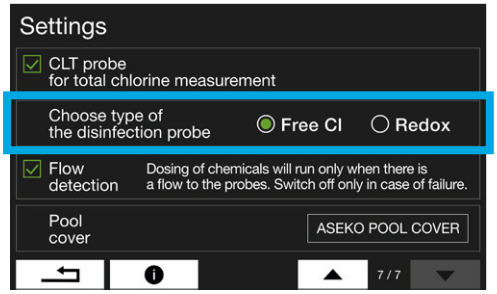
The filtration runs NONSTOP. The heating is OFF.



OFF

Everything is OFF.

Choosing the disinfection control probe



ASIN AQUA Pro allows to control the disinfection dosing with the CLF probe or the Redox probe. Choose the control probe. The second measured value will be indicative.

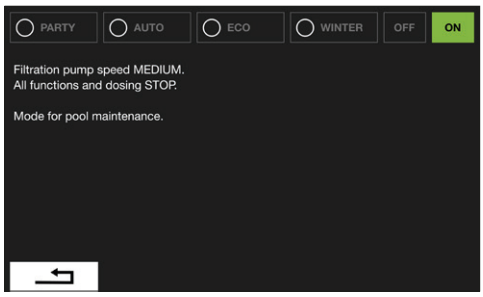
1. **CLF free chlorine probe**
   Free chlorine measurement, CHLOR PURE dosing

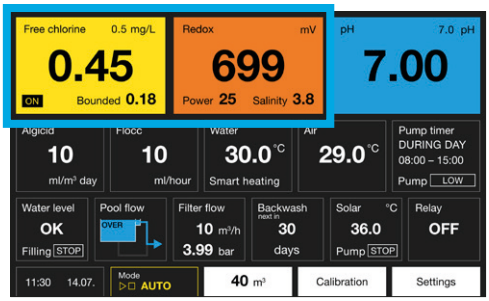


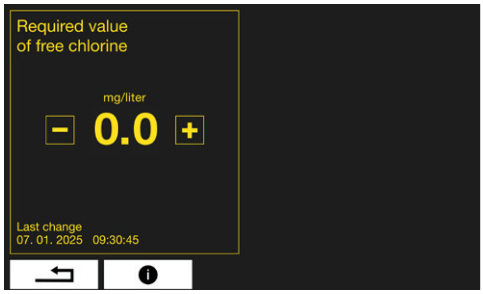
2. **Redox probe**
   Measurement of redox potential, CHLOR PURE dosing

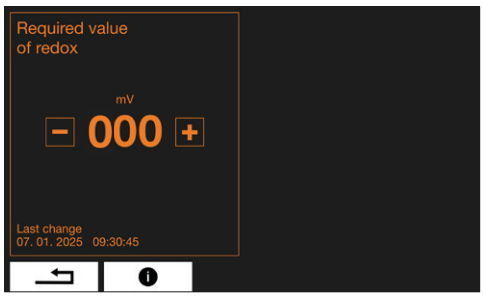


Commissioning procedure and required value setting









Commissioning procedure

The water in the pool must be clean without any additives especially free of chlorine stabilizers (cyanuric acid). Ideally fill the pool with fresh water from the water main.

- Set the system to **MODE ON** - filtration NONSTOP 24 hours
- If you control with the CLF probe, set the disinfection to 0.0 mg/l.
  If you control with the REDOX probe, set the disinfection to 000 mV.

CLOSE



Close the water supply to the probes

ASIN AQUA Pro displays no flow to the probes.



SuperCHLOR
#13120

Perform shock chlorination

Perform shock chlorination of pool water with Super CHLOR (inorganic active chlorine without stabilizers).
Follow the instructions on the packaging (1 kg = 80 m^3).

Before opening the water supply to the probes

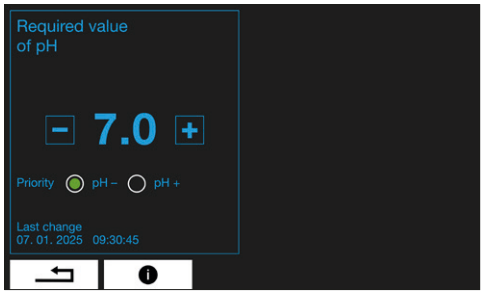
The water must be **clean** and the **chlorine concentration** measured by the digital tester must be between **0.3 and 1.2 mg/l.** If the **concentration is lower**, repeat shock chlorination. If the **concentration is higher**, wait till the chlorine concentration in the water drops down.

OPEN



Open the water supply to the probes

Warning No flow to probes turns off automatically.

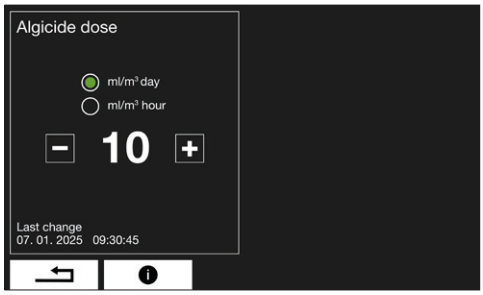


pH setting

It is recommended to enter the required pH value equal to pH value of water you refill or slightly lower.

Required pH value = refilled water pH value (in the range from 6.8 to 7.5)

pH may change during operation but if it is in the range from 6.8 to 7.5 you do not have to change this setting.



ALGICIDE setting

A sufficiently effective dose for most pools is 10 ml/m^3 per day. If green algae appear in the pool, you can increase the dose. After algae have disappeared, the dose can be returned to 10 ml.



FLOC+C setting

The FLOC+C dose is calculated from the amount of circulating water, which flows through the filtration. Based on your circulating pump power (in m^3/h), adjust the FLOC + C dose value. E.g. with the circulation pump with power of 10 m^3/h set the FLOC+C dose to 10 ml/h.
This value ranges from 10 to 40 ml per hour for most private pools.

Required values

If you control with the CLF probe

For the correct functionality of the CLF probe you must observe the following conditions:

pH of the pool water

The pH value should be between **6.8 and 7.5.**
The pH of the pool water must be stable.
If the pH value fluctuates, the value of the chlorine changes accordingly.

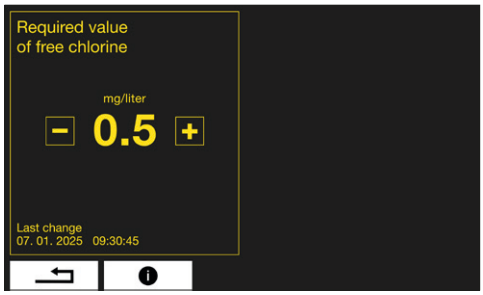
Chlorine content mg/l	Water temperature
0.3 to 0.5	24 to 26 °C
0.5 to 0.8	26 to 32 °C
0.8 to 1	Over 32 °C

Determination of the required chlorine value in pool water

The required concentration of chlorine in pool water varies with the temperature of the pool water. However it should never be less than 0.3 mg/l. Determine the required value using the table on the left.

WARNING

CLF Probe Calibration: Calibration can only be done when the pH is stable in the range of 6.8–7.5.
After changing the electrolyte, wait at least 1 hour, but ideally 24 hours, to allow the signal to stabilize before proceeding with calibration.



How to set the required chlorine value

Use a colorimeter or digital Pool Tester to measure the chlorine value in pool water sample.

If the chlorine concentration (measured with a colorimeter or digital Pool Tester) is:

- **ADEQUATE to the value shown on the ASIN AQUA Pro**, your device is ready to maintain the required concentration of chlorine in pool water.
- **BELOW the required value shown on the ASIN AQUA Pro**, **increase** the required value **by 0.1 (by 0.2 mg/l max)** (regardless of the required value according to the table).

  Repeat the measurement after the water in the pool is mixed thoroughly and the value shown on the ASIN AQUA is stable.
  Repeat the process until the **chlorine concentration in pool water matches your required value** then set the correct required value according to the table. Additionally, you can perform the calibration of the CLF probe (see the chapter CLF Probe Calibration).
- **HIGHER than the required value shown on the ASIN AQUA Pro display** - you can calibrate the CLF probe (see the chapter CLF Probe Calibration).

NOTIFICATION:
Fix the **low chlorine value** in pool water by **increasing required disinfection value on the display of the unit.**

RECOMMENDATION: Check the chlorine value in the pool once a week using the colorimeter or digital pool tester.

If you control with the Redox probe

For the correct functionality of the REDOX probe, you must observe the following conditions:

pH of the pool water

The pH value should be between **6.8 and 7.5.**
The pH of the pool water must be stabilized.
If the pH value fluctuates, the value of the Redox changes accordingly.

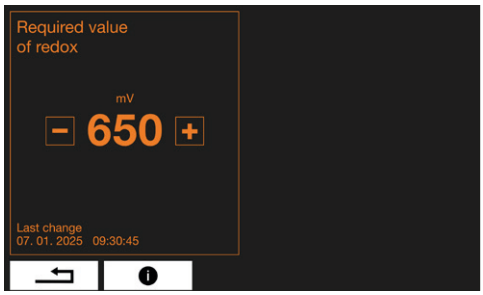
Chlorine content mg/l	Water temperature
0.3 to 0.5	24 to 26 °C
0.5 to 0.8	26 to 32 °C
0.8 to 1	Over 32 °C

Determination of the required chlorine value in pool water

The required concentration of chlorine in pool water varies with the temperature of the pool water. However it should never be less than 0.3 mg/l. Determine the required value using the table located on the left.

WARNING

Befor proceeding to setting of the required values, keep the probe connected to the water for at least 1 hour, ideal 24 hours, to stabilize its measurement.



How to set the required Redox value

Set the required REDOX value to **650 mV**

Use the tester to check if the **chlorine content in pool water is within the range of 0.5 - 1.2 mg/l.**

Fine-tuning

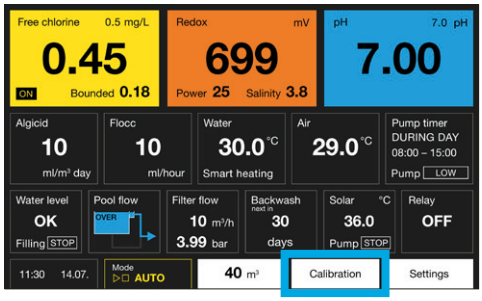
Use the colorimeter or Pool Tester to measure the chlorine value of the pool water. If the manually measured chlorine value in pool water is:

- **ADEQUATE**, your ASIN AQUA Pro is ready to maintain the required concentration of chlorine in pool water.
- **LOW**, increase the required REDOX mV value in the menu.
- **HIGH**, reduce the REDOX mV value in the menu.

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

EXAMPLE:
The chlorine value in the pool water is 0.3 mg/l - the displayed value is 650 mV. If you want to increase the chlorine value to 0.5 mg/l. You have to increase the preset value of the redox by 20 mV to 670 mV.

NOTE:
The relationship of Redox potential and chlorine value in pool water cannot be determined by the exact table. The correct value of the Redox must be observed by several check measurements.



In operation measurement and calibration



pH probe calibration

When pH is being measured in operation, there may be a difference between the value measured by ASIN AQUA and the actual pH value in water.

Proceed to the calibration.

pH probe calibration menu

Non-calibrated value

The pH probe calibration menu always displays the original non-calibrated value. Calibration of the pH probe is not possible when the new value differs by more than 1 from the non-calibrated value. If the difference from the non-calibrated value exceeds 1, the probe should be sent for inspection or replaced with a new one.

Calibration is not possible when the new value differs by more than 1 from the non-calibrated value.

The pH probe can only be calibrated in the pH range of 6.2 to 7.8.

The pH probe cannot be calibrated when the LOW or HIGH warning is displayed.

pH probe calibration process

Calibration can be done in two ways:

pH 7.00 Buffer #12065



1. With a buffer

- **Close the water supply to the probes.**
- Remove the probe from ASIN AQUA Pro : rinse the probe with clean water and wipe it.
- The probe must remain connected to the device via the cable. Dip the probe in the calibration buffer and after the value displayed on ASIN AQUA is stable, enter the buffer value into the pH Probe Calibration menu.

Digital Photometer
Aseko #13449



2. With a colorimeter or Pool Tester

- **The water supply to the probes must be open**
- Measure the pH value directly in pool water using a colorimeter or Pool Tester.
- Then enter this value into the pH Probe Calibration menu. Calibration can be performed in the range of 6.4-7.8.

In operation measurement and calibration



CLF probe calibration

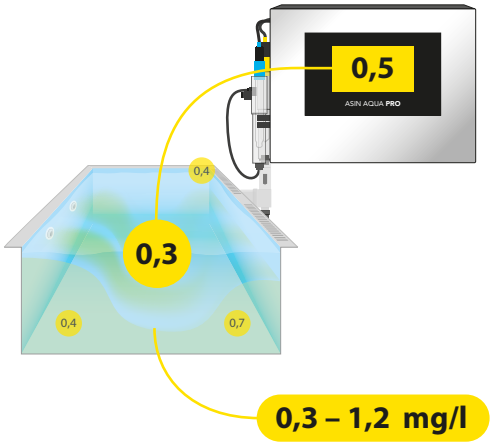
Do not calibrate the probe until the pool water is thoroughly mixed and the value displayed on the ASIN AQUA Pro is stable. After adding fresh electrolyte, it takes at least 4 hours for the signal to stabilize.

Perform calibration of the CLF probe when the manually measured value of free chlorine is equal to or higher than the value you want to have in your pool.



Digital Photometer
Aseko #13449

Calibration is performed by entering the manually measured value of chlorine concentration (using a photometer) in the CLF probe calibration menu.



Calibration **is not necessary** if the difference between the photometer measured value and the value shown on the display **is less than 0.2 mg/l**.

Calibration is best performed with chlorine concentrations in the pool water in the range of **0.3 - 1.2 mg/l**.

Calibration restrictions

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**.

In operation measurement and calibration



Redox probe calibration

Use a buffer

- **Close the water supply to the probes.**
- Remove the probe from ASIN AQUA Pro:
  rinse the probe with clean water and wipe it with a paper towel.
- The probe must remain connected to the device via the cable during the calibration. Dip the probe in the calibration buffer and after the value displayed on ASIN AQUA Pro is stable, enter the buffer value into the Redox probe calibration menu.

Redox Buffer 650mV
#12091



RECOMMENDATION: Perform the calibration using the 650 mV buffer. If the non-calibrated value differs by 15 mV from the buffer, it indicates that the probe is faulty.

In operation measurement and calibration



CLT probe calibration

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

This may take several hours.

Calibration is performed by entering the manually measured value of total chlorine content (using a photometer) in the CLT probe calibration menu.

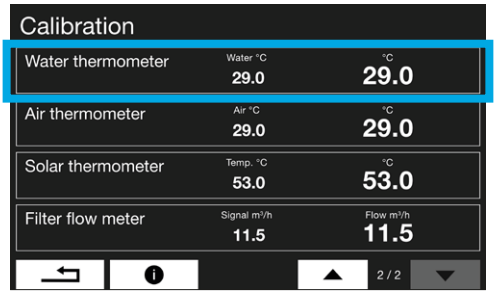


Digital Photometer
Aseko #13449

Calibration **is not necessary** if the difference between the photometer measured value and the value shown on the display **is less than 0.2 mg/l**.

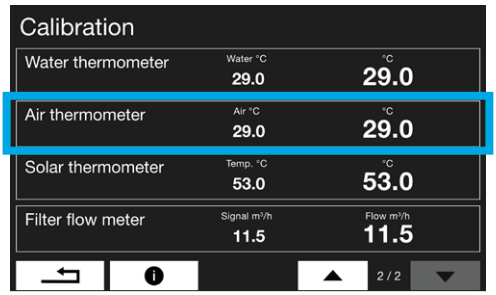
Calibration restrictions

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



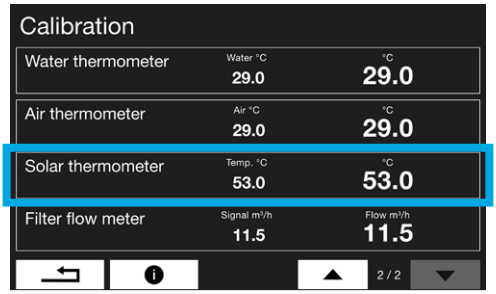
Water thermometer calibration

If the temperature of water in the pool is different from the temperature shown on ASIN AQUA Pro, calibrate the water thermometer in the water thermometer calibration menu.



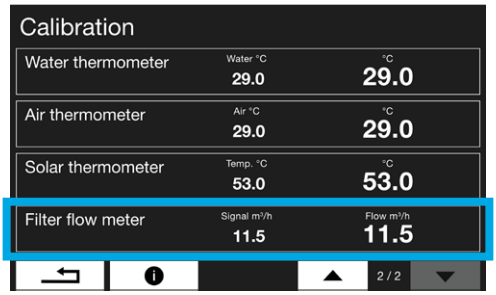
Outdoor air thermometer calibration

If the temperature of air is different from the temperature shown on ASIN AQUA Pro, calibrate the air thermometer in the air thermometer calibration menu.



Solar thermometer calibration

If the temperature of solar is different from the temperature shown on ASIN AQUA, calibrate the solar thermometer in the solar thermometer calibration menu.



Filter flow meter calibration

If the pool water flow in the pool is different from the value shown on the ASIN AQUA Pro, calibrate the filter flow meter in the filter flow meter calibration menu.

Stabilizer in water

BALANCER #13345



Alkalinity

Alkalinity volume in the water should range from **80** to **120 ppm**. Alkalinity stabilizes the pH and reduces its consumption. To increase the Alkalinity in the water, use **Pool & SPA BALANCER** (#13345).

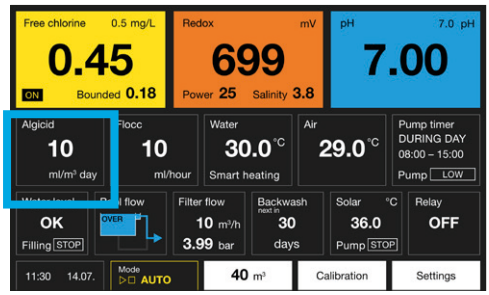
Cyanuric acid

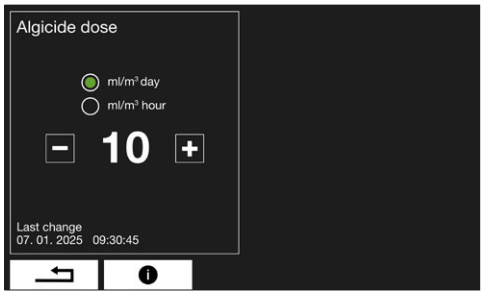
The value of Cyanuric acid must be **0 ppm**. Cyanuric acid greatly diminish the effectiveness of chlorine, making it difficult to accurately measure and control its concentration.

Never use stabilizers with cyanuric acid in ASIN AQUA devices

The value of Cyanuric acid must be 0 ppm!
Cyanuric acid forms a chlorine-cyanurate complex, which rapidly decreases the disinfecting power of chlorine and makes it impossible to measure with a free chlorine probe. Be aware that some chlorine tablets contain cyanuric acid. Ensure there is no cyanuric acid in your pool.

Functions

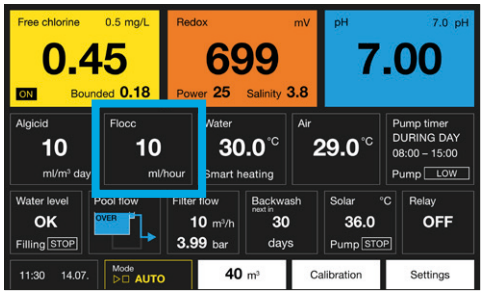


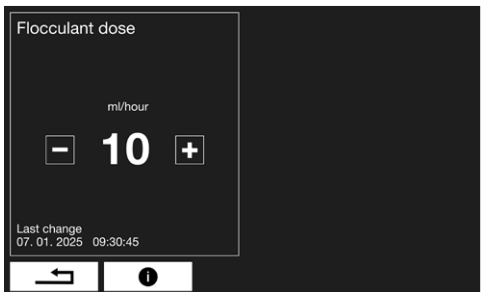


ALGICIDE setting

Press the algicide square to enter the required algicide dose menu.
A sufficiently effective dose for most pools is 10 ml/m³ per day. If green algae appear in the pool, you can increase the dose. After algae disappears, return the dose to 10 ml.

The required algicid dose menu allows the notification if the level in the chemical can drop under the set percentage.



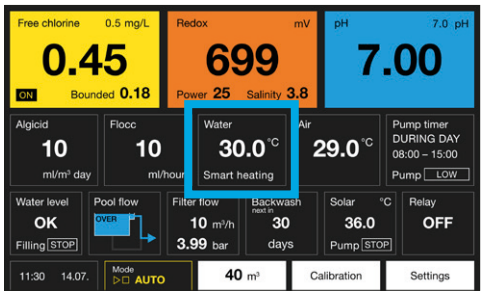


FLOC+C setting

The FLOC+C dose is calculated from the amount of circulating water, which flows through the filtration.
Based on your circulating pump power (in m³ per hour), adjust the FLOC+C dose value. E.g. with the circulation pump with power of 10 m³/h set the FLOC + C dose to 10 ml/h. This value ranges from 10 to 40 ml per hour for most private pools.

The required Floccualnt dose menu allows the notification if the level in the chemical can drop under the set percentage.

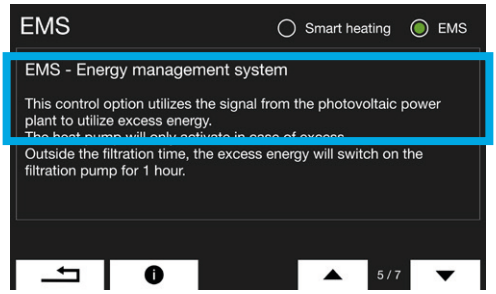
Functions



Smart heating

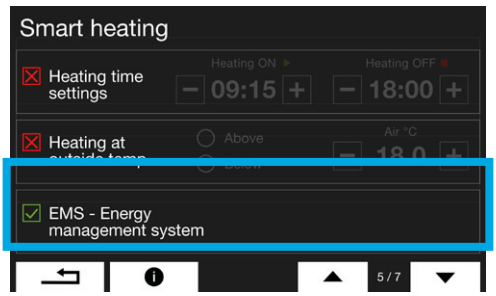
Water temperature measurement and heating control

The water thermometer should be installed in the inlet pipe coming from the pool. Never install it behind the heat exchanger. When the temperature drops below the required value, the relay switches ON your heat source (heat pump, electric heating, gas boiler circulating pump).



Heating time settings

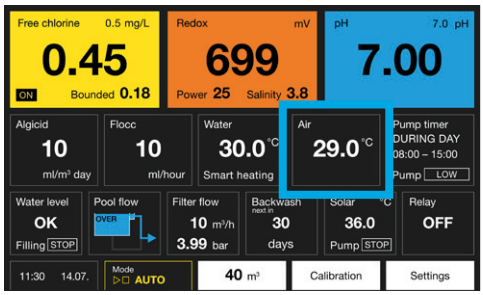
This function allows to set a time for which the heating will be in operation. This is particularly useful for switching on the heat pumps which have a higher efficiency during the day when outdoor temperature is higher. Eventually, turn off the heat pump during a specific time to reduce the noise from the heat pump.



Heating at outdoor temperature (above or below)

This feature allows you to set the outdoor air temperature, at which or below which ASIN AQUA Pro starts heating. To use this feature, an outdoor air thermometer must be installed. This function is used to optimize the effectiveness of air heat pumps, which have higher efficiency at higher temperatures.

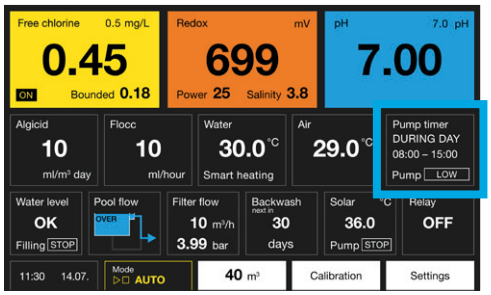
Other heating functions can be set individually for each mode in the **MODE Settings**



Outdoor air temperature

The value is used for smart heating and for the winter mode - protection against water freezing.

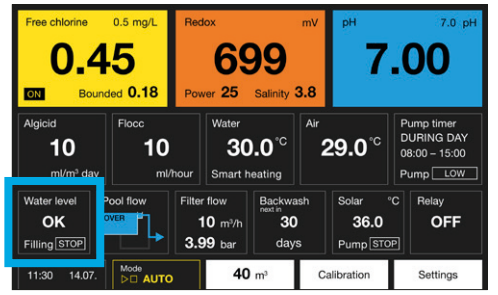
Functions



Pump timer

The field displays the current filtration timer interval and the current speed of the filtration pump.

Press the field to go to the settings of the current mode.



Level sensor - level monitoring and automatic refilling

The water level is monitored using a pressure-type level sensor, which is easy installed by inserting the probe into the buffer tank or the blind nozzle of skimmer pools. ASIN AQUA monitors four different levels, which can be set in centimeters in the water level meter menu.

Setting:

High level ALARM - too much water in buffer tank

After this level is reached, following actions may start:

1. If the automatic filter backwash is enabled, one backwash cycle starts and drains the waste water.
2. If the automatic filter backwash is not enabled, the relay switches on (filter backwash) for the period of time until level is OK. The second circulating pump or automatic drain valve can be connected to this relay.

Refilling OFF - required level

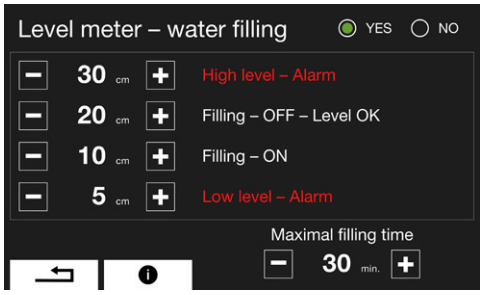
Refilling stops

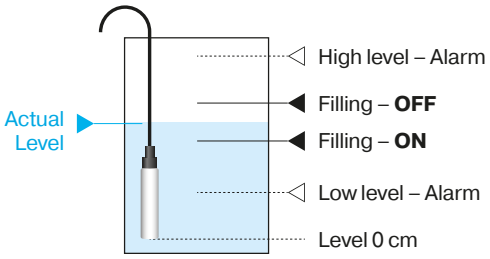
Refilling ON - level at which refilling starts

Refilling starts when the water level stays for at least 10 seconds below this value (in order to prevent oscillating).

Low level ALARM

Circulation (filtration) pump shuts off.

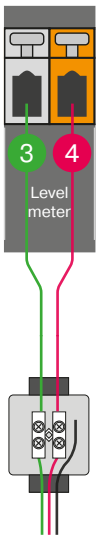




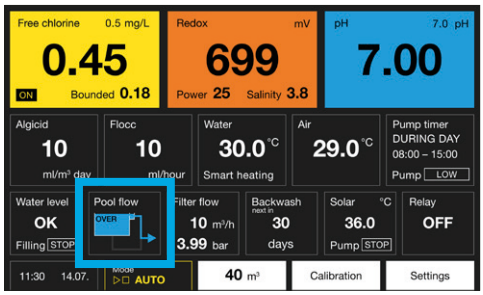
Maximum Refilling Time

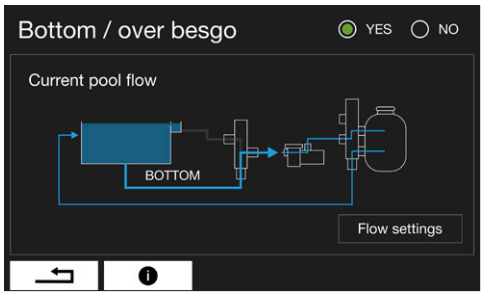
Maximum time to reach the required water level. If the water level is not reached within the preset maximum refilling time an error message appears.

Set the maximum filling time to 0 to disable the maximal filling time function.



Functions



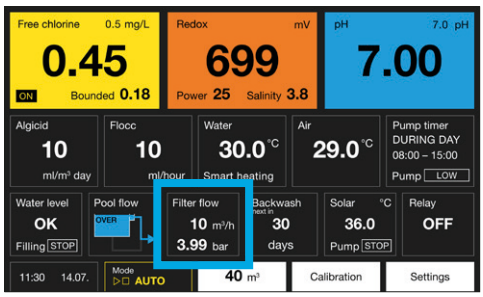


Switch Overflow/Bottom drain – Besgo 3w

The box shows the current direction of water flow to the filtration.

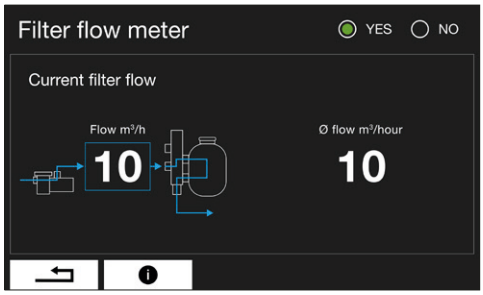
Enable this function to change the direction of the water flow.
This change will be valid until the next timer event.

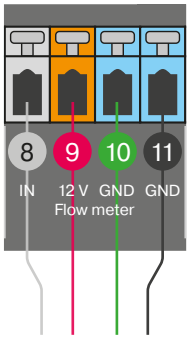
During filter backwash, water flows through the BOTTOM DRAIN.
An alarm WATER LEVEL TOO HIGH switches the water flow to the OVERFLOW until the alarm expires.
The pool cover has no effect on the BOTTOM/OVERFLOW switching.
The three-way BESGO should be connected in a way that when the solenoid valve is not powered, water flows through the BOTTOM.



Filter flow

Measurement of pool water flow through filtration, the value is displayed in m³/h.





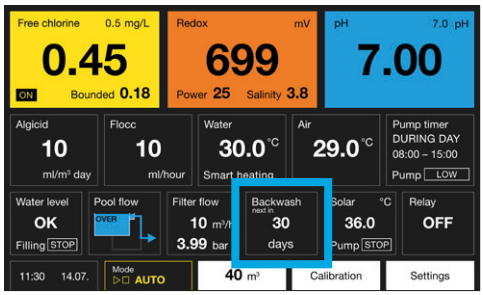
#13364
FlowVis d63mm
flowmeter
with non-return valve

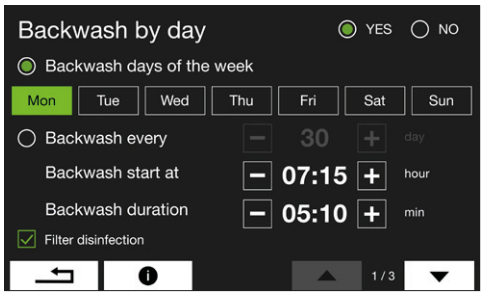


#13365
Electronics set
for connecting FlowVis
flowmeter



Functions





Automatic filter backwash

The ASIN AQUA technology is in particular based on the high efficiency of filtering and removing even the finest impurities, it is necessary to **wash the filter on a regular basis.** The automatic filter backwashing function ensures the filter washing on a regular basis in the preselected intervals.

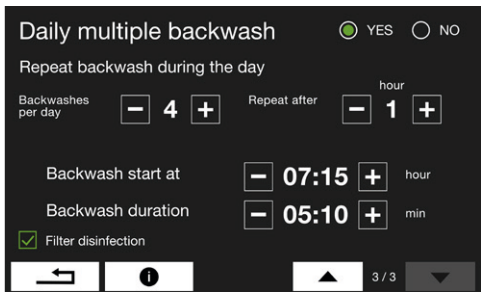
To enable this function, it is necessary to use the automatic 5-way BESGO valve. The ASIN AQUA controlls the BESGO valve with rellay output.

When the relay switches ON, the BESGO valve switches to the required position with the pressure of water or air and performs the filter backwash. See the BESGO manual.



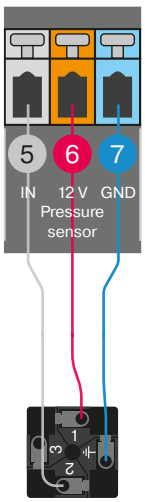
Backwash by pressure

The ASIN AQUA Pro offers an additional feature for automatic backwashing based on the pressure in the filter. If the pressure exceeds the preset value, the device will automatically initiate a backwashing cycle. In practice, this means the device performs backwashing according to the settings on the previous screen and executes an additional backwashing cycle if the pressure in the filter increases beyond the set threshold. To enable this feature, a pressure gauge must be installed on the filter.

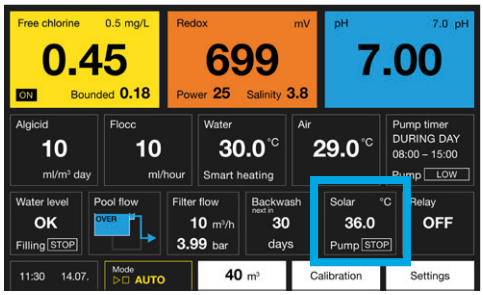


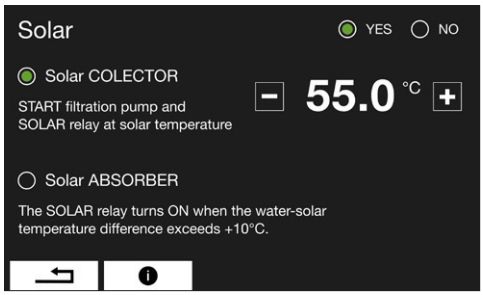
Multiple backwash per day

In the case of public pools, it is necessary to replace a larger amount of water daily. The ASIN AQUA Pro allows you to schedule multiple backwashing cycles throughout the day.



Functions

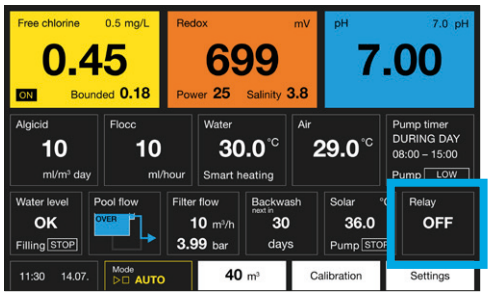




Solar

Menu shows the solar settings.

Activate this function and set the required temperature for the solar panels. Once the required temperature of the solar panels is reached, the solar relay will activate. The solar relay can control the Besgo 4-way or the solar panel circulation pump.

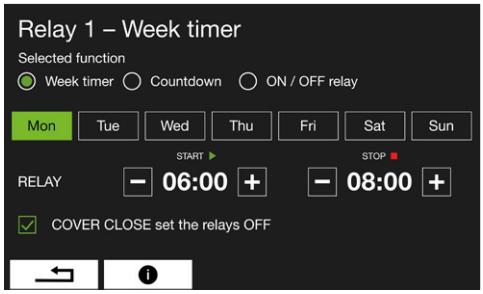


Relays

ASIN AQUA Pro has one integrated programmable relay to control one extra accessory. It is also possibile to connect optional **RL module** (relay module) to connect 4 extra relays.

Integrated relay has a only week timer function and can be set and controlled directly on the ASIN AQUA Pro screen or via the Pool REMOTE app.

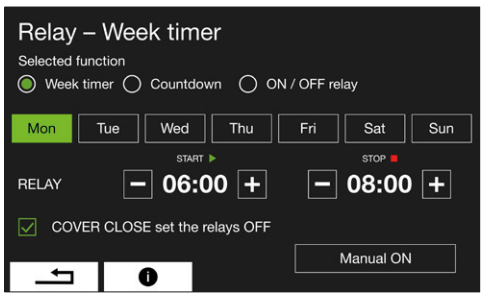
Extra relays from the RL module have funtions: Week timer, Countdown and ON / OFF. Extra relays can be set and controlled only via the Pool REMOTE app.

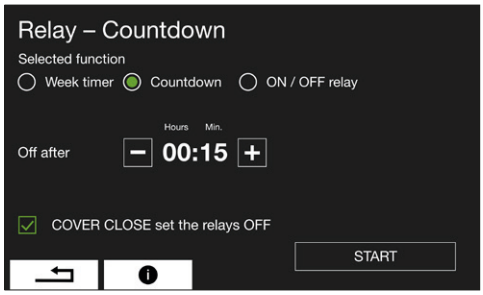


Week timer - Set the specific days and times for relay activation.

Countdown - Set the time for which the relay is active. Turn on the relay manually or with the Pool REMOTE app. The relay switches OFF after the time countdown is complete.

ON / OFF relay - Control the relay manually or with the Pool REMOTE app.





Maintenance

#12073 Replacement hose for the pump PP 60

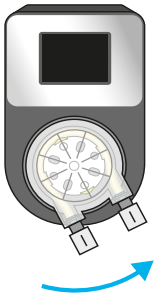


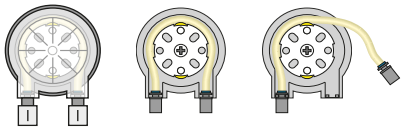
To ensure the optimum efficiency, perform visual checks and maintenance of ASIN AQUA on a regular basis.

PP60 and PP10 tube replacement

To prevent the pump from failing, it is recommended to replace the tube #12073 every 24 months for private and every 12 months for public pools.

In doing so, proceed as follows:





- Switch off ASIN AQUA.
- Turn the pump cover cassette anticlockwise and take it out.
- Release both tube ends and take it out of the cassette.
- Lubricate the new tube with the supplied grease.
- Insert the lubricated tube into the cassette.
- Place the cassette back on the pump and turn it clockwise to lock it.
- Use new nuts, which are part of the replacement tube set, for connection of the PE tube.

#12005 Injection valve



Injection valve maintenance

On a regular basis, check throughput of the injection valves, rubber band integrity, remove scale.

In case of private pools, replace injection valve rubber bands #13087 every 2 years. In case of public pools, replace #12005 every year.

#13087 Replacement rubber band for injection valve



Flow detector #12106



Flow detector with filter

Rinse the filter of the flow detector regularly.

Fuse Replacement

Fuse T 170 mA #13429
or Fuse T 125 mA #13078
Fuse T 1 A #13079



T170 mA or T125 mA fuse

Fuse protecting the inner electronics. In case of its burnout, check the inner electronics.

T1 A fuse

Fuse protecting external sensors. In case of burnout of this fuse, check the level sensor, flow detector, and external display.

pH - Buffer 7,00 #12065



pH probe testing

Take the probe out of ASIN AQUA housing and clean it from impurities. Check for visible mechanical damage on the probe.

Measure the pH value and ensure it falls within the tolerance range of +/- 1.0. For example, if the water pH is 7.2 and the probe measures 7.9, it is in tolerance, the probe is considered okay.

Test the probe's response to positive or negative changes in water or buffer by immersing it in a 7.0 pH buffer and observing the response after one minute. The response should be at least 90%.

Follow the instructions in the user's manual for the probe.

CLF probe testing

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.

REDOX probe testing

Redox Buffer 650 mV #12091



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 50 mV; when tested with a buffer of 650 mV, it should not show less than a minimum of 600 mV
- the probe reacts to both positive and negative changes in the free chlorine content of the water

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.

Winterizing - storage during winter

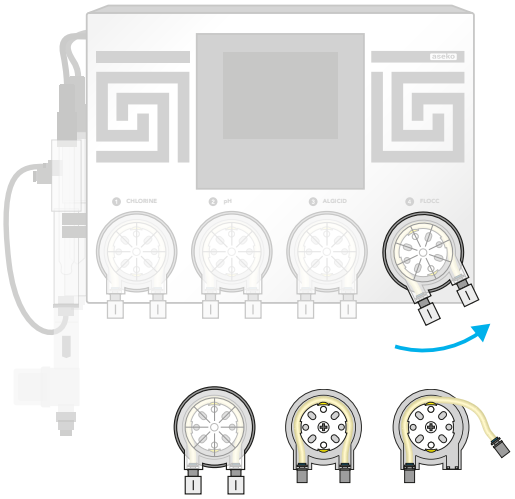
If you want to operate ASIN AQUA in Winter mode, go to the chapter Configuration - Winter mode. If you do not want to operate the device in Winter mode, it is necessary to winterize the device and all its components (store them when not in use).

Winterization of the unit and its accessories

If you do not want to have the ASIN AQUA device in operation in winter, the device and all accessories must be dismantled, winterized and moved to a suitable location. To disassemble and winterize the ASIN AQUA, follow the instructions below.

Storing of pool chemicals, connecting PE tube and dosing pumps

- If the chemicals are left in a place where the temperature does not drop below 0°C, turn OFF the ASIN AQUA. Disconnect the dosing pumps from the ASIN AQUA and remove the inner tube from the pump. Leave the tube connected to the connecting PE tube. Put the pump cartridges without the inner tubes back onto the ASIN AQUA. Store the chemical barrels and connecting PE tube in a place where the temperature is between +0 - +40 °C.
- If chemicals remain in a location where the temperature drops below 0°C, SWITCH OFF ASIN AQUA. Remove the connecting PE tubes from the chemical barrels and place them in a container with water. Turn on ASIN AQUA. Go to the RELAY TEST menu and press Chlor/Oxypure, pH, Algicide and Floc. When the connecting PE tube is completely filled with water, turn OFF the relay test. Remove the water container and perform the RELAY TEST again to completely fill the connecting PE tube with air. When the connecting PE tube is completely filled with air, stop the relay test and turn OFF the ASIN AQUA. Disconnect the connecting PE tubes from the dosing pumps and from the injection valves. Store the chemical barrels in a place where the temperature is between +0 - +40 °C.



Disconnect of the ASIN AQUA and its accessories

1. Disconnect the ASIN AQUA Home mains cable from the 230 V / 50 Hz socket.
2. Disconnect the filter unit's mains cable from the ASIN AQUA and store the filtration pump according to manufacturers manual.
3. Disconnect all accessories from the ASIN AQUA motherboard and store them according to manufacturers manual.

#12154 Probe storing sump



#12082 Probe storing liquid



Winterizing of probes

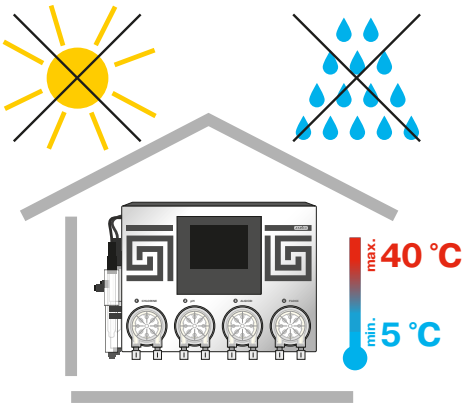
Winterizing of pH and Redox probe

Remove the probe from the housing, dry it with a paper towel and place it in a storage sump filled with a special storage liquid. See probes manual at the website manuals.asekopool.com.

Winterizing of CLF probe

Remove the probe from the housing, unscrew the membrane and empty the electrolyte from it. Do not put the membrane back on the probe and store them separately in a dust-free place where the temperature is between +5 - +40 °C and the humidity does not exceed 70 % throughout the winter. See probes manual at the website manuals.asekopool.com.

Storing of the unit



Move the ASIN AQUA unit in a place where the temperature is between +5 - +40 °C and the humidity does not exceed 70 %.

Internet connection

The LAN connector is to be connected to the domestic router. Data are sent in the intervals of 10 seconds to the address **aseko.cloud**, the route must not be blocked by the firewall.

If you are not able to setup the connection by your own ask your IT specialist for help.

Possible connection methods

Home network

Connect the ASIN AQUA Pro to your router via LAN cable.

Mobile network

In case you have no direct internet access you can use the data transmission over the mobile network. Connect the ASIN AQUA Pro to your mobile network router via LAN cable.

Wifi connection

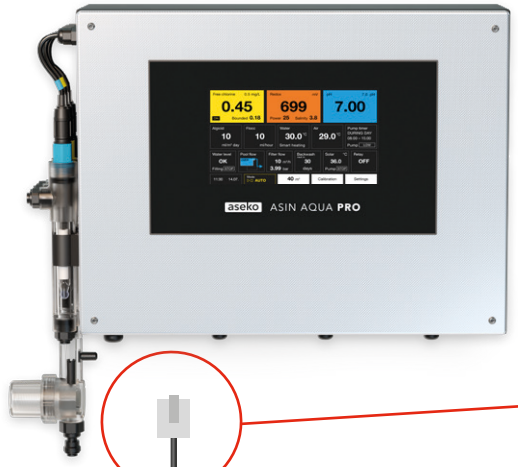
If you install the ASIN AQUA Pro in place where is no access to your private network by wired connection but your Wifi has enough signal, you can connect the ASIN AQUA Pro to your Wifi by use of Wifi extender.

Powerline via 230V/DC

If you have no wired access to your LAN network but your ASIN AQUA Pro is in the at the same electric network you can connect the LAN network via 230 V power line socket adapter.

If you have connection problems:

Follow specialized guide at manuals.asekopool.com in folder internet connection.



Connect ASIN AQUA Pro via the LAN cabel

LAN

Home network

INTERNET

Router

3G / LTE

INTERNET

LTE Router

Wifi extender

WIFI EXTENDER

INTERNET

Router

Powerline via 230 V socket outlet

230 V

INTERNET

Router

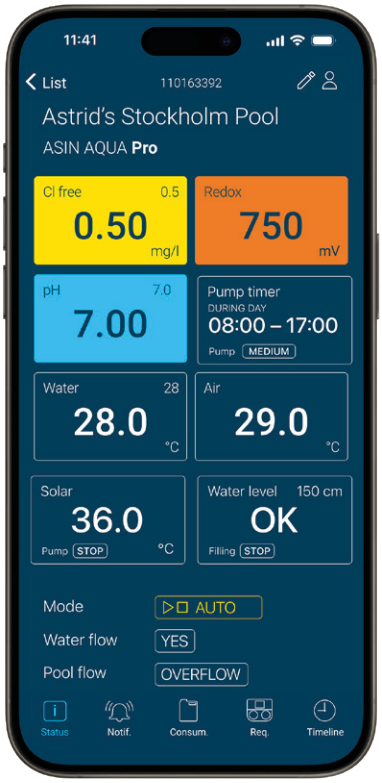
Aseko Cloud Services

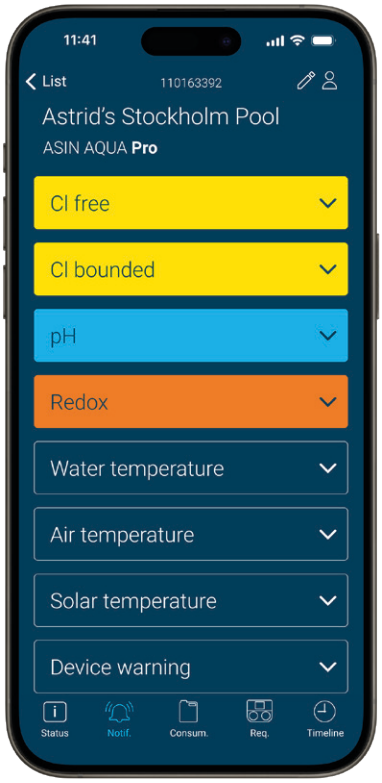
Aseko Live app

The internet connection allows you to use the Aseko Live mobile application and monitor your pool on mobile devices wherever the internet connection is available.

After you connect the ASIN AQUA Pro to the internet download the Aseko Live application to your smartphone. Application is available for iOS and Android operation systems.

App's main screen, after opening, will ask for typing your ASIN AQUA Pro serial number. You can add more units to the Aseko Live app.







Aseko Live **for iOS**

Aseko Live **for Android**

Aseko Cloud Services

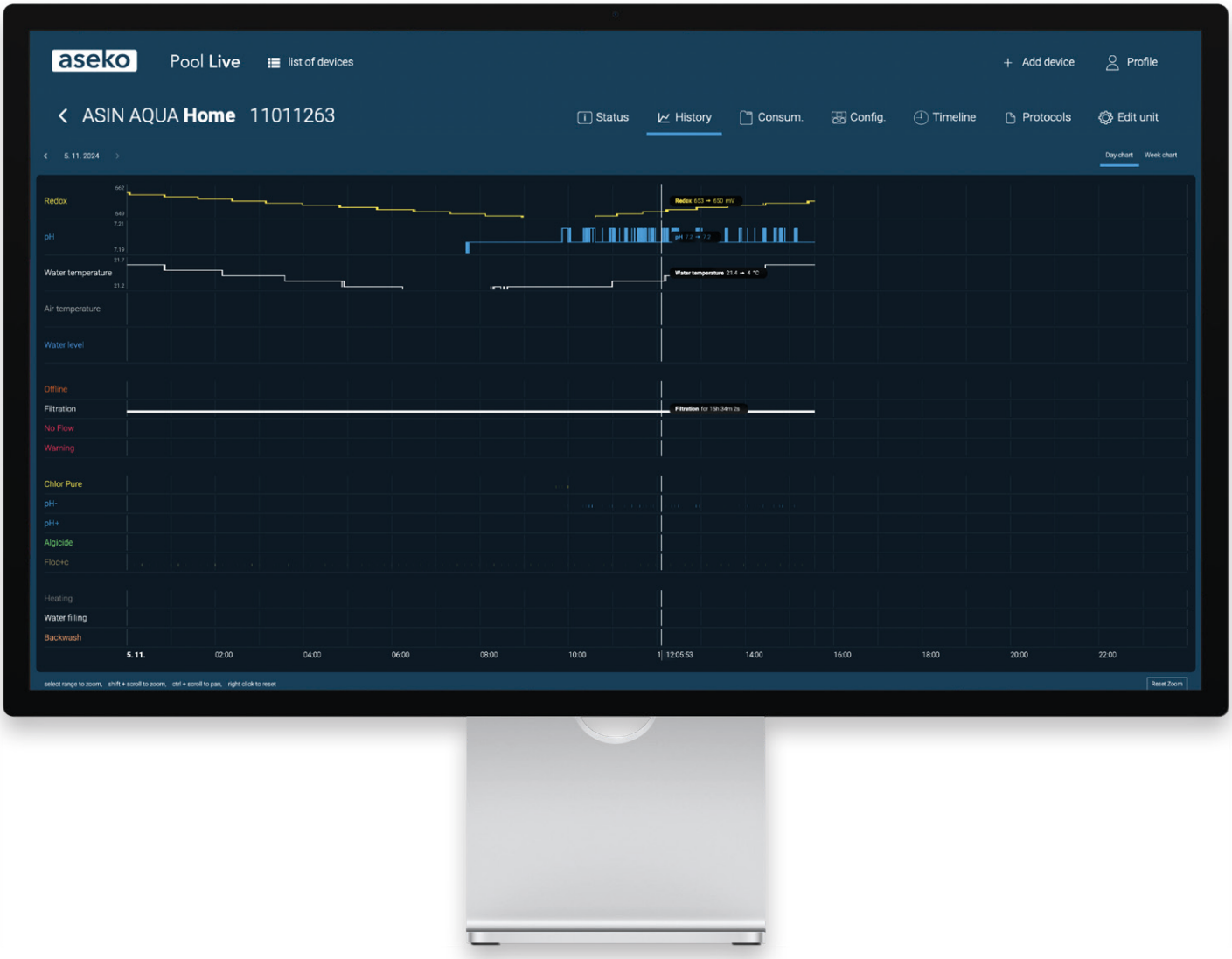
https://aseko.cloud

The web application for detailed monitoring of the pool water quality by means of well-arranged graphs. It shows all the measured parameters and ASIN AQUA Pro actions up to 30 days back.

This application is giving you the detailed information of the pool status and detailed review of all events, taken actions and act levels of monitored items up to 30 days back.

Transparent graphic environment of chart lines is giving fast report and you can easily see interconnection of monitored values.

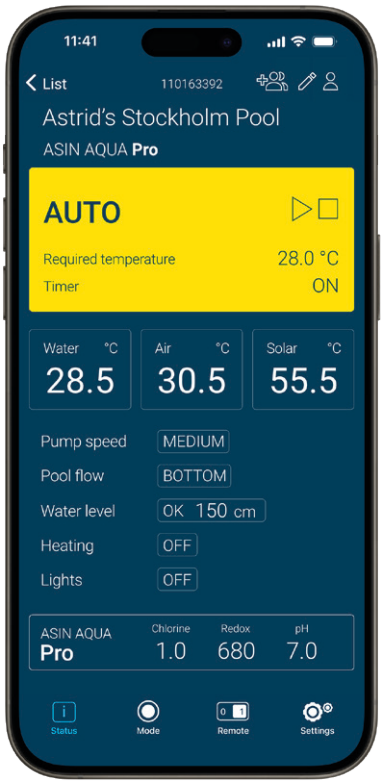
This application is useful at public pool installations where you need to observe the history and monitor the pool water quality and maintenance. In case of any discrepancy in water quality you can find all actions, provided in that moment and in relation to other values you can diagnose the reason of such discrepancy.

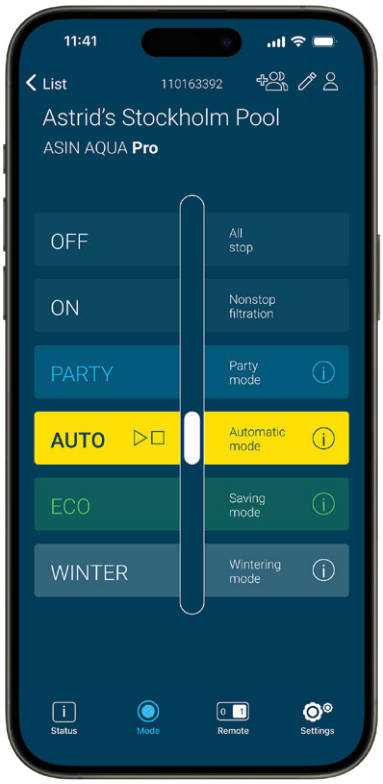


Aseko Cloud Services

Aseko Remote App

App for iOS and Android smartphones to set the modes and control the pool technology connected to the ASIN AQUA Pro device.







Aseko Remote **for iOS**

Aseko Remote **for Android**

Create your account

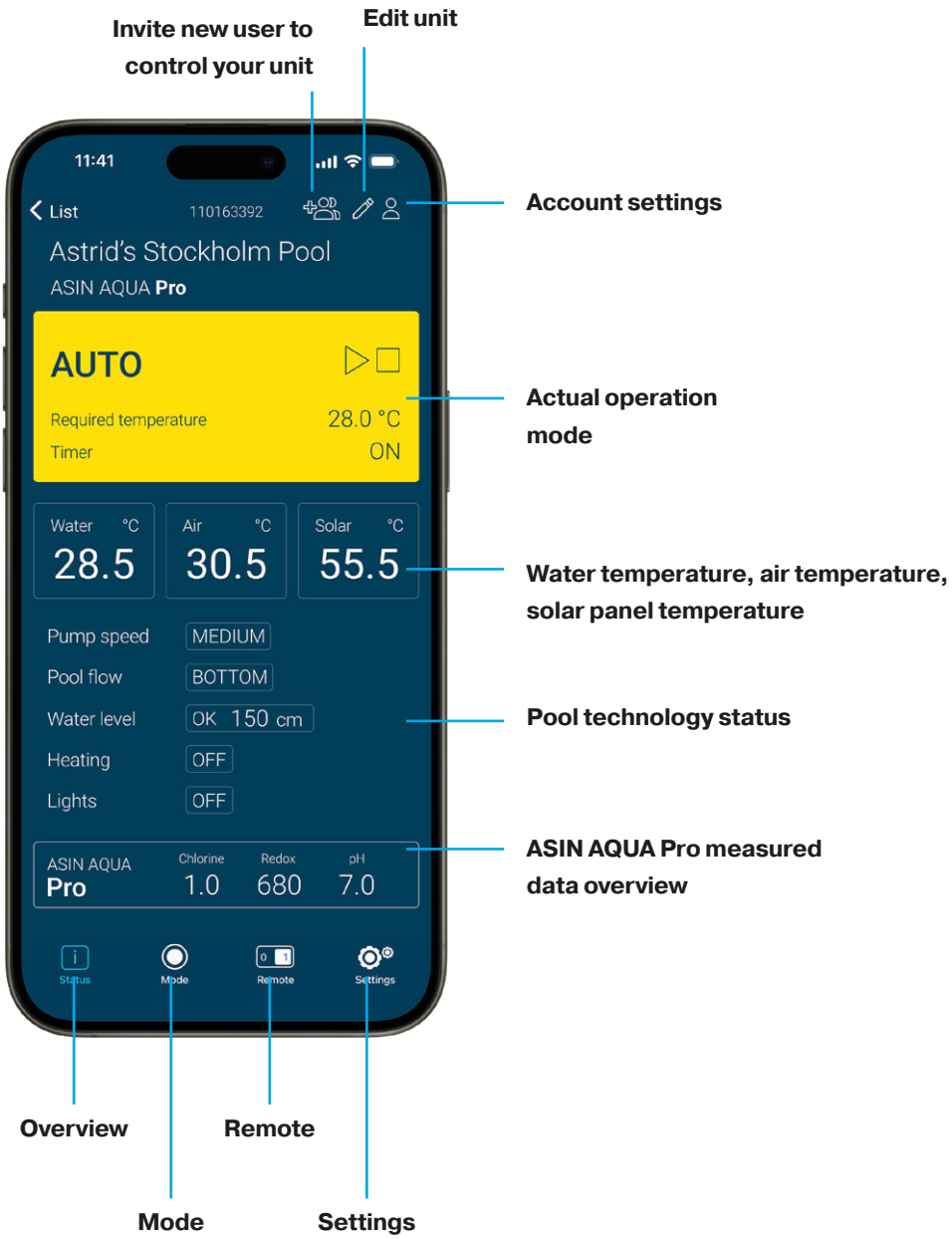
Create your account at account.aseko.cloud or use your existing Aseko Live account.

Enter serial number

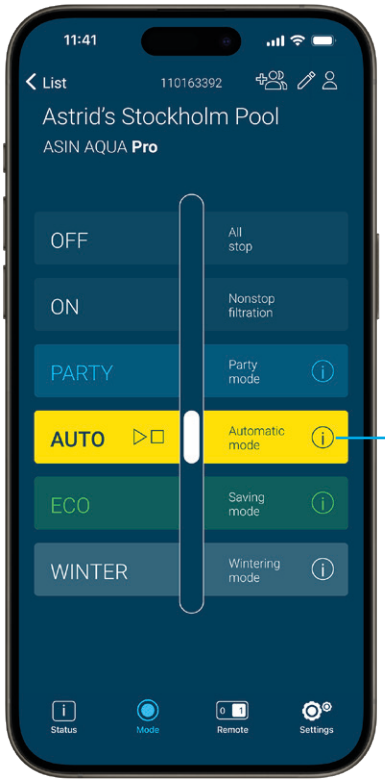
Enter the serial number of your ASIN AQUA Pro to add the unit under your account.

Overview

The screen provides all the important information about the current status of your pool and the connected components controlled by ASIN AQUA Pro.



Mode selection



The screen serves to switch between operation modes of your pool controlled via ASIN Pool.

The slider serves to control your pool operation modes.

Remote control



Customize the functionality of each relay in the settings tab. Control relays manually by turning them ON or OFF, send pulses, or configuring them as week timers to automatically operate your pool equipment at specific times of the day.

Warning: The pulse relay feature can be used to remotely open a close a pool cover. Note that remote control of pool covers is prohibited in certain countries due to safety regulations. It is your responsibility to ensure compliance with the laws and safety standards of your country regarding the use of remotely controlled pool covers. Always prioritize safety and follow all local guidelines and regulations.

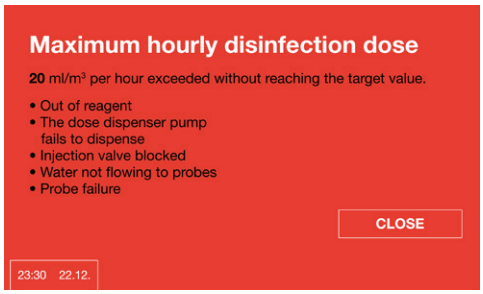
ASIN AQUA Pro Relay extension module

Number of relays can be extended using a RL extension module.

RL module #13065



Warnings

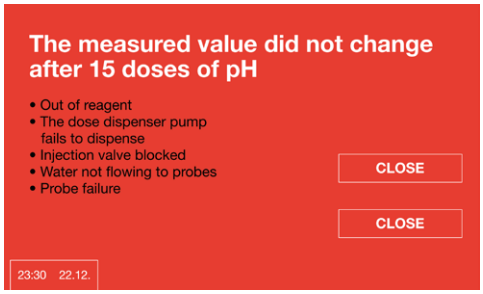


Maximum hourly disinfection dose

If the maximum hourly dose of disinfection is exceeded with no probe response, ASIN AQUA Pro stops dose dispensation and displays a warning.

Recommended settings:

Pool	15 – 20
Whirlpool	20 – 50
Whirlpool high stress	30 – 99

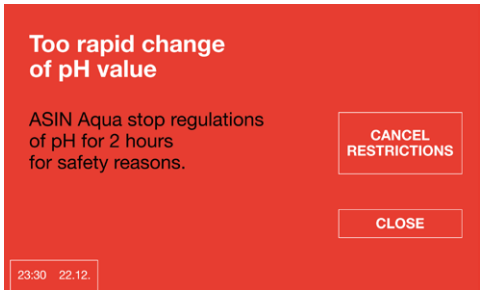


The measured value did not change after 15 doses of pH

If the maximum number of pH doses is exceeded with no probe response, ASIN AQUA Pro stops dose dispensation and displays a warning.

The present hardness affects the dose amount:

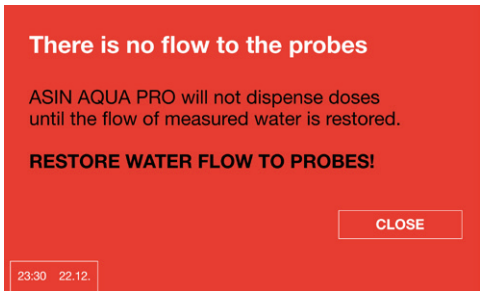
Soft water	< 9° dH	15 doses
Hard water	9 – 21° dH	30 doses



Too rapid change of pH value

Too rapid change of pH is usually caused by refilling water directly to the skimmer. If such rapid change of pH occur, ASIN AQUA Pro stops controlling pH for two hours.

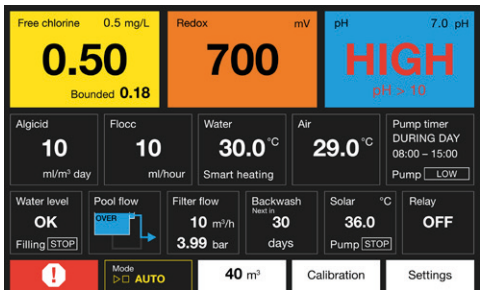
This limitation can be manually disabled.
After pH has been stabilized or two hours have elapsed, ASIN AQUA Pro changes over to the normal mode.



There is no flow to the probes

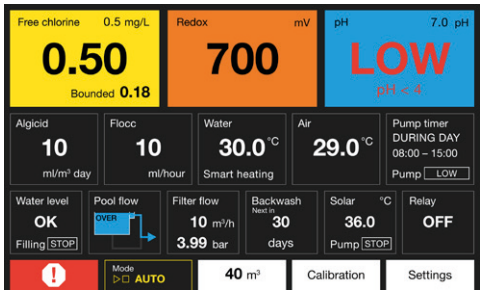
No flow to the probes was detected.

Warnings



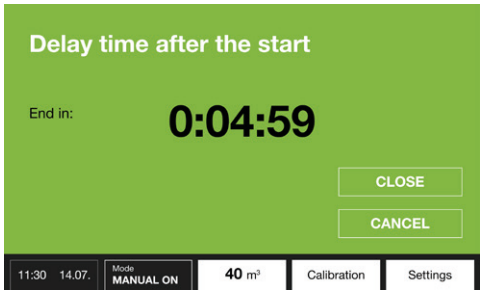
The probe shows a pH> 10

Check the pool water and probe.



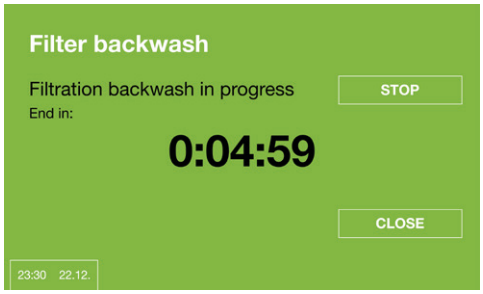
The probe shows pH <4

Check the pool water and probe.



Delay time after the start

Waiting for the pool water to mix after the start.



Filter backwash

Filter backwash in progress.

External touch display

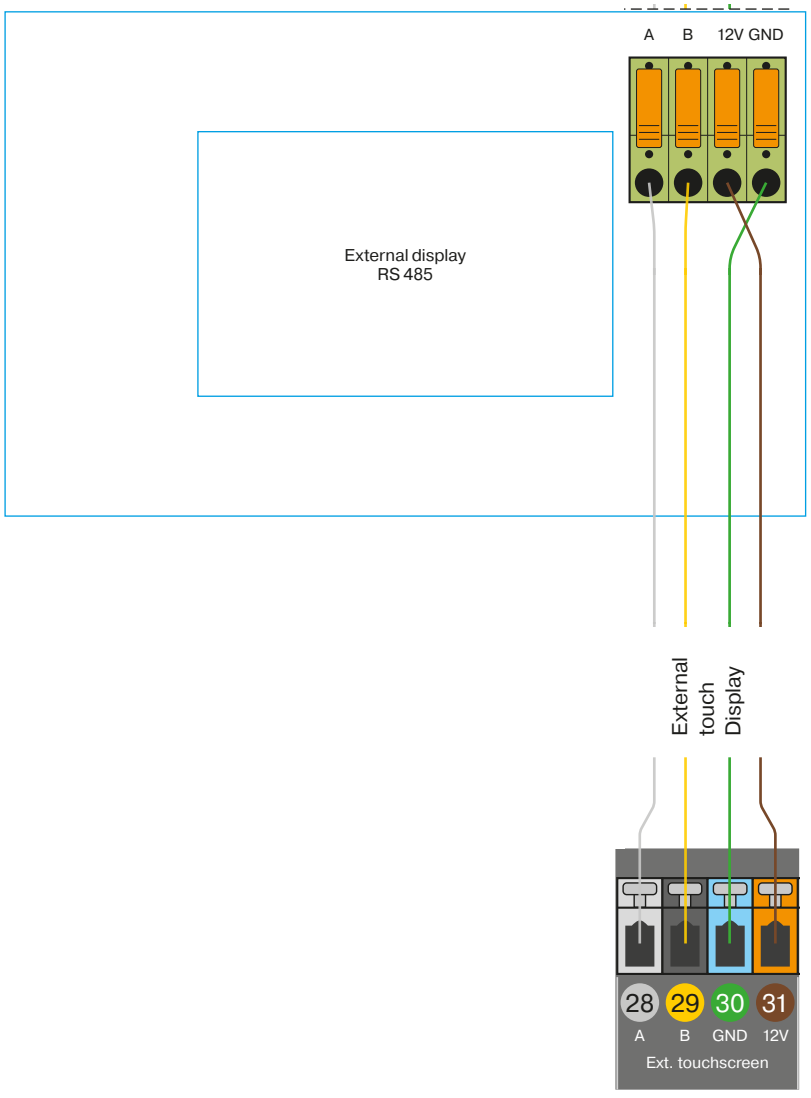
External touch display
#12048



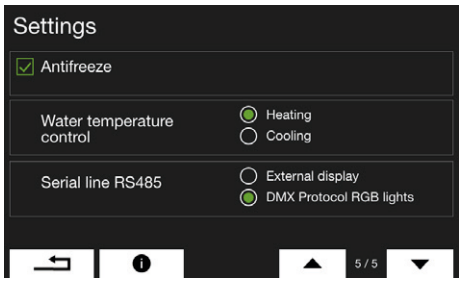
The external display shows

1. Pool water parameters:
   Temperature, pH value, redox potential or chlorine concentration.
2. Parameters of the air in the pool area:
   relative humidity and temperature.

The setpoints can be set on the ASIN AQUA Pro device and a probe calibration can be carried out via the external display.



RGB lights



The ASIN AQUA Pro supports the DMX protocol to connect and control RGB lights (Duravision,EVA, compatibility with other manufacturers has to be discussed with the seller).

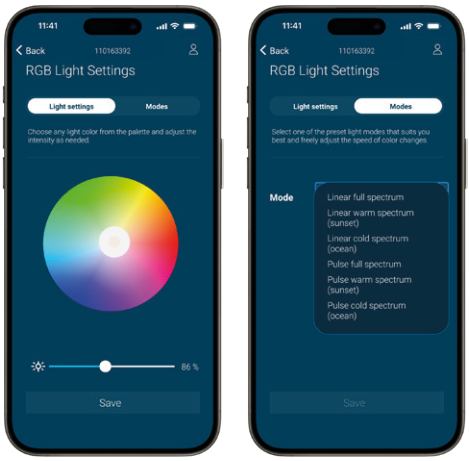
1. Enable DMX protocol RGB lights in the menu of the device

In the menu of the device, select the Serial line RS485 to be in DMX Protocol RGB lights mode.



2. Connect light control unit with the RS485 output of ASIN AQUA Pro

Connect the RS485 of ASIN AQUA Pro with the DMX input on the motherboard of you light contorl unit according to the schem below.



3. Open Aseko Remote app and to control the lights

RGB lights can only be controlled via Aseko Remote app. Select a color and save or use one of the preselected modes.

Enhancement of filtering efficiency



AFM® activated filter media

AFM is direct substitute for filter sand. It doubles efficiency of the existing filtration system. AFM® is resistant to biological pollution and formation of so-called bio-film.

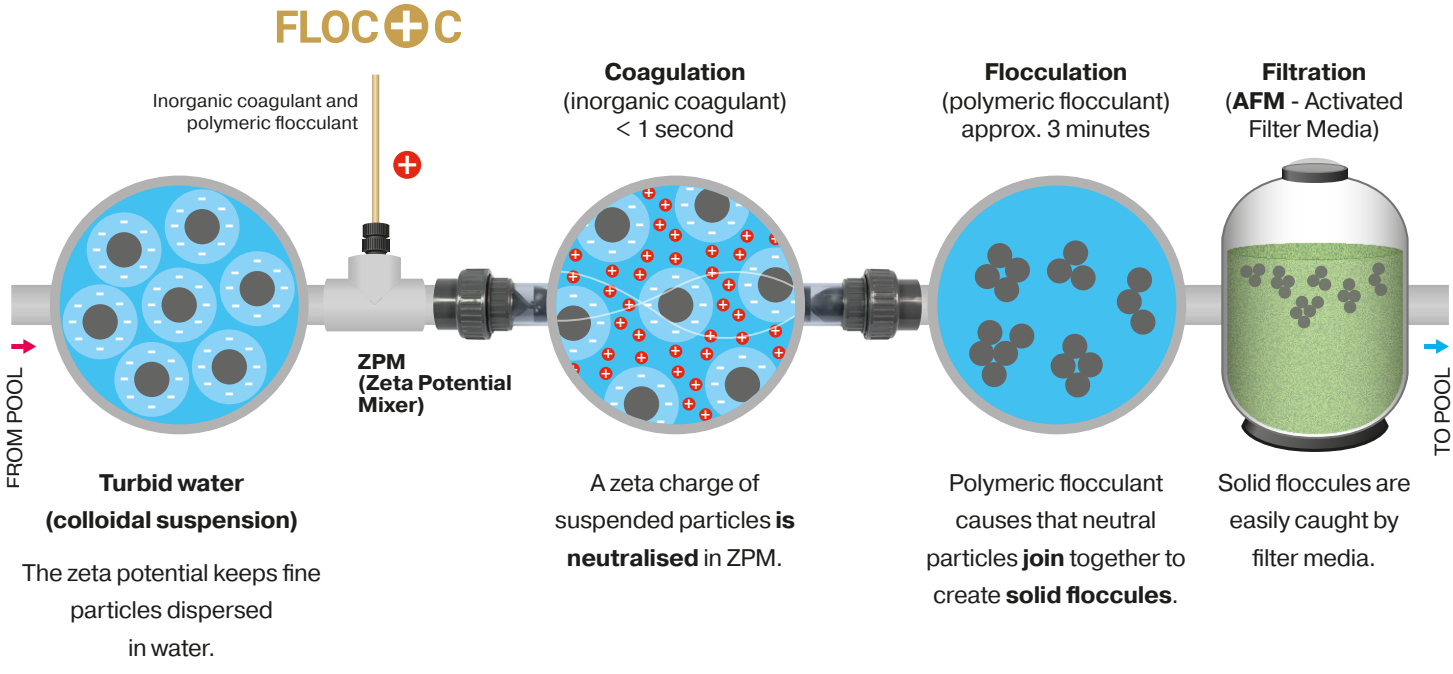


ZPM® coagulation mixer

ZPM increases effects of coagulation and flocculation for transition of smaller dissolved solids (turbidity) to larger particles that can be removed by filtering.

ASEKO Pool & Spa FLOC+C

A unique mixture of coagulant and flocculant for increasing the efficiency of the filter. The coagulant neutralizes the zeta potential, which keeps impurities dispersed into a fine turbidity. The flocculant produces flakes that are better captured by the filter.



Turbid water (colloidal suspension)

The zeta potential keeps fine particles dispersed in water.

A zeta charge of suspended particles **is neutralised** in ZPM.

Polymeric flocculant causes that neutral particles **join** together to create **solid floccules**.

Solid floccules are easily caught by filter media.

aseko

USER'S MANUAL

ASIN AQUA **Pro**

2025

EN

www.asekopool.com