

QLEEN

PURE WATER CLEANING SYSTEMS

User information



Q-Station

72669

Version 02/2023

Introduction to the user information QLEEN Q-Station

Thank you for choosing a QLEEN Q-Station cleaning system from Lehmann.

Before you start with the cleaning work, here is some important user information.

Please read these carefully and be sure to observe them.

As the owner of a QLEEN Q-Station cleaning system, please also make absolutely sure that your employees have also read the „**Q-Station User Information**“ and follow the safety and warning instructions.

Please also observe and comply with the „**General User and Safety Instructions**“ (separate publication of Lehmann KG).

This document is the original user information. It is written in German. Copies in other languages are translations of this original user information.

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Country of origin

Federal Republic of Germany

We are pleased that you have chosen our QLEEN Q-Station product.

Item number 72669

Type designation QLEEN Q-Station

Serial number _____

Year of manufacture _____



1 Table of contents

Topics		Page	
2. General notes and safety instructions	2.1	Instruction structure	5
	2.2	Safety instructions	6
3. Description of the QLEEN Q-Station	3.1	The PUREWATER principle - cleaning with pure water	7
	3.2	Sustainability	7
	3.3	Water hardness and productivity of the mixed bed resin	7
	3.4	Functionality of the QLEEN Q-Station	8
	3.5	Areas of application	8
	3.6	Scope of delivery	8
	3.7	Connectors and controls	9
	3.8	Remote control	10
4. Starting up	3.9	Hose reel	10
	4.1	Installation	11
	4.2	Unroll the hose	11
	4.3	Connection of the water supply	11
	4.4	Water supply through the house water connection	12
	4.5	Water supply through a water tank	12
	4.6	Switching on the machine and remote control	13
	4.7	Bleeding	14
	4.8	Bleeding the pump	14
	4.9	Bleeding the dosing pump	15
	4.10	Mounting the poles and brush	16
4.11	Connecting a ROTAQLEEN	18	
5. Cleaning	5	Cleaning	19
	5.1	Cleaning with PUREWATER or tap water	20
	5.2	Cleaning with tap water and cleaning solution	20
	5.3	Cleaning with ROTAQLEEN	24
6. Water quality meter	6	Water quality meter	25
	6.1	Operation	25
7. Alarms	7.1	Alarm at saturation of the mixed bed resin	25
	7.2	Discharged battery alarm	26

Topics		Page
8. After cleaning	8.1 Dismantling	26
9. Additional information	9.1 Maintaining and cleaning the device and accessories	29
	9.2 Charging the batteries	29
	9.3 Replacing the mixed bed resin	30
	9.4 Cleaning/replacing the strainer at the water inlet	31
	9.5 Battery change remote control	31
	9.6 Troubleshooting	32
	9.7 Storage	33
	9.8 Repair and maintenance	33
	9.9 Recycling and disposal	33
	9.10 Warranty and guarantee	33
	9.11 Manufacturer information	33
10. Technical information	10.1 Supply connections	34
	10.2 Climatic operating conditions	34
	10.3 Technical data	34
	10.4 CE Declaration of Conformity	34

2 General notes and safety instructions

2.1 Instruction structure

This manual will give you an overview of the functions, operation and proper use of our QLEEN Q-Station machine.

Certain symbols in these instructions indicate various information:



The information sign indicates useful tips and information.



The exclamation mark warns of potential dangers and risks

2.2 Safety instructions



Warning: Fire and explosion hazard:

- Never use flammable liquids or operate the machine near flammable liquids/vapors or combustible dust.
This machine is not equipped with an explosion-proof motor. The electric motor emits sparks during startup and operation that can cause ignition of flammable materials.
- Do not aspirate flammable materials with the machine.



Warning: Risk of electric shock:

- Before each start-up, check the power cable and the power plug for damage. If any damage is detected, the machine must be shut down immediately and repaired by a specialist!
- When plugging in the machine, make sure that the power plug and your hands are not wet!



Caution: Danger of accident:

- The operating personnel must be adequately trained in the use of the machine.
- The machine must be in perfect condition.
- Only set up the machine on solid, even surfaces.
- Wear sturdy, non-slip footwear with protective caps to protect yourself from being crushed by the machine.
- Work on roofs only with appropriate safety equipment.
- Take care not to get mixed bed resin in your eyes. For further safety instructions and handling of the mixed bed resin, read the "**Mixed bed resin systems user information**".
- When using cleaning solution, observe the respective manufacturer's specifications.



Warning: Risk of accidents and damage to the machine and equipment

- Use the machine only from +5 °C and higher, frost damage to the machine and equipment may occur.
- Do not work with the pole system in wind forces above 2 (>3.3 m/s), the rod system may buckle and fall off

3 Description of the QLEEN Q-Station

3.1 The PUREWATER principle - cleaning with pure water

The high chemical-free cleaning power of PUREWATER is the basis on which the PURAQLEEN principle for cleaning glass, solar and facade surfaces.

In this process, tap water is passed through a granulate bottle. The minerals contained in the tap water accumulate in the mixed bed resin and all salts are removed from the water. The tap water is demineralized by pre-pressurization in the granulate bottle and reaches the cleaning head as PUREWATER.

PUREWATER not only has a very good wetting capacity, but also dries without stains or streaks, even in strong sunlight.

This means that in many cases the use of cleaning solutions can be dispensed with. (exception: greasy, oily or very heavy soiling).

3.2 Sustainability

Our system contributes to the careful and sustainable use of resources for cleaning in times of dwindling resources.

In contrast to the reverse osmosis process, our devices operate in the energy-saving low-pressure range; the pressure of the domestic water supply is sufficient to operate our devices. In addition, our systems convert 100% of the supplied water into PUREWATER, which can be used for cleaning.

3.3 Water hardness and productivity of the mixed bed resin

The water hardness at the place of use can be obtained from the local water supplier. This allows you to estimate the yield of the granulate bottle.

Depending on the measured value, the following values result for the maximum PUREWATER quantity and cleaning time with a granulate bottle (at a maximum initial value of 50 μS , **approximate data**):

German hardness level	Corresponds approximately to conductance	Estimated total quantity	Estimated total cleaning time*
2,8 °dH	100 μS	10200 l	51,0 h
5,6 °dH	200 μS	5100 l	25,5 h
8,4 °dH	300 μS	3400 l	17,0 h
11,2 °dH	400 μS	2500 l	12,5 h
14,0 °dH	500 μS	2000 l	10,0 h
16,8 °dH	600 μS	1700 l	8,5 h
19,7 °dH	700 μS	1650 l	8,25 h
22,5 °dH	800 μS	1200 l	6,0 h
25,3 °dH	900 μS	1100 l	5,5 h
28,0 °dH	1000 μS	1000 l	5,0 h

* Based on a flow rate of 200 l/h with the brush bow Vario

3.4 Functionality of the QLEEN Q-Station

After switching on, the power button lights up green and the system is ready for operation.

The operating modes are selected via the control buttons or the remote control.
PUREWATER/tap water blue hose, cleaning solution/tap water black hose, change of direction ROTAQLEEN

Tap water is required for cleaning with PUREWATER.
For this purpose, tap water is passed through the mixed bed resin system in the granulate bottle and demineralized in the process.
See also "Mixed bed resin system user information" (Lehmann KG publication).

Tap water is required for cleaning with cleaning solution (for particularly heavy soiling). The cleaning solution is sucked out of a cleaning solution container by the dosing pump and added to the tap water in the dosage to be set.
After working with cleaning solutions, the system should always be rinsed with tap water.

A pump conveys the clean water/cleaning solution/tap water via a DUO hose attached to the pole set* to the cleaning head* at the top end of the pole set*.
There it is distributed evenly and sparingly over the surfaces to be cleaned via fine nozzles*.

The pole set* consists of individual, mountable poles.
This results in variable working lengths between approx. 2 m (min.) and up to 21 m (max.).

With the DUO hose, the blue hose conveys the PUREWATER or tap water, and the black hose conveys the tap water or cleaning solution.

The integrated water quality measuring device provides information on the quality of the outgoing PUREWATER.

3.5 Areas of application

Typical applications for the QLEEN Q-Station are:

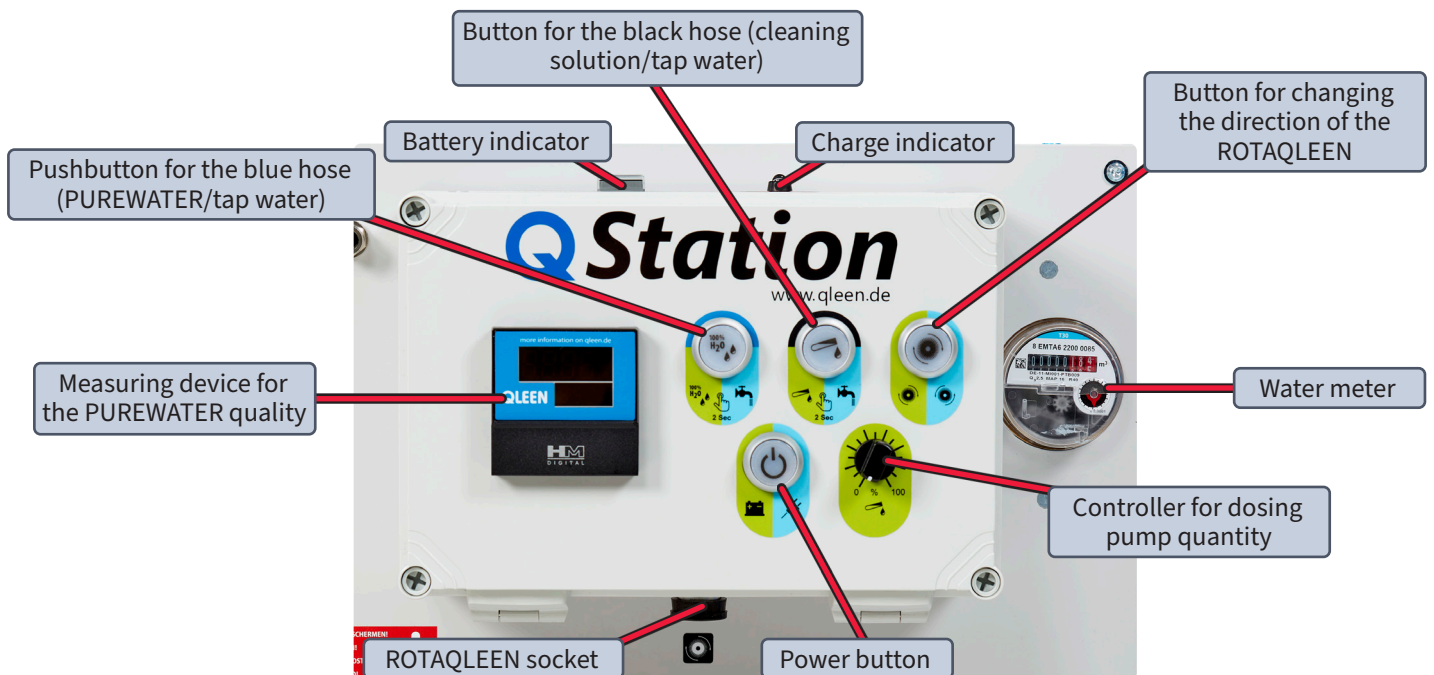
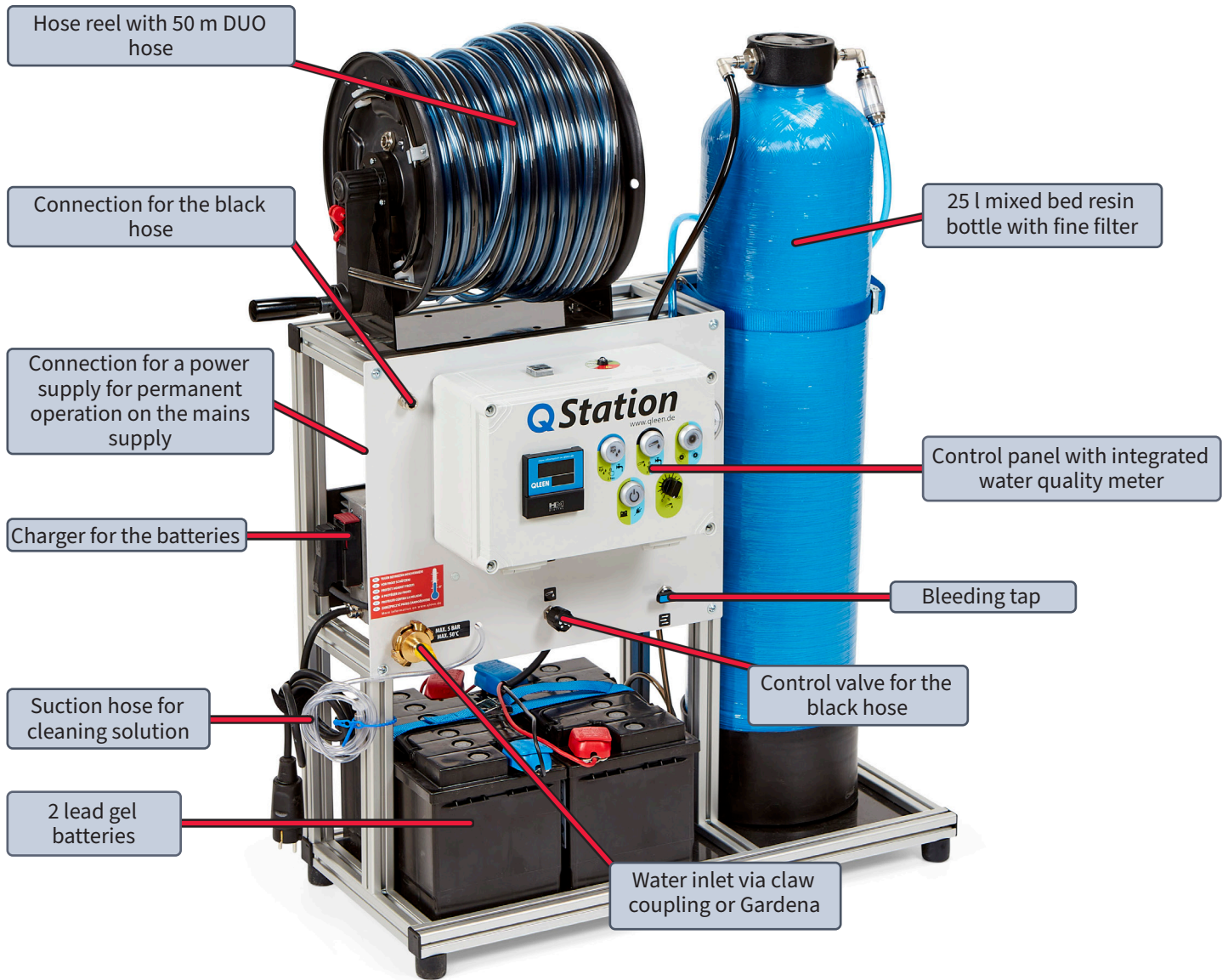
- To restore and increase the energy yield of solar and photovoltaic systems.
- Glass-clear and streak-free view for windows, window frames, conservatories, glass and greenhouses
- Often difficult to access outdoor advertising spaces and lighting boxes
- Against the intensive pollution by insects on vehicles (train, ship, plane, truck, car).

3.6 Scope of delivery

QLEEN Q-Station (72669)

- QLEEN Q-Station base station with 25 l granulate bottle filled with mixed bed resin, pump, dosing pump and integrated measuring device for water quality
- 50 m DUO hose on hose reel
- Remote control
- Suction hose
- Fastening lugs
- Gardena to quick coupling adapter
- Quick Start Guide, Instruction

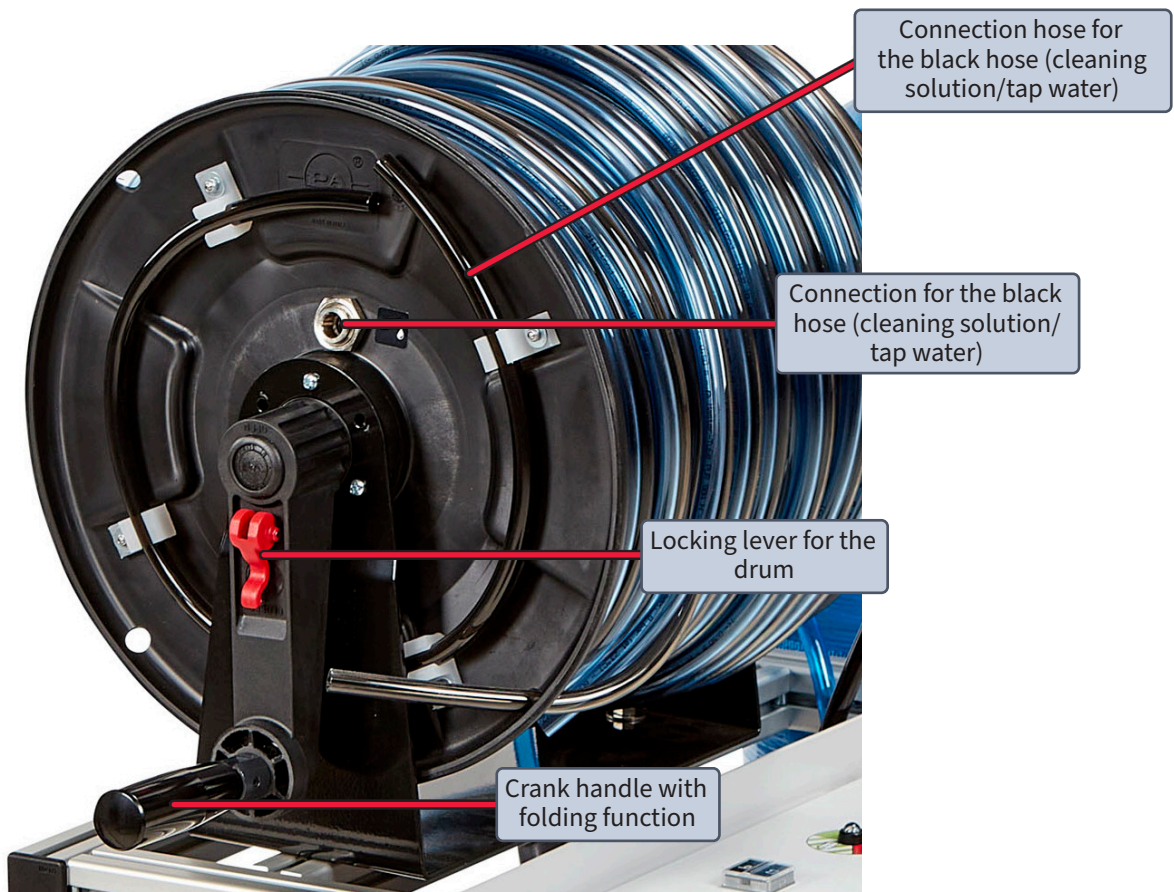
3.7 Connections and controls



3.8 Remote control



3.9 Hose reel



4 Starting up

4.1 Installation

The QLEEN Q-Station is designed for installation in a car or trailer. Eyelets are supplied for mounting.



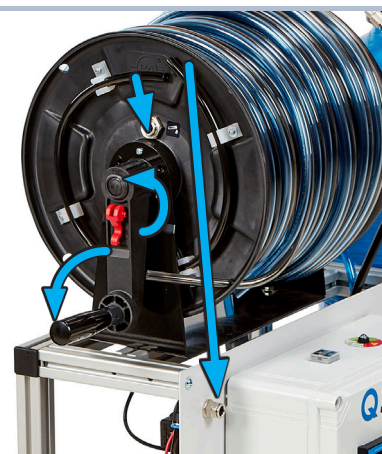
Caution Risk of injury and accident

- The installation of the Q station should only be carried out by qualified personnel
- Do not place on inclined, sloping and uneven surfaces, the QLEEN Q station may fall over
- If there are obvious defects on the QLEEN Q station or the pole system, do not put them into operation!

4.2 Unroll the hose

1. Unfold the hand crank
2. Fold the red safety lever upwards
3. Extend the DUO hose to the required length
4. Disconnect the black connection hose from the drum
5. Connect the connection hose to the drum inlet and the water outlet on the machine

⇒ The DUO hose is ready for use



4.3 Connection of the water supply

Water can be supplied directly to the house water connection via a Gardena hose or from a tank using the suction hose.



Caution the device may be damaged:

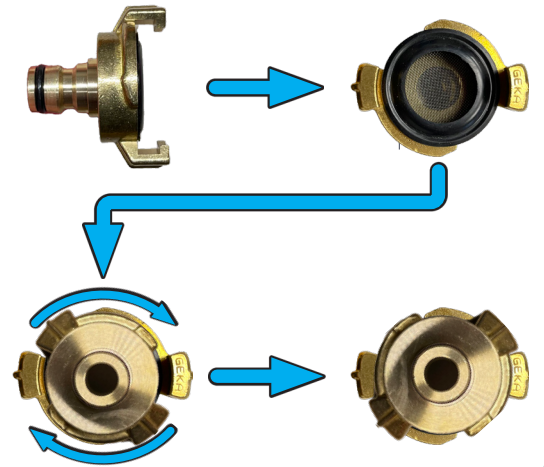
Only use clean tap water with a maximum inlet pressure of 5 bar for the water supply! Otherwise, the unit or the mixed bed resin may be damaged.



Before assembly, check the strainer and the seals in the quick coupling for contamination. These can reduce the flow rate and lead to a pressure drop at the nozzles.

4.4 Water supply through the house water connection

1. Attach the Gardena adapter to the water inlet and lock it in place by turning it clockwise.



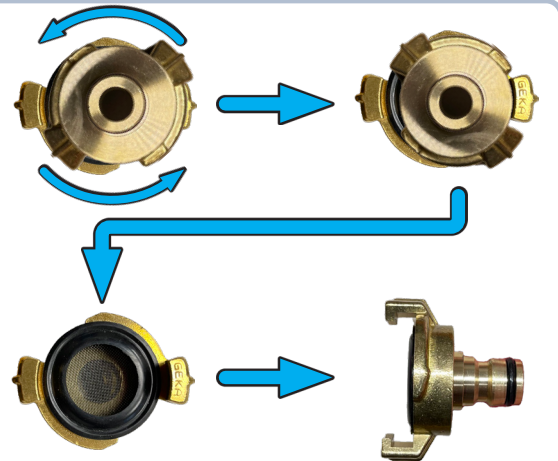
2. Connect the house water connection by means of Gardena hose to the inlet of the QLEEN Q-Station
3. Open the tap of the house water connection

⇒ The water supply via the house water connection is established

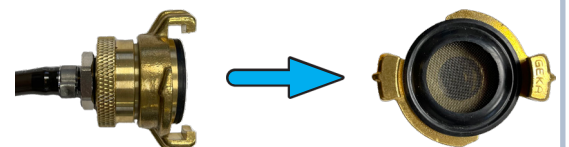


4.5 Water supply through a water tank

1. Remove the Gardena adapter from the water inlet by turning it counterclockwise.



2. Attach the suction hose to the machine with the quick coupling and screw it tight



3. Sink the side with the filter in the tank to the bottom
 ⇒ The water supply via the water tank is established



4.6 Switching on the machine and the remote control

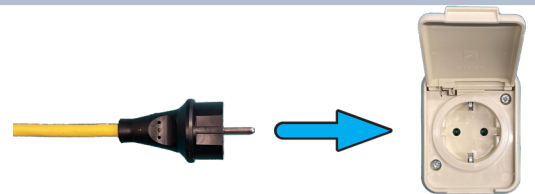
Normal operation runs on the integrated rechargeable batteries. The QLEEN Q-Station detects whether an optional power supply* is connected and plugged in and automatically switches to mains operation when switched on.



Warning: Risk of electric shock:

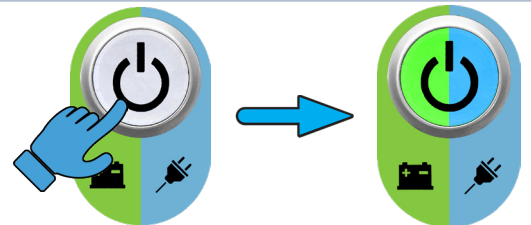
- Check the power cable and the power plug for damage before each starting up. If any damage is found, the machine must be shut down immediately and repaired by a specialist!
- When plugging in the machine, make sure that the power plug and your hands are not wet!

1. Insert the mains plug of the power supply* into the socket.



2. Switch on the machine with the »Power« key,
 in battery mode the key lights up **green**,
 In mains operation, the key lights up **turquoise**

⇒ The machine is switched on



The control keys on the machine are mirrored on the remote control. It can be switched on with the control keys and switched off again with the remote control and vice versa.

7. To turn on the remote control, set the Power switch to »I«



* Accessories are not included

4.7 Bleeding

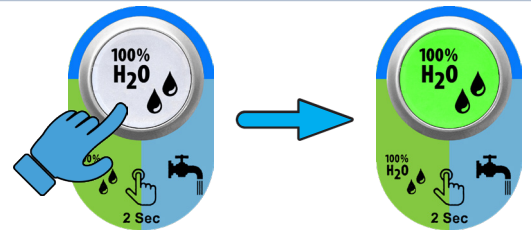
In order to ensure a constant water flow and pressure, the pump must be bled before each use. If a cleaning solution is to be used, the dosing pump must also be bled.

4.8 Bleeding the pump

1. Open the bleeding tap



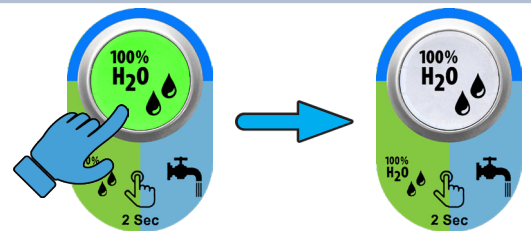
2. Switch on the machine with the »PUREWATER/tap water« key, the key lights up **green**
3. Run for 1 - 2 minutes until the water flows evenly from the bleeding tap



4. Close the bleeding tap



5. Switch off the machine with the »PUREWATER/tap water« key
- ⇒ The pump is bled

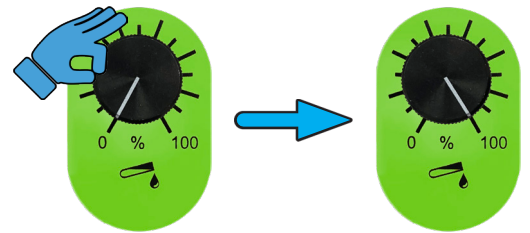


4.9 Bleeding the dosing pump

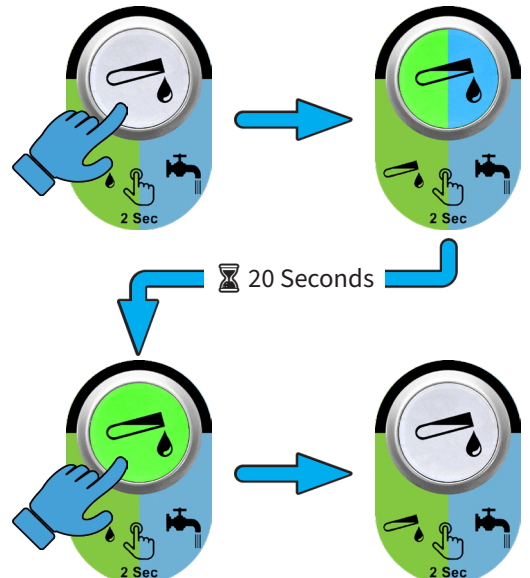
1. Place the cleaning solution suction hose in the cleaning solution tank and let it sink to the bottom



2. Turn the dosing pump regulator to 100%



3. Start bleeding with the »Cleaning solution/tap water« key, the key flashes **green/turquoise** for 20 seconds during bleeding



4. When bleeding is complete, the »Cleaning solution/tap water« key lights up **green** continuously
5. Switch off the machine with the »Cleaning solution/tap water«

⇒ The dosing pump is bled

4.10 Mounting the poles and brush*

The pole system supplied is for a height up to 15 m and can be extended to a height of 21 m. The carbon poles should always be at the top and the titanium poles below them because of weight and stability.

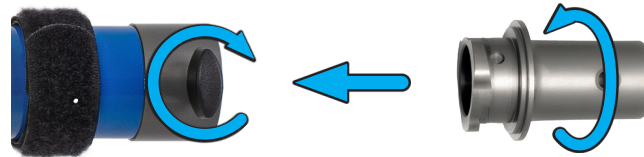
To protect against damage to edges and protrusions, the half titanium poles must always be mounted in the uppermost position.



Caution: Danger of falling:

- Always secure the poles and brush adapter with the wing screws
- Always use half the titanium rod as the top pole to protect the carbon poles from damage
- Do not use pole set above wind force 2 (>3.3 m/s)

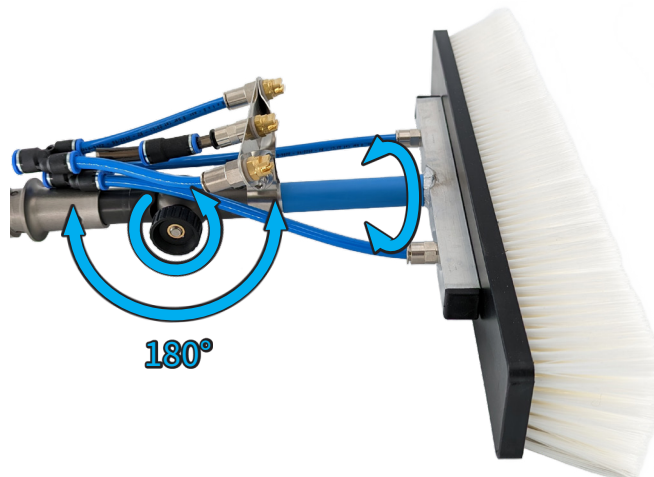
1. Place the brush adapter on the half titanium pole and fasten it with a clockwise rotation
2. Secure with the wing screw



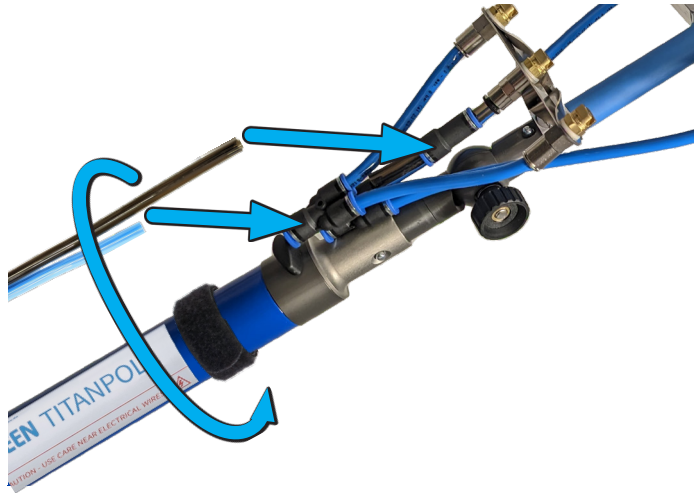
3. Insert the brush bow into the brush adapter until the snap button engages



4. Loosen the knurled screw on the joint and set the desired working angle of the brush
5. To set the brush vertically, press the snap button and rotate the brush holder 90 degrees

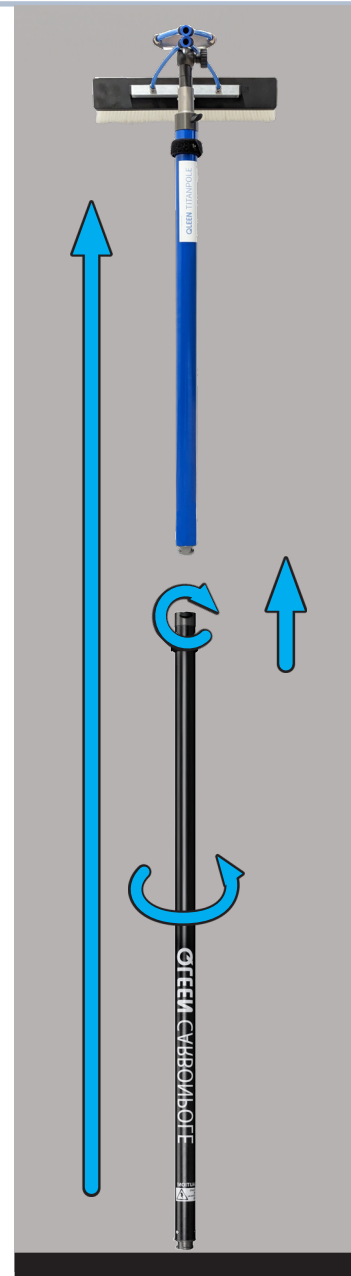


6. Connect the blue hose with the 2 nozzles through or over the brush
7. Connect the black hose to the single chemistry nozzle or the 2 free nozzles
8. Fix the DUO hose with the Velcro tape



9. Place the brush against the wall and push it upwards
10. Click in the next bars from below and fix them with a half clockwise rotation of the bar
11. Secure with the wing screw
12. Secure the hose to the pole with the Velcro strap
13. Add more poles up to the required height by repeating steps 9 - 12
14. At the end of the poles fasten the handle piece and secure it with the wing screw, thus the pole system can be put down

⇒ **The device is now ready for operation**

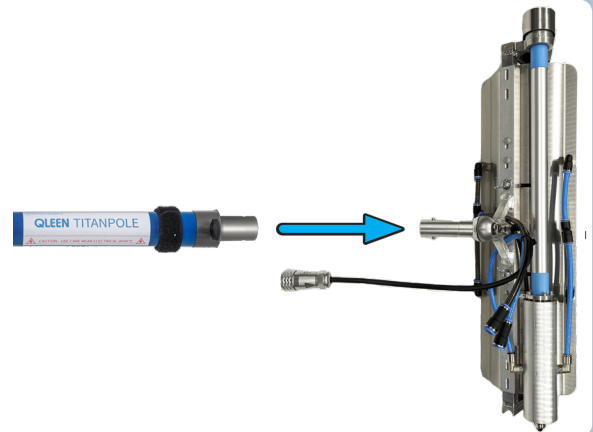


4.11 Connecting a ROTAQLEEN*

The ROTAQLEEN are electric rotating brushes for use with heavy soiling and/or large areas. The QLEEN Q-Station is equipped with a connection and control for supply and return for all current ROTAQLEEN.

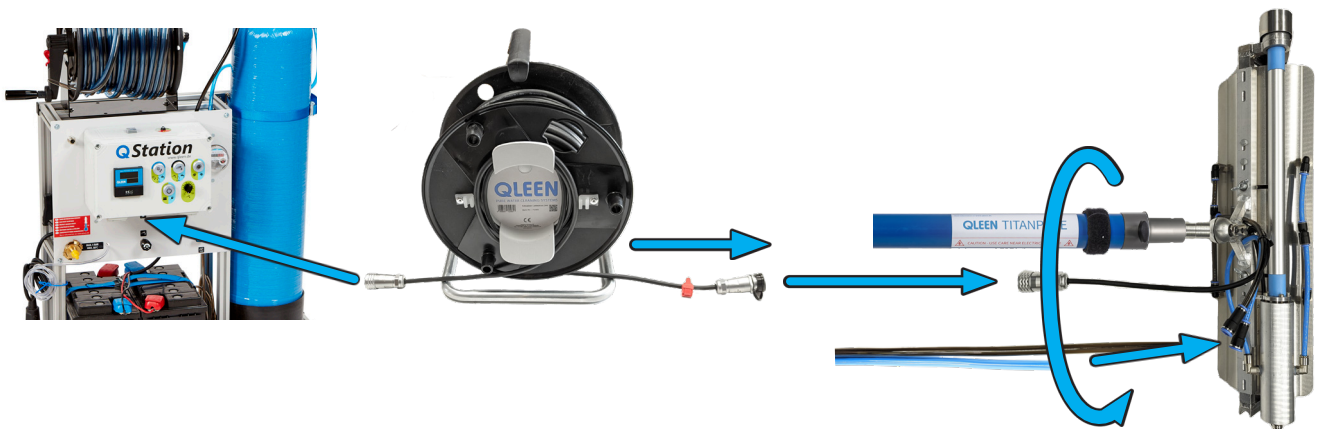
For further information read the „User information ROTAQLEEN“.

1. Assemble the pole set and brush adapter, see **Page 16 (4.11 Mounting the poles and brush)**
2. Insert the ROTAQLEEN into the brush adapter until the snap button clicks into place



3. Roll out the cable to the required length
4. Connect the socket of the cable drum with the plug of the ROTAQLEEN
5. Connect the plug of the cable drum to the ROTAQLEEN socket on the machine
6. Connect the hose to the nozzles on the ROTAQLEEN
7. Attach the hose and cable to the poles with the Velcro straps

⇒ **The ROTAQLEEN is ready for operation**



Beware of damage to the ROTAQLEEN:

- Always connect the blue input to the ROTAQLEEN and run water through it during operation, this serves to cool the motor
- Do not use a cleaning solution with the ROTAQLEEN

5 Cleaning

For most soiling, the PUREWATER is completely sufficient.

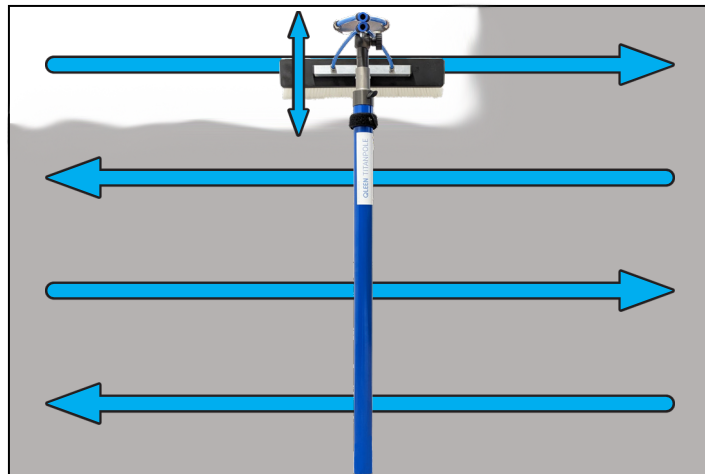
Only heavily soiled and oily or greasy surfaces must be pre-treated with a cleaning solution.

Dirt that can only be removed by intensive mechanical cleaning (e.g. glass plane) should also be pre-treated accordingly.

The higher the level at which work is carried out, the greater the dirt load at the lower levels, because the "foreign dirt" from the higher level is added to the "inherent dirt".

This should be taken into account when calculating the work and the order.

1. Mount the pole system to the maximum height of the cleaning area
see **Page 16 (4.11 Mounting the poles and brush)**
2. Place the brush in the upper area and activate the desired cleaning mode with the remote control
3. Move from one side to the other with even up and down movements over the surface to be cleaned
4. To increase the mechanical cleaning performance, press the pole system lightly against the surface to be cleaned with the help of the guide hand
5. Proceed in the same way for the underlying surfaces until the entire surface is cleaned.
6. Adjust the pole system according to the working height to ensure fatigue-free work



Caution Risk of injury

- **Tripping hazard:** Pay attention to the hose when working!
- **Crash hazard:** Place the poles on the floor during work interruptions! Do not lean against vertical walls, this may cause them to fall over and result in injury or damage to the equipment!
- **Crash hazard:** Do not work with the pole system above wind force 2 (>3,3 m/s)
- **Risk of electric shock:** Do not work with the pole system under high-voltage lines!

5.1 Cleaning with PUREWATER or tap water

Cleaning with PUREWATER is the most chemical-free and sustainable way of cleaning. Surfaces dry streak-free and without wiping due to the good salt absorption capacity of PUREWATER.

The cleaning mode tap water is the cost effective way to pre-clean heavily soiled surfaces.

The cleaning mode is changed with the control button and/or the remote control.

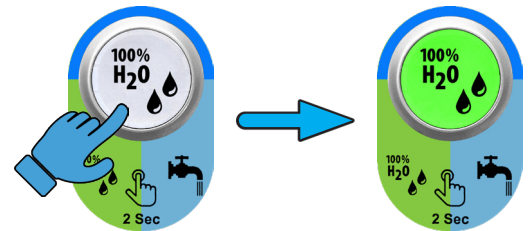
The PUREWATER or tap water is pumped through the blue hose.



After switching on the machine, it is in the standard **PUREWATER** mode.

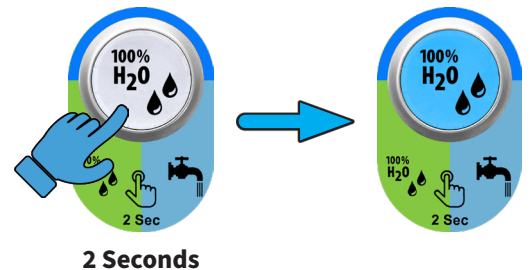
Switching on the PUREWATER

- Briefly press the »PUREWATER/tap water« button on the machine or remote control, the button lights up **green**
- ⇒ After a short time, the PUREWATER comes out of the nozzles via the blue hose and the ROTAQLEEN starts up



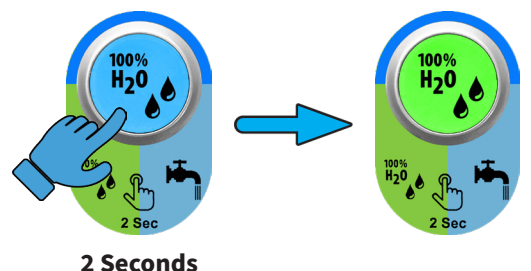
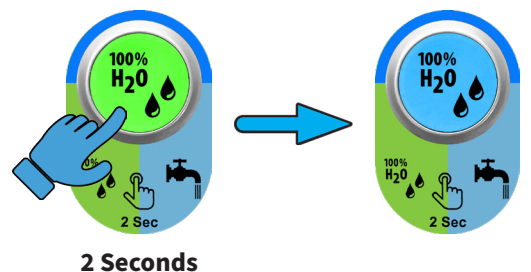
Turning on the tap water

- Press the »PUREWATER/tap water« button on the machine or remote control for 2 seconds until it lights up **turquoise**
- ⇒ After a short time, the tap water comes out of the nozzles via the blue hose and the ROTAQLEEN starts up



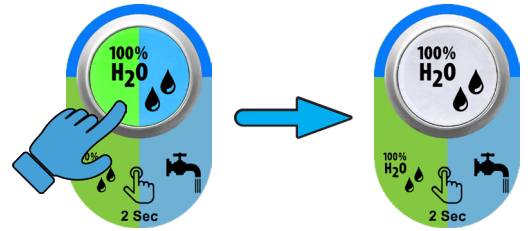
Switching the cleaning mode

- If the »PUREWATER/tap water« key lights up **green**, the machine is in the cleaning solution mode
- Press the »PUREWATER/tap water« button on the machine or remote control for 2 seconds, the button lights up **turquoise**
- If the »PUREWATER/tap water« key is lit up in **turquoise**, the machine is in the tap water mode
- Press the »PUREWATER/tap water« button on the machine or remote control for 2 seconds, the button lights up **green**
- ⇒ The machine switches to the respective other mode



Switching off the PUREWATER/tap water

- Briefly press the »PUREWATER/tap water« button on the machine or on the remote control
- ⇒ Stop the PUREWATER and the ROTAQLEEN



i The machine remains in the last cleaning mode after switching off and on with a short keystroke.

i The water meter measures only in **PUREWATER** mode and displays the amount of **PUREWATER** produced.

5.2 Cleaning with cleaning solution or tap water

The dosing pump mixes the aspirated cleaning solution with the tap water. The dosing pump has an adjustable flow rate of 1 to 6 liters per hour. With the Vario brush bow, approximately 200 liters per hour flow through the nozzles, which corresponds to an adjustable mixing ratio of 1:200 to 1:33.

With the control valve for the black hose, the total flow rate can be controlled and thus the mixing ratio can be changed again in favor of the cleaning solution. This is well suited for spraying surfaces with a cleaning solution.

The cleaning mode Power water is used to rinse the cleaning solution or to rinse the black hose after cleaning solution has been used.

The cleaning mode is changed with the control button and/or the remote control.

The cleaning solution or the tap water is pumped through the black hose.

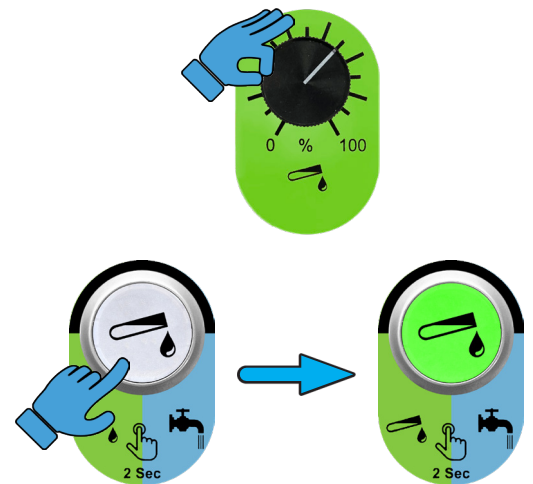
i For cleaning solution operation, the dosing pump must be bled beforehand, see **Page 15 (4.10 Bleeding the dosing pump)**.

! When using cleaning solution, observe the respective specifications and safety instructions of the manufacturer.

i When the machine is switched on, it is in the standard **cleaning solution** mode. Unless the dosing pump controller is set to 0 %, the machine is always in **tap water** mode.

Switching on the cleaning solution

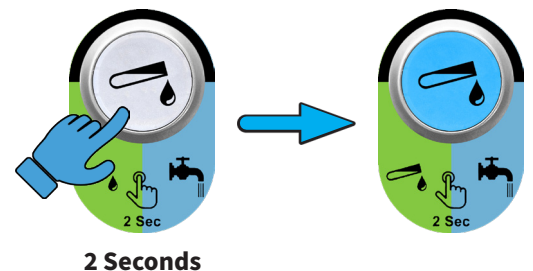
1. Use the dosing pump regulator to set the mixing ratio of tap water and cleaning solution
 2. Briefly press the »Cleaning solution/tap water« button on the machine or remote control, the Button lights up **green**
- ⇒ After a short time the cleaning solution comes out of the nozzles via the black hose and the ROTAQLEEN starts



If the machine starts in **tap water** mode, the dosing pump regulator is set to 0 %. Turn the regulator up and the machine switches to the cleaning solution mode.

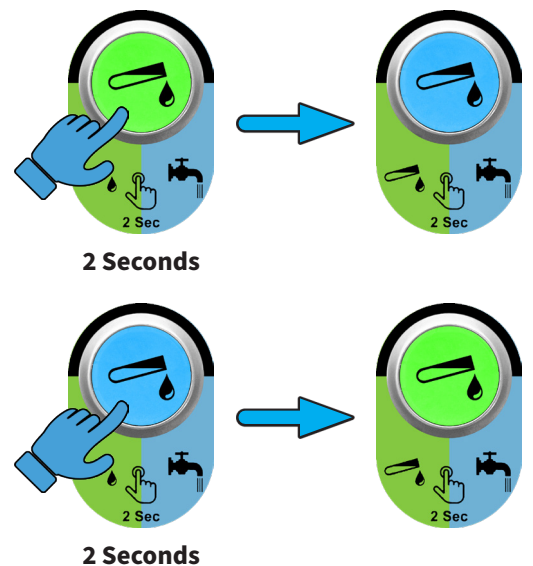
Turning on the tap water

1. Press the »Cleaning solution/tap water« button on the machine or remote control for 2 seconds until the button lights up **turquoise**
- ⇒ After a short time, the tap water comes out of the nozzles via the black hose and the ROTAQLEEN starts up



Switching the cleaning mode

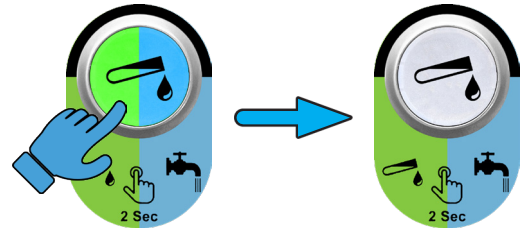
- If the »Cleaning solution/tap water« key lights up **green**, the machine is in the cleaning solution mode
 - Press the »Cleaning solution/tap water« button on the machine or remote control for 2 seconds, the button lights up **turquoise**
- If the »Cleaning solution/tap water« key lights up **turquoise**, the machine is in the tap water mode
 - Press the »Cleaning solution/tap water« button on the machine or remote control for 2 seconds, the button lights up **green**
- ⇒ The machine switches to the respective other mode



Switching off the cleaning solution/tap water

- Briefly press the »Cleaning solution/tap water« button on the machine or on the remote control

⇒ Stop the PUREWATER/tap water and the ROTAQLEEN

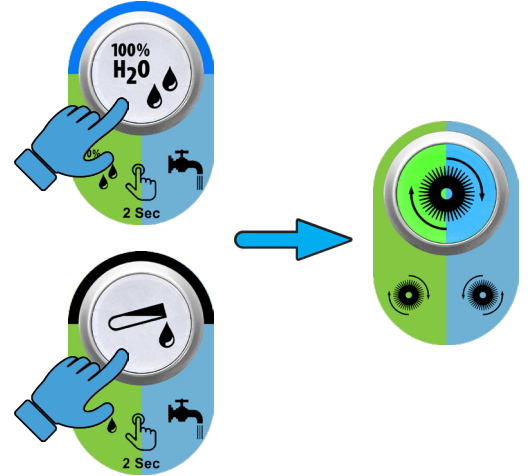


The machine remains in the last cleaning mode after switching off and on with a short keystroke.

5.3 Cleaning with ROTAQLEEN

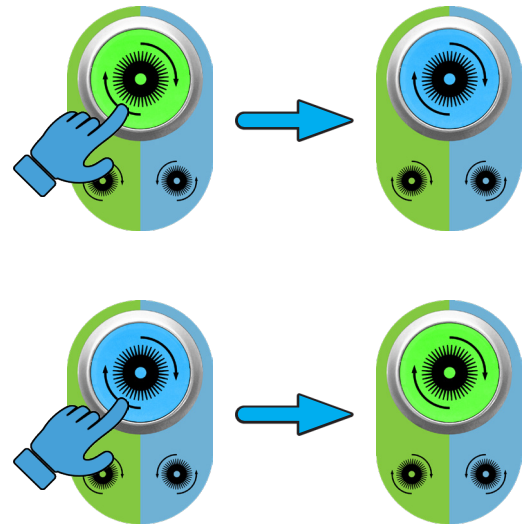
Switching on the ROTAQLEEN

- Briefly press the »Cleaning solution/tap water« and/or »PUREWATER/tap water« key, the »ROTAQLEEN« key lights up **green** or **turquoise**
- ⇒ The ROTAQLEEN starts in the last selected running direction



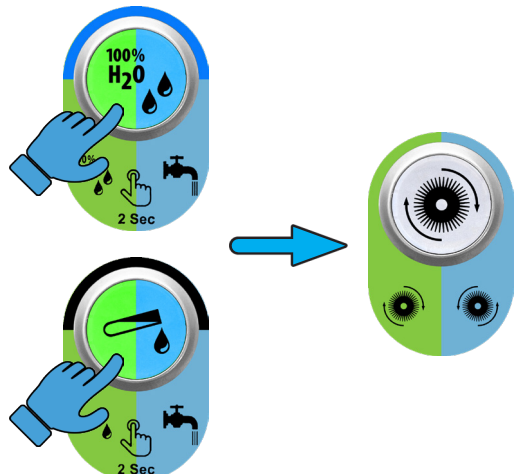
Switching the running direction

- If the »ROTAQLEEN« key lights up **green**, the ROTAQLEEN runs forwards.
- Briefly press the »ROTAQLEEN« button on the machine or remote control, the button lights up **turquoise**
- If the »ROTAQLEEN« key lights up **turquoise**, the ROTAQLEEN runs backwards
- Briefly press the »ROTAQLEEN« button on the machine or remote control, the button lights up **green**
- ⇒ The ROTAQLEEN changes to the running direction



Switching off the ROTAQLEEN

- Briefly press the »Cleaning solution/tap water« and/or »PUREWATER/tap water« key
- ⇒ The ROTAQLEEN stops



6 Water quality meter

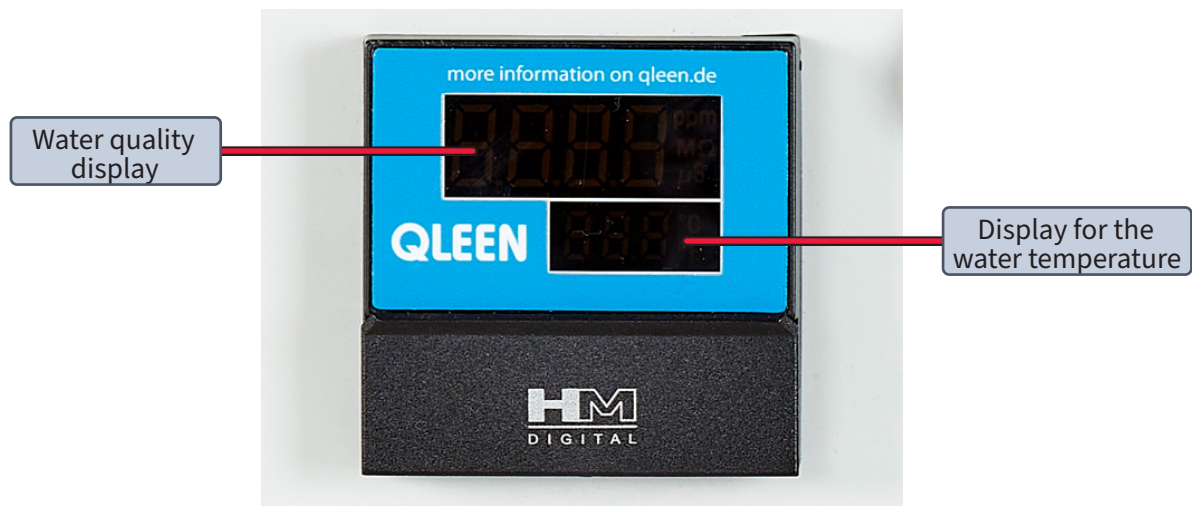
With the integrated measuring device you can monitor the quality of the incoming tap water and the PUREWATER at any time.

We recommend to replace the mixed bed resin for glass and solar systems from a value of 50 μS .

If the values are above 50 μS , it cannot be guaranteed that the surface will dry free of streaks and stains.

6.1. Operation

- The water quality display shows the salt concentration in μS
- From a value of 50 μS the machine switches off and displays an alarm, see **Page 25 (7.1 Alarm at saturation of the mixed bed resin)**
- The temperature display shows the temperature of the flowing water
- To measure the water quality of the incoming water, change the cleaning mode from PUREWATER to tap water see **Page 20 (5.1 Cleaning with PUREWATER and tap water)**



7 Alarms

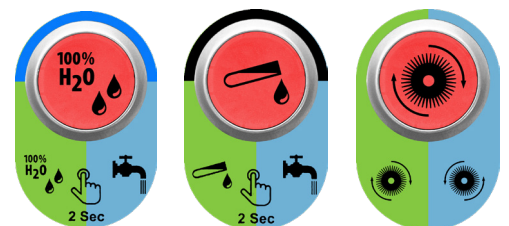
The machine signals two alarm conditions visually and acoustically:

- Alarm at saturation of the mixed bed resin (can be switched off)
- Discharged battery alarm (cannot be disabled)

7.1 Alarm at saturation of the mixed bed resin

- If the water quality meter indicates more than 50 μS , the machine switches off, the control buttons flash **red** and an acoustic signal sounds
- This alarm can be turned off with the »Loudspeaker« button on the remote control and work can continue

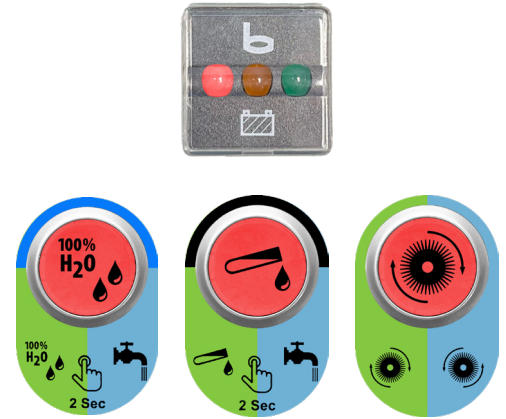
⇒ **The mixed bed resin should be replaced, see Page 31 (8.3 Replacing the mixed bed resin)**



- When cleaning with mixed bed resin above 50 μS , streaks and stains may appear when drying the surfaces.
- If the machine is in **tap water** mode, the alarm does not sound.

7.1 Discharged battery alarm

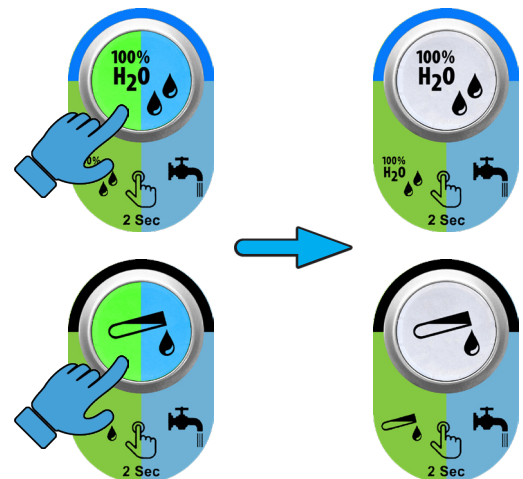
- If the battery indicator shows **red** the machine switches off
 - The control keys flash **red** and an acoustic signal sounds
 - This alarm protects the batteries from deep discharge and cannot be deactivated
- ⇒ To charge the batteries, see Page 29 (8.2 Charging the batteries)



8 After cleaning

8.1 Dismantling

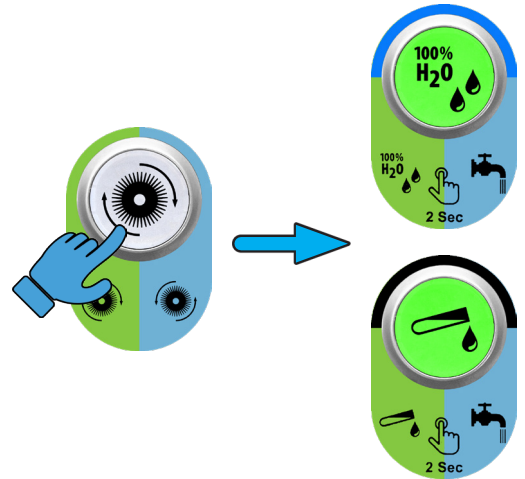
1. Switch off the machine with the »PUREWATER/tap water« and/or »Cleaning solution/tap water« keys



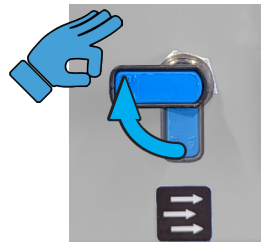
2. Close the tap of the house water connection
3. Disconnect the hose from the house water connection and the QLEEN Q-Station or pull the suction hose out of the tank and remove it from the QLEEN Q-Station
4. Open the bleeding tap or press the »ROTAQLEEN« key briefly, the »PUREWATER/tap water« and »Cleaning solution/tap water« keys light up **green**



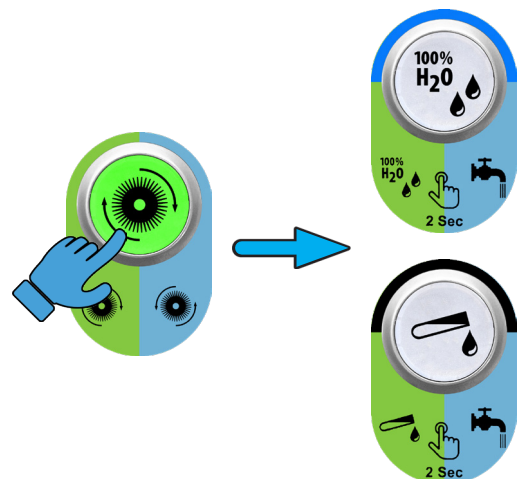
or



5. Drain the water until the system is depressurized
6. Close the bleeding tap or press the »ROTAQLEEN« key briefly



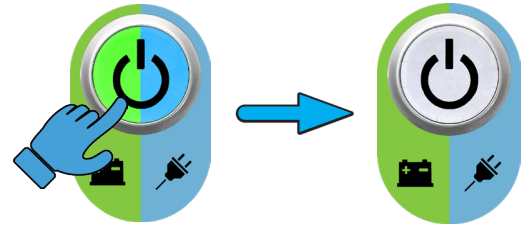
or



7. To turn off the remote control, set the power switch to »O«



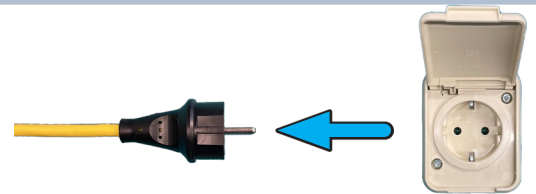
2. Switch off the machine with the »Power« key



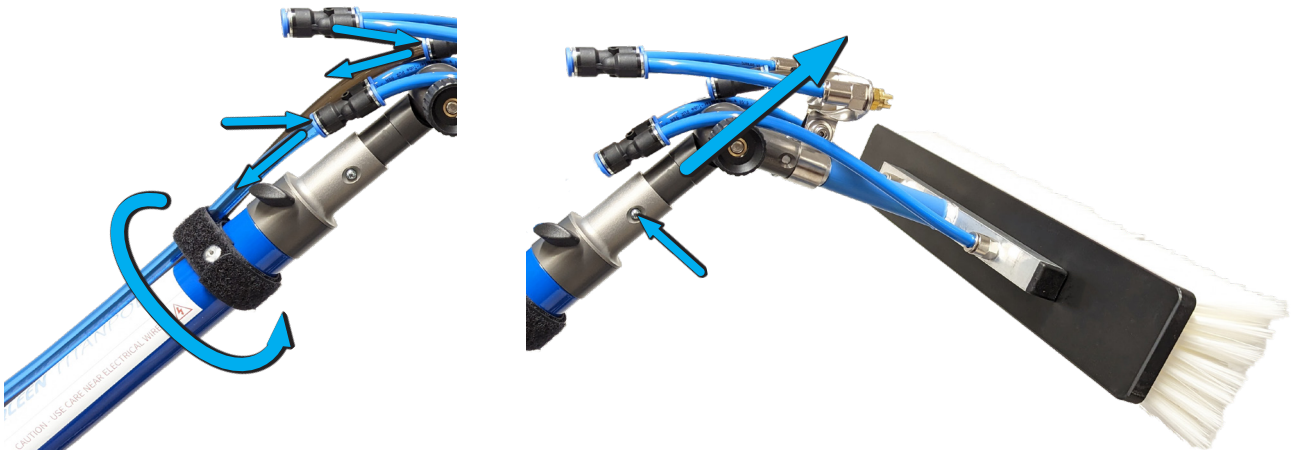
Warning: Risk of electric shock

- When unplugging the machine, make sure that the power plug and your hands are not wet!

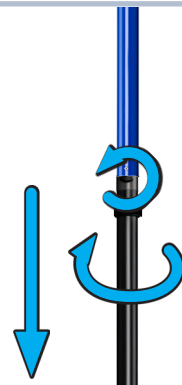
8. If a power supply* is connected, pull out the mains plug



9. Open the Velcro and remove the hose
 10. Pull the hose tight, push the blue rings on the hose connector in and pull the hose out
 11. Press the snap button on both sides and pull the brush bow out of the brush adapter



12. Loosen the wing screw
 13. Turn the lower rod counterclockwise and pull it out of the lock
 14. Stow the poles in the transport bag



15. Disconnect the black connection hose from the drum and the machine and attach it to the drum
 16. Roll up the hose

⇒ **The machine is ready for transport**

9 Additional information

9.1 Maintenance and cleaning of the device and accessories

Clean hoses

- Carefully wash or wipe off any soiling
- Dry with a clean cloth
- Check for damage and leaks
- Roll up the hose onto the hose holders

⇒ The hose is cleaned, checked and ready for storage and transport

Poles clean

- Rinse poles as well as all caps and contact surfaces with water
- Clean the outside and inside with a soft, clean cloth
- If necessary, lubricate with commercially available silicone spray

⇒ The poles are cleaned, checked and ready for storage and transport

Clean washing brush

- Rinse brushes
- Let dry in the air

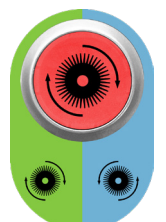
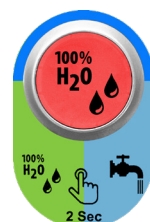
⇒ The washing brush is cleaned, checked and ready for storage and transport

9.2 Charging the batteries

When the battery is empty, a charging cycle takes about 10-12 hours and should not be interrupted. To charge the battery, the machine must be switched off or running in mains operation with a connected power supply*.

The batteries are maintenance-free lead gel batteries. They should be fully charged regularly.

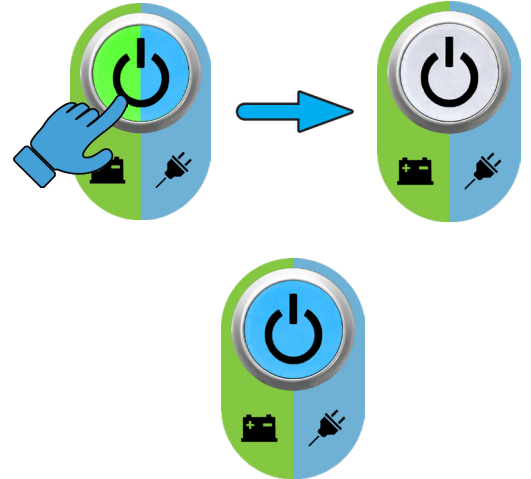
- If the battery indicator shows **yellow**, the battery should be charged
- If the battery indicator shows **red** the machine switches off
- The control keys flash **red** and an acoustic signal sounds
- This alarm protects the batteries from deep discharge and cannot be deactivated



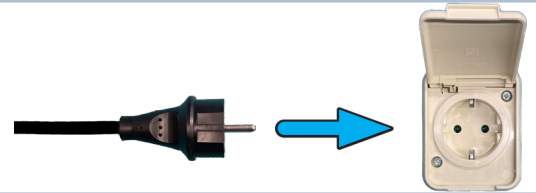
1. Switch off the machine with the »Power« key

When the power supply is connected, it is possible to charge and continue working with the machine at the same time*.

1. The machine is switched on and in mains operation



2. Insert the mains plug of the charger into the wall socket



- The charging indicator lights up **red**
 - During charging, the display changes to **yellow** and then **green**
- ⇒ **The charging process is completed**



i If the charging indicator flashes **red** or **yellow**, there is a fault with the batteries or the connection of the batteries, see **Page 32 (8.6 Trouble shooting)**

9.3 Replacing of the mixed bed resin

If the water quality measuring device indicates more than 50 µS, we recommend changing the mixed bed resin.

For the exchange of the mixed bed resin, please observe the instructions of the „User Information Mixed Bed Resin Systems“ (separate publication of Lehmann KG).



Caution: Pressure on the granulate bottle:

- Always depressurize the system before replacing the cylinder, see **Page 26 (8.1 Dismantling)!**

9.4 Clean/replace the strainer at water inlet

If the water flow is poor in suction operation, the strainer at the water inlet may be clogged and must be cleaned or replaced.

1. Remove the rubber seal in the claw coupling



2. Remove the sieve with a small screwdriver



3. If the sieve has holes it must be replaced
4. If dirty, clean the sieve thoroughly under running water
5. Press the cleaned or new sieve and the seal back into the claw coupling

9.5 Battery change remote control

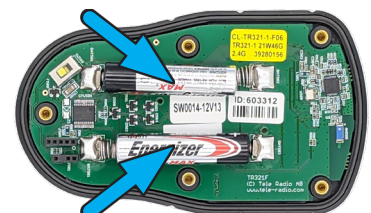
If the remote control does not respond after switching on or the range is reduced, the batteries must be replaced.

There are 2 round cells of the type AAA (LR3) installed.

1. Remove the 5 screws on the bottom of the housing with a Phillips screwdriver and remove the cover



2. Remove the old AAA batteries and replace them with new ones, be sure to observe the polarity of the batteries
3. Close and screw the housing again



9.6 Troubleshooting

Malfunctions	Causes	Solutions
No water comes out of the nozzles	The tap of the house water connection is closed The hose is kinked	Open the water tap Remove the kink from the hose
Little water or an uneven spray pattern from the nozzles	The strainer in the claw coupling water inlet is dirty The nozzles are clogged with dirt or mixed bed resin residues The claw coupling is not properly screwed to the water inlet	Take out the sieve and clean it, see Page 31 (9.4 Clean/replace the strainer at water inlet) Remove the hose on the nozzles and blow through with compressed air from the nozzle side Tighten the claw coupling
The surface does not dry streak free	The granules have a conductance of over 50 μS	The mixed bed resin must be replaced, see Page 31 (9.3 Replacing the mixed bed resin)
The remote control does not respond	Remote control not switched on Batteries in remote control empty	Switch on the remote control, see Page 13 (4.7 Switching on the machine and remote control) Replace the batteries, see Page 32 (8.5 Changing the battery of the remote control)
Poor remote control range	Batteries in the remote control are empty Buildings or other interfering transmitters are nearby	Replace the batteries, see Page 31 (9.5 Changing the battery of the remote control) If possible, always place the machine in the line of sight, reduce the distance to the machine or eliminate the sources of interference.
Battery is not charging and the charging indicator flashes yellow or red	Charging indicator flashes yellow : The battery is not connected properly or there is a short circuit Charging indicator flashes red : An internal short circuit	Check the quick-release fasteners on the batteries and the red and black plug connection The machine must be taken to the technical service for inspection
The control keys flash red and the machine does not respond to any input	The machine is in alarm mode because the granules are used up or the battery is discharged	For problem solving, see Page 25 (7. Alarms)

9.7 Storage

The QLEEN Q-Station should be stored dry and at a temperature above 5 °C.

The mixed bed resin in the bottle can be stored for up to 6 months; longer storage will render it unusable due to algae and germ formation.

9.8 Repair and maintenance

System users and operators must not carry out any repair and maintenance work of their own on Lehmann cleaning systems.

Such work is not permitted and will result in direct loss of warranty and guarantee.

loss of warranty and guarantee.

Repair and maintenance work may only be carried out by the technical customer service of Lehmann authorized dealers or by the manufacturer, Lehmann KG.

For all repair and maintenance work, please contact your Lehmann authorized dealer from whom you purchased the cleaning system.

All repairs are carried out by trained technicians who are equipped with original spare parts for Lehmann systems.

Before contacting the authorized dealer's technical service department, please have the following information ready:

- Type, customer number, telephone number, date of purchase and the most accurate description of the problem possible

9.9 Recycling and disposal

System, accessories and packaging - must not be disposed of with household waste.

Instead, they must be handed over to a suitable collection point for recycling or disposal.

Return shipment to Lehmann KG is also possible. The sender bears the costs of the return shipment.

Saturated mixed bed resin can be recycled or disposed of in household waste.

Please observe the instructions of the „**User Information Mixed Bed Resin Systems**“ (separate publication of Lehmann KG)

9.10 Warranty and guarantee

Lehmann KG trusts in the quality of its products.

That is why we offer our customers in the member states of the European Union an exceptional 24-month warranty, which is understood to be without prejudice to statutory warranty claims and does not restrict them.

9.11 Manufacturer information

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E-Mail info@qleen.de

Internet www.qleen.de

Youtube www.youtube.com/@qleen

Facebook www.facebook.com/lehmannkg/

10 Technical information

10.1 Supply connections

- Water supply via Gardena tap piece (only tap water with maximum 5 bar) or suction via claw coupling with suction hose
- PUREWATER/tap water output via 50 m blue PU hose
- Cleaning solution/tap water over 50 m black PU hose
- 100-240V mains connection with type F plug

10.2 Climatic operating conditions

- Permissible temperature range for system use: +5 °C to +50°C
- Maximum permissible wind speed: < 3.4 m/s (wind force 2) for work with pole set
- Maximum permissible surface temperature of surfaces to be cleaned: < 50 °C

10.3 Technical data

Component	Measured variables	Notes	Values
QLEEN Q-Station	Dimensions	Length / Width / Height	73 x 36 x 103 cm
	Weight	With mixed bed resin	100 kg
	Required filling quantity	Per bottle	25 l
	Productivity	Depending on the water quality	1000 - 10200 l PUREWATER
	Power supply*	Type F Plug	100-240 V, max. 6 A
	Pump		24V, max. 10 bar, max. 360 l/h
Charger	Power supply	Type F-Plug	100-240 V, max 5,5 A
	Output	Special charging curve for lead gel batteries	24 V, 13 A
Remote control	Range	Without obstacles, on line of sight	Up to 50 m
	Frequency band		2405-2480 MHz
	Approval for		EU, USA, Canada
	Batteries		2 x AAA (LR3)
EC meter	Measuring range		0- 9999 µS ±2 %
Pole system*	Working height	Maximum	21 m
Workplace	Work and movement area	Minimum length / width	2 x 2 m
	Ground inertia	At least	250 Kg/m2
	Safety distance to power poles and lines	At least	40 m

10.4 CE Declaration of Conformity

This product has been extensively tested before market launch and complies with the legal requirements. Please see next page: **CE Declaration of Conformity**.

* Accessories are not included



EC declaration of conformity



Directive 2006/95/EG (low voltage)
 Directive 2006/42/E (machine)
 Directive 97/23/E (pressure equipment)
 Directive 1999/5/EG (telecommunications)

The documents authorized person is:

Mr. Dustin Schnabel, Lehmann KG, Kranichstraße 2a, D 17235 Neustrelitz, Germany

Manufacturer:

Lehmann KG, Kranichstraße 2a, D 17235 Neustrelitz, Germany

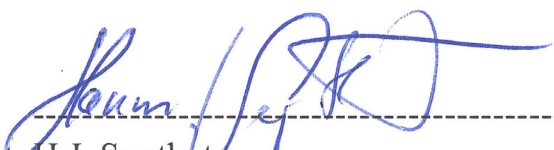
hereby declares that the following products / devices match the regulations of the above mentioned directives including their amendments in force at the time of declaration.

- **QLEEN Q-Station in different versions**

The following harmonized standards have been applied:

EN 55014-1, EN 55014-2, EN 55022, EN 50081-1, EN 50082-2, EN 61000-3-2,
 EN 61000-3-3, EN 13923, EN 60950-1:2006-A11+A1+A12, EN 301489-1:V1.9.2, EN
 301489-3, EN 300220-2:V2.4.1, EN 61204-3:2000

Neustrelitz, 09.02.2023



 H.J. Supthut
 Executive Director

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