

QLEEN

PURE WATER CLEANING SYSTEMS

User information QLEEN DISY (pa100)

Variant 09 / 2018



User information QLEEN DISY

Thank you very much for taking the decision to buy a QLEEN DISY cleaning system, manufactured by Lehmann.

Some important user information before you start the cleaning works. We kindly ask you to read them carefully and observe them under any circumstances. As owner of a QLEEN DISY cleaning system, please, ensure that your staff members have read the “**User Information QLEEN DISY**”, too, and observe the safety and warning information.

We kindly ask you to also consider and obey the General User and Safety Information (see separate Lehmann publication “**General User and Safety Information**”).

This document is the original user information. It was issued in German language. Copies provided in other languages are translations of this original user information.

Manufacturer/ Editor

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Country of origin

Federal Republic of Germany

1. Structure and Content of these User Information

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1.1 Basic Safety Information




Obligations of the operator
 Requirements to staff
 Proper use
 Improper use
 Measures to avert hazard
 Information on work safety
 Requirements to the work place

See also „General User and Safety Information“ here (published by Lehmann KG).

2. Description of the QLEEN DISY

2.1.1 Product presentation/overview



QLEEN System version			
DISY	×	×	
DISY (= injector included)	×	×	×
DISY ELECTRO	×	×	
DISY ELECTRO (= dosing pump)	×	×	×

2.1.2 Product components

Main Components (depending on the product version)

1. Chassis (stable plastic housing)
2. 1 Granulate bottle, 25 l
3. Water pump*
4. Injector or dosing pump**
5. Hose holder: Single hose / Duo hose**
6. Control unit, comprises of*
 - System control electronics
 - Radio control
 - Operation display
 - Main switch, dosing pump control
7. Hand transmitter for radio control*
8. Testing device (for measuring the water conductivity)
9. Main plug (230V*)
10. Supply connection ROTAQLEEN*

2.1.3 Accessories

The Lehmann KG offers an extensive range of QLEEN accessories and spare parts. If you are interested, we would be pleased to send you the latest overview. Just send your request to info@qleen.de or contact us via telephone **(+49) 03981 488 50**

2.2 Structure and function

2.2.1 The PURAQLEEN principle – Cleaning with pure water

High chemical-free cleaning power of pure water is the principle, the PURAQLEEN system for glass and façade cleaning is based on. Tap water is conducted through a granulate bottle here. The minerals contained in tap water are absorbed by the granulate. The tap water is demineralized and conducted to the pump and, further,

to the cleaning head as pure water. Pure water does not only have an excellent wetting capacity, but dries without spots and streaks even with strong sunshine which allows to refrain from using cleaning agents in many cases (exception: greasy, oily or very heavy contaminations).

2.2.2 Functionality of the QLEEN DISY (depending on the version)

After plugging in the power plug, the function switch lights up in blue and the system is switched in.

The operation modes are selected via the function switch – the system can be controlled manually or by radio control.* (Switch on to the left = ROTAQLEEN forward, pump on/Switch on to the right = ROTAQLEEN backwards, pump on)

The function modes – cleaning with tap water, pure water or cleaning solution ** – are selected via the ball valves. Pure water is needed for cleaning without cleaning agents. For this, the tap water is conducted through the mixed-bed resin in the granulate bottle and demineralized during this process. See the **“user information mixed-bed system”** for this (published by Lehmann KG).

For cleaning with detergents (in case of extremely heavy contamination), tap water is needed. The cleaning agent is suctioned in from the cleaning agent barrel by the dosing pump and added to the tap water in the correct dosage with the cleaning agent injector.

Pure water can also be used for cleaning with cleaning agents. A combined use of pure water and ecological water-based cleaning agents may intensify the purifying power.

The system should be always rinsed with tap water after working with cleaning agents.

A pump transports the pure and/or tap water/cleaning solution via the single hose or duo hose** assembled to the pole set to the cleaning head at the top end of the pole set. There, it is evenly and saving distributed over the surfaces to be cleaned through fine nozzles.

The pole set comprises of single, mountable poles. Variable working length between about 2 m (min.) and 20 m (max.) are enabled by this. See the **“user information mixed-bed system”** for this (published by Lehmann KG).

The hose – depending on the version – is placed on the hose holder or hose reel and is 40 m long. For the duo hose, pure water is conducted via the blue hose, while tap water or cleaning solution are conducted via the black hose.

The integrated water conductivity measuring device informs about the granulate's degree of saturation.

2.3 Information on use

2.3.1 Operation areas

Typical operation areas are the cleaning of

- Solar and photovoltaic systems
- Facades, facade claddings, sun protection devices
- Windows, window frames
- Conservatories, glass and greenhouses
- Outdoor advertising space, light boxes
- Vehicles (train, ship, airplane, truck, car)

2.3.2 Proper use

The system must only be used properly and in technically sound condition. See “**General user and safety information**” (published by Lehmann KG).

2.3.3 Improper use

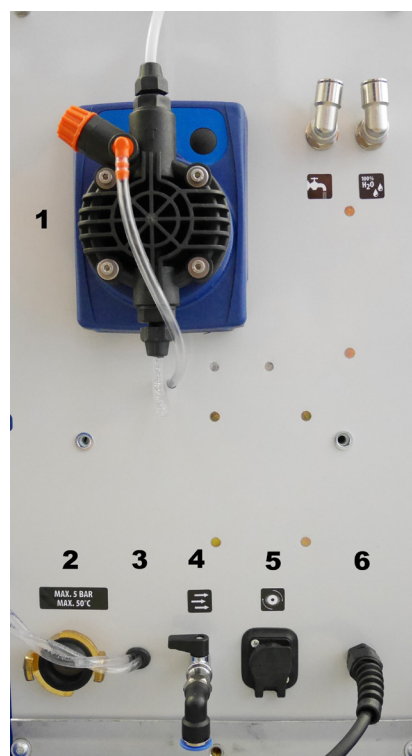
Any use different from the described proper use is considered as improper use!
The system user/operator is solely responsible for damages resulting from improper use! See “**General user and safety information**” (published by Lehmann KG).

2.4 Operation and display elements

2.4.1 Operation elements



- Function switch with operating display blue (1) *
- Dosing pump switch with regulator (2) **
- Conductivity meter (3)
- Ball valve for the black hose (4) **
- Ball valve for the blue hose (5)



- Dosing pump with orange Bleed screw (1) **
- Water connection (2)
- Chemical hose (3) **
- Venting for resin bottle (4) *
- ROTAQLEEN socket (5) *
- Power cable (6)

2.5 Operation and functional modes

2.5.1 Operation modes*

Cleaning with:

- Manual mode
- Radio control

2.5.2 Functional modes

- Pure water
- Tap water
- Cleaning agent**
- Cleaning agent** and/or pure water
- Tap water and/or pure water

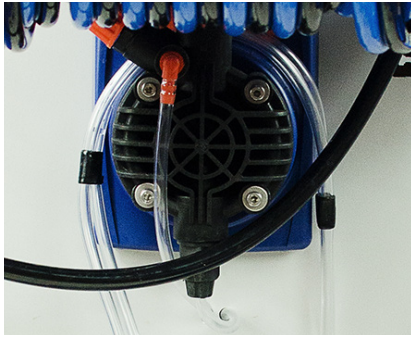
2.5.3 Overview: Functional mode switch positions

Functional modes	Small ball valve with black handle
Cleaning with pure water	
Cleaning with tap water, Cleaning agent or pure water	
Cleaning with tap water, Cleaning agent or pure water	

2.5.4 Explanation of the used symbols (Operation mode switch)

Symbols at the function switch/hand-held transmitter:

- Function switch Position = Operation via hand-held transmitter
- Function switch Position = ROTAQLEEN reverse operation, pump on, dosing pump on
- Function switch Position = ROTAQLEEN forward operation, pump on, dosing pump on
- Hand-held transmitter = ROTAQLEEN, pump and dosing pump on/off
- Hand-held transmitter Key = ROTAQLEEN forward / reverse



Symbols of the functional mode switch	
Cleaning with cleaning agent**	
Cleaning with tap water	
Cleaning with pure water	
OFF / no relevant operation mode selected	
Symbols at the claw coupling/ Water supply	
Tap water	
Symbol at the supply connections*	
Supply connection ROTAQLEEN	
Ventilation	

Symbols at the dosing control / pump:

Switch on controller and adjust to intended chemistry amount

2.6 Technical data

2.6.1 Product labelling

- System/Version: QLEEN DISY / QLEEN DISY Electro
- System number
- Year of construction

2.6.2 Product data

Component	Measurement category	Remarks	Valued
Device	Dimensions	Length / Width / Height	66 x 66 x 110 cm with half shell 74 x 66 x 110 cm with reel
	Weight	with 1 filled bottle	80-90 kg
Grid	Operating voltage		110 V - 230 V/50 - 60 Hz
Water pump	Delivery amount		160 - 240 l/h
	Connection values		24 V
	Delivery height	max.	20 m
	Water pressure	before bottle / at the nozzles	6 - 8 / 0,5 - 3 bar
	Water flow via the nozzles	ø 2 x 0,4 / 0,8 mm	240 l/h
Water supply	Pressure	min. / max.	0 / 5 bar
	Temperature	min. / max.	5° / 50°C
Granulate	needed amount per filling		25 l
	Yield	Depending on the water supply quality	1.150-11.500 l Pure water
Remote control	Scope		Up to 50 m
	Radio frequency		433 MHz
Pole set	Work height	max.	20 m
Workplace	Workplace and operation area	Length / Width, min.	2 x 2 m
	Bearing capacity of the ground	min. / max.	250 kg/m ²
	Safety distance from electrical towers/power supply	min.	40 m

2.6.3 Supply connections

- Main plug 230 V ~, 50-60 Hz*
- Water supply to the system via water pipe
- Water supply to the system via tank (optional)
- Single hose (40 m) for supplying the cleaning head with water and pure water
- Duo hose (40 m) for supplying the cleaning head with water, pure water and cleaning agent
- Water connection: claw coupling* (hose length 5 m maximum)
- Water connection Gardena (length with pressure operation: unlimited)
- Connection ROTAQLEEN 24 V*
- Supply hose for cleaning solution**
- Valve for venting the mixed-bed resin system

2.6.4 Environmental and climate conditions

- Permitted temperature range for system use: +3 °C to +50°C
- max. permissible wind speed: < 3.4 m/sec (wind speed 2) for works with the pole set
- max. permissible surface temperature of the cleaned surfaces: < 50 °C

2.6.5 Underlying standards

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, EN61204-3:2000

2.6.6 CE Conformity

This product was extensively tested before its launch and corresponds with the legal requirements. See annex "Conformity declaration" here, too (page 21).

3. Description of correct handling

Safety information

Please observe when transporting, assembling, commissioning, handling, troubleshooting, de-commissioning, disassembling, repairing and recycling the system and its accessories

- the „General User and Safety Information“ of this user information (see separate publication of Lehmann KG)
- the „User information pole systems - QLEEN Poles“ of this user information (see separate publication of Lehmann KG)
- the „User information mixed-bed systems“ of this user information (see separate publication of Lehmann KG)
- the „User information cleaning, maintenance, repair, storage“ of this user information (see separate publication of Lehmann KG)
- the respective labour safety and accident prevention regulations. The required permits of local authorities must also be obtained, where compulsory.

3.1 Transport and Placing

3.1.1 Transporting the system

The system can be carried upright or vertically placed on the handle. The respective fastening and transport regulations must be observed. In the variant with hose reel you must dismantle the hose reel at first.

⚠ CAUTION

Danger of crushing! Feet can be trapped.
Wear safety footwear when loading the system.

⚠ CAUTION

Beware of heavy loads! Do not lift the system. Protect back and arm muscles.
Push the system.

3.1.2 Placing the system on the operation site

Preconditions

- The ground of the surface where the system is unloaded from and placed on must be even, non-slippery and sufficiently load-bearing.

3.2 Assemble the system

3.2.1 Supply system with water

Preconditions

Water inlet hose:

For suction mode (via tank):

- The water inlet hose must be low-pressure resistant, i.e. it must not contract at low pressure.
- The max. permissible length of the water inlet hose is 5m!

Pressurized water operation (max. 5 bar/ min. 110l/h):

- The max. permissible water inlet temperature is 50 °C!
- The water inlet hose must be protected against running over, kinking and bending.

Workplace:

- All tripping hazards and obstacles must be marked.

Procedure

1. Connect water inlet hose to the customer's water tapping point.



- ▷ Check water pressure at water tapping point
- ▷ Connect hose and water tapping point



- ☞ In suction mode* the connection must be checked for airtightness. The system will not run with an air leak.

▷ Keep tap connection closed until the system is fully connected.



✓ **The water inlet hose is connected to the tap connection at the customer or the tap connection at the water tank.**

✓ **The water inlet hose is connected to the system.**



2. Cautiously open the customer-sided tapping point or water tapping point.

✓ **The water tapping point at the customer or of the water tank is open.**

3. Check all connections for water and air tightness.



✓ **All connections are checked for water and air tightness.**

3.2.2 Supply the system with cleaning agent**

Only greasy, oily or specific contaminations, e.g. dried bird droppings, need to be treated with cleaning agent. For normal contaminations, the cleaning power of pure water is absolutely sufficient. Use only cleaning agents approved by Lehmann KG! The safety and recycling regulations of the cleaning agent producer must be adhered to. Cleaning agent and cleaning agent tank are accessories.

Preconditions

The cleaning agent is automatically added to the tap water with the system-side injector** or dosing pump**.

Procedure

- ▷ Remove the transparent cleaning hose from the holder.

The transparent cleaning agent hose is located directly next to the central water connection.

- ▷ Check the sieve at the end of the detergent hose for dirt and clean it, if necessary
- ▷ Put the two chemical hoses in the detergent container
- ▷ To vent the dosing pump, set the dosing pump controller to maximum and open the orange venting screw on the dosing pump. Switch the function switch to manual mode and let the dosing pump run for a long time until the air is completely removed from the suction hose. Switch off the machine and close the orange bleeding screw again when the air is out.
- ▷ Switch on the dosing pump with the controller and adjust the desired dosing quantity (0-6 L / h)
- ▷ Mixing ratio of dosing pump (flow for 2x4 nozzles about 180L/h)

Dosing pump l/h	Mixing ratio
1	1:180
2	1:90
3	1:60
4	1:40
5	1:36
6	1:30

3.2.3 Uncoil hose (single or duo hose**)

Procedure

1. Uncoil as much hose length as you need.



CAUTION

Risk of stumbling! Beware of stumbling when the hose is uncoiled! Therefore, uncoil with caution and always store in loops at the edge of the workplace and operation area.

The required hose length is uncoiled and stored at the edge of the workplace and operation area in a way to prevent stumbling and provide protection against running over, kinking and bending.

3.2.4 Assemble poles

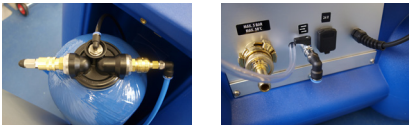
Preconditions & procedere

Furthermore, we kindly ask you to consider and observe the separate Lehmann publication „**User information pole system (QLEEN poles)**“.

3.3 Commissioning

3.3.1 Switch in system

Technical supplement (only for electric)



Vent the granulate bottle before every commissioning of the machine:

- Connect the water hose and plug in the main plug
- Switch on the machine and cautiously open the vent tap
- Let the water run until an equal flow of water can be observed
- Shut the vent tap again

✓ Granule bottle is vented

Preconditions

- The system is properly configured
- The water supply is connected
- The work and operation areas are fenced off
- All trip hazards are removed or marked respectively
- The mains plug (230 V) is connected (function switch lights blue)
- The hand transmitter is ready for use*

Procedures for QLEEN DISY

1. Open water inlet

✓ System is ready for operation

2. Select mode of operation

The following functional modes are available:	
Cleaning with tap water	
Cleaning with pure water	
Cleaning with cleaning solution	
Cleaning with cleaning solution and/or pure water	
Cleaning with tap water and/or pure water	

The selection is done via the related ball valves (top operation panel):

- ▷ Ball valve set on „water“ (= functional mode „cleaning with tap water“ is selected)
- ▷ Ball valve set on „pure water“ (= functional mode „cleaning with pure water“ is selected)
- ▷ Ball valve set on „cleaning agent“ (= functional mode „cleaning with cleaning agent“ is selected)
- ▷ Ball valve set on „cleaning agent“ and on „pure water“ (= functional mode „cleaning with cleaning agent and/or pure water“ is selected)
- ▷ Ball valve set on „water“ and on „pure water“ (= functional mode „cleaning with tap water and/or pure water“ is selected)

✓ The correct function is selected


Procedure QLEEN DISY Electro

1. Plug in main plug, machine is ready for operation
2. Select operating mode

Two operating modes are available:

- Radio control
- Manual control

The selection of operation mode:

- Manual control via function switch
- The operation mode „Radio control“ is marked with the symbol  on the function switch.

Obstacles, such as protruding / recessed parts of buildings, trees or electricity lines impair the range of the hand transmitter (max. 50 m).

▷ Combined switch into position „forward“ or „backwards“ (= operation mode „Manual operation Electro“ selected)

✓ **The operation mode is selected.**

3. Select functional mode

The following functional modes are available:	
Cleaning with tap water/cleaning agent	
Cleaning with pure water	
Cleaning with tap water and/or pure water	

- ▷ Set black ball valve to position tap / chemistry, dosing pump switched off (= function type "cleaning with tap water")
- ▷ Set black ball valve to position tap / chemistry, dosing pump switched on (= function type "cleaning with cleaning solution")
- ▷ Set the blue ball valve to the clean water position (= "Clean with Pure water ")
- ▷ Set black ball valve to tap water / chemistry position, blue ball valve set to clean water, dosing pump switched off (= "Clean with tap water and / or pure water ")
- ▷ Set black ball valve to tap water / chemistry position, blue ball valve set to clean water, dosing pump switched on (= "Clean with cleaning solution and / or pure water ")

✓ **The proper functional mode is selected.**

3.4 Handling

3.4.1 Operate system in the functional mode „manual control“ (DISY Electro)

The operating mode „manual control“ is used as default control, if „radio control“ mode (optional) is not available or impaired due to obstacles such as protruding / recessed parts of buildings, trees or electricity lines.

Preconditions

- The system is ready for operation and switched on.

Procedure

▷ Set function switch to

- position “forward” or “reverse” = ready for operation via “manual control”
- radio operation is deactivated

The system builds up pressure immediately, because the mode switch starts the pump. You can only select one operating mode at a time (= never two simultaneously).

3.4.2 Operate system in the functional mode „radio control“*

The hand transmitter has two keys:

- 1. Key ON/OFF
- 2. Key ROTAQLEEN Forward/Backwards

Preconditions

- The system is ready for operation and switched on
- The hand transmitter is within reach and operating (battery charged, keys work properly)
- Function switch on position Radio

Procedure

- Press the ON / OFF button once

✓ Start Pump and ROTAQLEEN are starting

- The machine switches off by pressing the button again
- Press the ROTAQLEEN key to change the direction of the ROTAQLEEN

3.4.3 Work with cleaning solution**

For this, please also note the instructions in chapter 3.2.2.

The surfaces treated with cleaning solution must be rinsed with tap water after about 5 minutes soaking time and subsequently treated with pure water in order to avoid runlets or water spots. You may also use cleaning solution and pure water. The use of pure water can, in combination with ecological cleaning agents on water basis, intensify the cleaning effect. The cleaning solution must not be used on hot (= sun heated) surfaces. Hot surfaces must be cooled down with tap water first, before the cleaning solution is applied. Afterwards rinse thoroughly and extensively, because the rinse water quickly evaporates and leaves streaks or spots.

Preconditions

- see section 3.2.2

Procedure

- ▷ Spray contaminations with cleaning agent
- ▷ Allow the cleaning agents to soak for about 5 minutes
- ▷ Clean the surface with suitable cleaning head (brush, washer, padholder)
- ▷ Rinse diluted contaminations with tap water
- ▷ Carefully rinse with pure water afterwards

3.4.4 Work with tap water and/or pure water

The cleaning power of pure water is absolutely sufficient for normal contaminations. Only oily, greasy or heavily contaminated surfaces need to be pre-treated with cleaning solution. (see 3.4.3 „Work with cleaning agent“).

The higher the working height, the more dirt covers the lower floors, since the „additional dirt“ from the higher floors is added to the „own dirt“. Make sure you have considered this when calculating work and order.

High humidity (= rain, fog) reduces the cleaning result, since, physically seen, every wet drop reduces the dirt binding capacity and forms spots when dried.

Contaminations which can only be removed by intensive mechanical cleaning (e.g. with glass scrapers) should not be cleaned with QLEEN DISY.

Procedure

- ▷ Lead the cleaning head (brushes, washer, pad holder) with steady moves up and down over each lane (lane = width of the cleaning head) of the surface to be cleaned
- ▷ When you change the lane and need to get around obstacles (frames, facade elements etc.) slightly lay the cleaning head on edge (= reduces the friction on the surface – facilitates the lateral movement)
- ▷ If necessary, gently press the pole set with your guiding hand against the surface to be cleaned in order to improve the cleaning effect

Pure water requires ca. one minute soaking time in case of heavy contaminations until the dirt dilutes. Increase mechanical pressure only after soaking time and if necessary.

3.5 Operation of the conductivity meter

- Displays either input or output values of the water in μS
- For a spotless cleaning on glass and solar we recommend a maximum value of 50 μS , facades and other substrates can also be used be cleaned higher values
- Switch on with POWER
- Automatic shutdown occurs after 3 min
- Press the button "In" for the measurement of the incoming water (in the display IN is shown) and OUT for outgoing water measurement
- If "bat" appears in the display, the batteries must be replaced
- Push the device out of the holder and open the back plate with a Phillips screwdriver
- 2 AA batteries are required
- Screw the cover back on and push the device back into the holder, make sure that the test leads are not tilted and bent

3.6 Troubleshooting

3.6.1 Permissible troubleshooting

- It is only permissible to perform the troubleshooting measures described in the below table!
- All other troubleshooting and repair work is not permissible! This work must be performed by authorized QLEEN dealers only (master dealers, importers)!
- Reconfigurations/changes on the system and its accessories are not permissible and result into a loss of guarantee! This applies in particular for conducting and water systems.

Preconditions

- The system is de-energized
- Only authorized personnel have access to the system

Procedure

1. Identify fault (see column faults in the table below)

Faults	Cause	Measures
Control lights do not flash after the device has been switched on	Power supply is interrupted	✓ Check mains supply
The pump does not work.		✓ Connect mains plug properly
The pump supplies only few or no water.	Leaks, bends, cracks, breakage	✓ Check water inlet hose (bend, crack, leak) ✓ Check hose (bend, crack, leak) ✓ Check transparent cleaning agent hose (bend, crack, leak) ✓ Check claw coupling for tightness
The pump supplies only few or no cleaning agent.	Cleaning agent too viscous (for injectors only)	✓ Water inlet and outlet side ✓ Cleaning agent must be diluted in water (for injectors only)
The radio control has only low or no range.	Low battery of the hand transmitter	✓ Check battery of the hand transmitter and replace, if necessary (coin cell, 12V)
	Distance to radio antenna too long (max. 50 m)	✓ Switch to manual control in case of strong impairments
	Protruding /recessed building parts, trees impair the connection between hand transmitter and radio antenna	

✓ The fault is clearly identified

2. Check cause of the fault (column „Causes" in the table)

✓ The causes of the faults are clearly identified.

3. Eliminate fault (column „Measures“ in the table)

- ▷ Perform measures as described in the column "measures"
- ▷ Check whether the fault is eliminated

✓ The fault is eliminated

3.6.2 Technical Customer Support

If a fault reoccurs, contact your authorized QLEEN dealer, where you bought the system. System users and operators must not implement any repair and maintenance works at Lehmann cleaning systems.

We kindly ask you to consider the information provided in the „User information Cleaning, Maintenance, Repair, Storage“ (see separate publication of Lehmann KG).


3.7 Decommissioning

3.7.1 Switch off system

DISY Procedure

- Directly continue with 3.7.2 Disconnect water supply

DISY Electro Procedure

- Set function switch to position 
- Disconnect main plug

3.7.2 Disconnect water supply

Preconditions

- DISY Electro: The system is switched off (= function switch set on „Radio“)
- Disconnect the plug

Procedure

1. Close tap water connection at the customer-side or at the tank

- At compressed water supply, the closed water inlet hose is still under pressure.

✓ The tap water connection at the customer-side or at the tank is closed.

2. Decompress water inlet hose

- ▷ Carefully disconnect claw coupling /hose connection
- ▷ Empty water inlet hose until no water emerges.

✓ Water inlet hose is now depressurized.

3. Dismount decompressed water inlet hose

- ▷ Coil the water inlet hose
- ▷ Store water inlet hose without stumbling hazard

✓ **Water inlet hose is ready for transportation**

3.8 Disassembly

3.8.1 Disassembling pole set

Preconditions & Proceeding

We kindly ask you to consider the information provided in the „**User information Pole systems - QLEEN Poles**“ (see separate publication of Lehmann KG)

3.8.2 Coil hose (single or twin hose**)

Beware of stumbling when you coil the hose. It is also important to observe the coiling direction in order to avoid bending the respective hose.

Preconditions

System is switched off.

- The water system is depressurized
- The poles are disassembled
- The main plug is disconnected

Procedure

1. Coil hose

▷ Coil hose manually

Beware of stumbling when you coil the hose.

- Remove possible contaminations by means of a tissue wrapped around the hose

✓ **The hose is coiled on the hose reel secured for transportation.**

3.8.3 Disassemble detergent supply**

Please observe this section only, if you worked with cleaning agent. Rinse any residues of cleaning solution with water in order to avoid any blocking or bonding on the surface of the cleaning solution hose or tank. Cleaning agent and cleaning solution residues must be properly recycled. The safety and recycling instructions of the cleaning agent manufacturer must be absolutely observed.

Preconditions

System is switched off.

- The water system is depressurized
- The poles are disassembled
- The hose is coiled
- The main plug is disconnected

Procedure

1. After completing the cleaning work, disassemble cleaning agent hose

- ▷ Carefully pull the transparent detergent hose out of the cleaning agent tank
- ▷ Rinse the chemical parts, let the machine run for about 1 min and immerse the end of the chemical tube in tap water
- ▷ Rinse cleaning agent residues with water
- ▷ Dry with a tissue
- ▷ Fasten at the holder (sieve side)

✓ **The transparent cleaning agent hose is disassembled and safely fastened.**

2. Disassemble cleaning agent tank

- ▷ close cleaning agent tank properly
- ▷ rinse cleaning agent residues with water

✓ **Cleaning agent tank is closed and secured for transport.**

3.8.4 Preparing the device for transportation

Preconditions

System is switched off.

- The water system is depressurized
- The poles are disassembled
- The hose (single or twin hose) is coiled
- The cleaning agent supply is disassembled

If the system or its accessories are dirty, you must clean them (see „**User information Cleaning, Maintenance, Repair, Storage, Disposal**“ - (see separate publication of Lehmann KG).

Procedure



CAUTION

Risk of electric shock! Do not touch live system, accessories and plug with wet hands. Wear protective gloves.

- ▷ Check all fastenings/holders of moving or loose items
- ▷ Fasten all moving or loose items for transportation

3.9 Storage (storing system and accessories)

We kindly ask you to consider the information provided in the „**User information Cleaning, Maintenance, Repair, Storage, Disposal**“ (see separate publication of Lehmann KG) for storing system and accessories.

3.10 Maintenance

We kindly ask you to consider the information provided in the „**User information Cleaning, Maintenance, Repair, Storage, Disposal**“ (see separate publication of Lehmann KG) for maintenance.

3.10.1 Replacing saturated granulate

We kindly ask you to consider the information provided in the „**User information mixed-bed resin**“ for granulate replacement (see separate publication of Lehmann KG) when replacing the granulate.

3.10.2 Clean device and accessories

We kindly ask you to consider the information provided in the „**User information Cleaning, Maintenance, Repair, Storage, Disposal**“ (see separate publication of Lehmann KG) when cleaning system and accessories.

3.11 Repair, Maintenance

We kindly ask you to consider the information provided in the „**User information Cleaning, Maintenance, Repair, Storage, Disposal**“ (see separate publication of Lehmann KG) when repairing the system and its accessories.

3.11.1 Defect system - safety information

Defective systems must be immediately

- de-energized*
- de-commissioned
- disassembled
- taken away
- being repaired or serviced

3.11.2 Repair and Maintenance works

Repair and maintenance works must be exclusively carried out by QLEEN authorized dealers. For all repair and servicing work please contact your authorized QLEEN dealer, where you purchased the system.

3.12 Recycling, disposal (system, accessories, packaging, mixed-bed resin)

We kindly ask you to consider the information provided in the „**User information Cleaning, Maintenance, Repair, Storage, Disposal**“ (see separate publication of Lehmann KG).

4. Additional information

4.1 Warranty remarks

The Lehmann KG trusts in the quality of its products. Therefore, we offer an extraordinary 24-months guarantee to our customers from the European Union member states, which shall be understood notwithstanding the legal warranty claims and does not limit these.

4.2 Adresses

Manufacturer:

Karlhans Lehmann KG, Kranichstraße 2a, 17235 Neustrelitz
Hotline: Tel. +49 (0)3981 488 50; Fax + 49 (0)3981 440 620
E-Mail: info@qleen.de

4.3 Index EC declaration of conformity according to directive / regulation

Karlhans Lehmann KG states that these are described under "Technical Data" Systems comply with the guidelines and regulations for:

- 2006/95 / EC (low voltage)
- 2006/42 / EC (machine)
- 97/23 / EC (pressure equipment)
- 1999/5 / EC (telecommunications)

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.

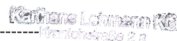
- **QLEEN DISY Elektro in different versions**

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, 01.05.2014


H.J. Supthut
Executive Director


Kranichstraße 2a
17235 NEUSTRELITZ

