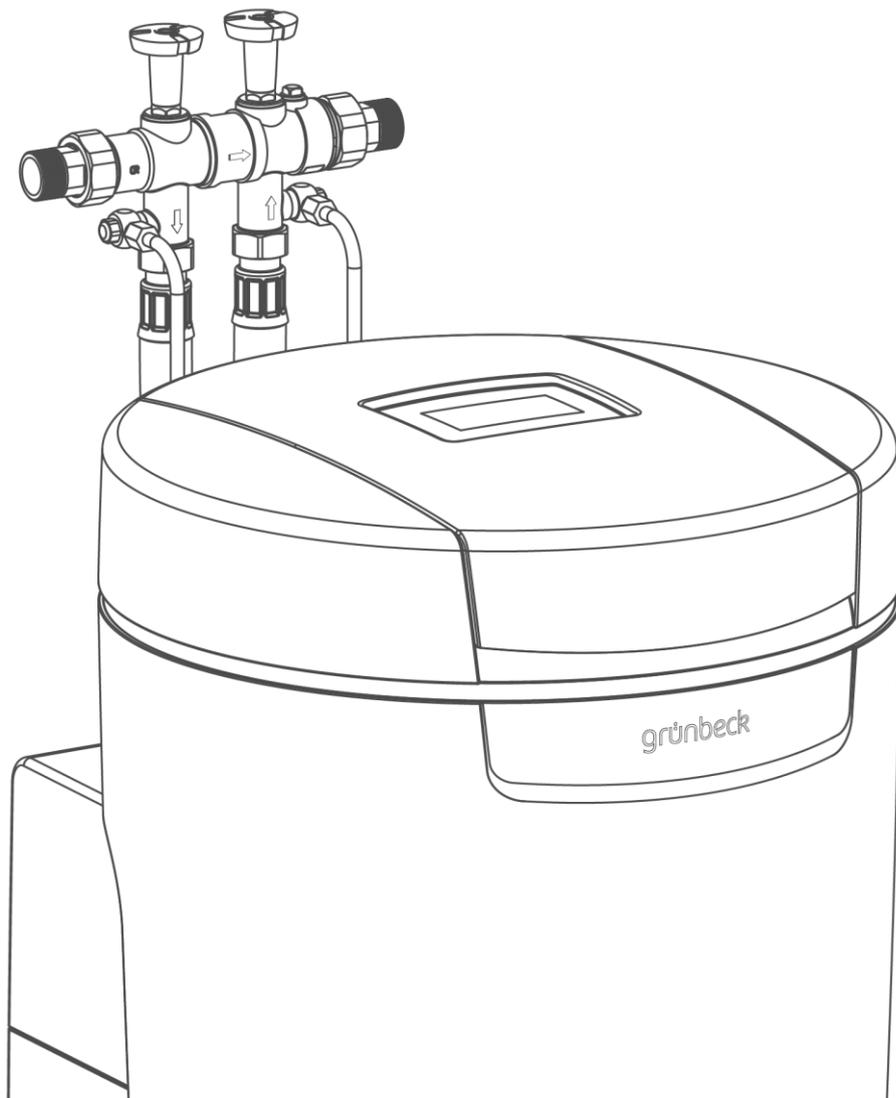


We understand water.



Hygiene system | safeliQ:EB

Operation manual

grünbeck

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# 1 Introduction

This manual is intended for owners/operators/operating companies, users as well as qualified specialists and ensures the safe and efficient handling of the product. The manual is an integral part of the product.

- ▶ Carefully read this manual and the included manuals on the components before you operate your product.
- ▶ Obey all safety and handling instructions.
- ▶ Keep this manual and all other applicable documents, so that they are available when needed.

Illustrations in this manual are for basic understanding and can differ from the actual design.

## 1.1 Validity of the manual

This manual applies to the product below:

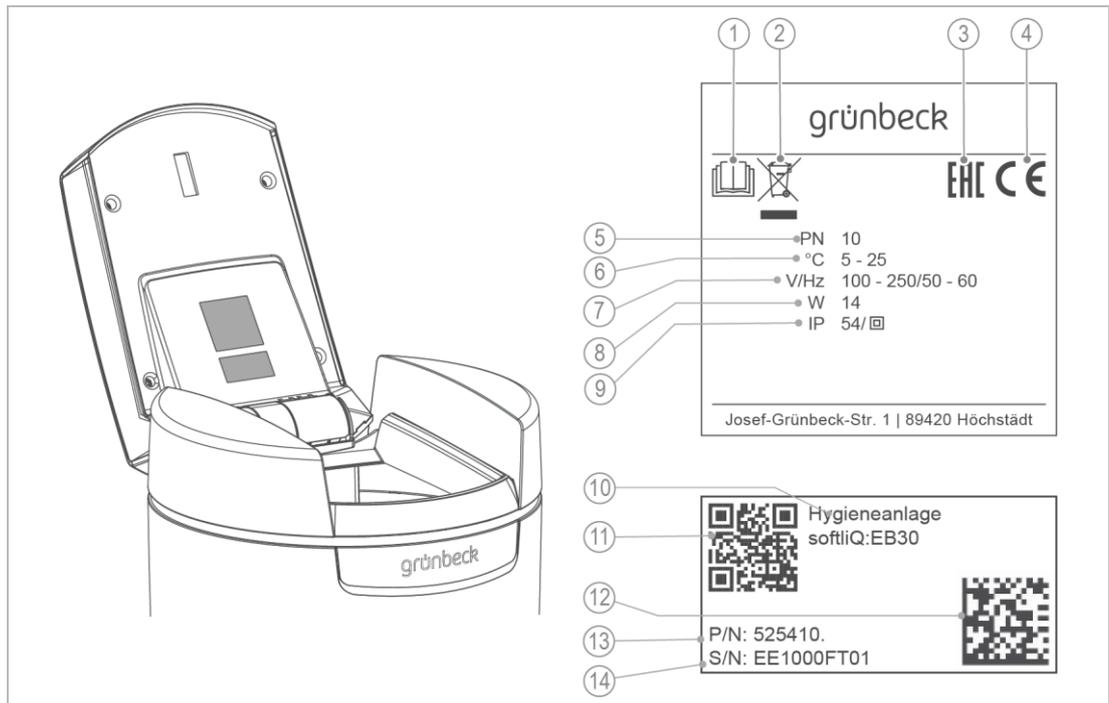
- Hygiene system safeliQ:EB30

## 1.2 Product identification

You can identify your product based on the product designation and the order no. indicated on the type plate.

- ▶ Check whether the products indicated in chapter 1.1 correspond to your product.

The type plate is located on the inside of the brine tank lid.



Designation	
1	Obeys the operation manual
2	Disposal information
3	EAC test mark
4	CE mark
5	Nominal pressure
6	Ambient temperature
7	Rated voltage range/frequency

Designation	
8	Rated input
9	Protection/protection class
10	Product designation
11	QR code
12	Data matrix code
13	Order no.
14	Serial no.

### 1.3 Symbols used

Symbol	Meaning
	Danger and risk
	Important information or requirement
	Useful information or tip
	Written documentation required
	Work that must be carried out by qualified specialists only
	Work that must be carried out by technical service personnel only

## 1.4 Depiction of warnings

This manual contains information and instructions that you must obey for your personal safety. The information and instructions are highlighted by a warning symbol and are structured as shown below:



**SIGNAL WORD** Type and source of hazard

- Possible consequences
- ▶ Preventive measures

The signal words below are defined subject to the degree of danger and might be used in the present document:

Warning symbol and signal word	Consequences if the information/instructions are ignored	
<b>DANGER</b>		Death or serious injuries
<b>WARNING</b>	Personal injury	Possible death or serious injuries
<b>CAUTION</b>		Possible moderate or minor injuries
<b>NOTE</b>	Damage to property	Possible damage to components, the product and/or its functions or an object in its vicinity

## 1.5 Demands on personnel

1.5.1 During the individual life cycle phases of the product, different people carry out work on the product. This work requires different qualifications.

1.5.2 Qualification of personnel

Personnel	Requirements
User	<ul style="list-style-type: none"> <li>• No special expertise required</li> <li>• Knowledge of the tasks assigned</li> <li>• Knowledge of possible dangers in case of incorrect behaviour</li> <li>• Knowledge of the required protective equipment and protective measures</li> <li>• Knowledge of residual risks</li> </ul>
Owner/operator/ operating company	<ul style="list-style-type: none"> <li>• Product-specific expertise</li> <li>• Knowledge of statutory regulations on work safety and accident prevention</li> </ul>
Qualified specialist <ul style="list-style-type: none"> <li>• Electrical engineering</li> <li>• Sanitary engineering (HVAC and plumbing)</li> <li>• Transport</li> </ul>	<ul style="list-style-type: none"> <li>• Professional training</li> <li>• Knowledge of relevant standards and regulations</li> <li>• Knowledge of detection and prevention of potential hazards</li> <li>• Knowledge of statutory regulations on accident prevention</li> </ul>
Technical service (Grünbeck's technical service/authorised service company)	<ul style="list-style-type: none"> <li>• Extended product-specific expertise</li> <li>• Trained by Grünbeck</li> </ul>

### 1.5.3 Authorisations of personnel

The table below describes which tasks may be carried out by whom.

	User	Owner/ operator/ operating company	Qualified specialist	Technical service
Transport and storage		x	x	x
Installation and mounting			x	x
Start-up/commissioning			x	x
Operation and handling Exception: Replacing the hygiene elements	x	x	x	x
Cleaning	x	x	x	x
Inspection	x	x	x	x
Maintenance				
semi-annually			x	x
annually				x
Troubleshooting	x	x	x	x
Repair				x
Decommissioning and restart/recommissioning			x	x
Dismantling and disposal			x	x

## 2 Safety

### 2.1 Safety measures

- Only operate your product if all components are installed properly.
- Obey the local regulations on drinking water protection, accident prevention and occupational safety.
- Do not make any changes, alterations, extensions or program changes on your product.
- Only use genuine spare parts for maintenance or repair.
- Keep the premises locked against unauthorised access to protect imperilled or untrained persons from residual risks.
- Comply with the maintenance intervals (refer to chapter 8.2). Failure to comply can result in the microbiological contamination of your drinking water system.

#### 2.1.1 Mechanical hazards

- You must never remove, bridge, or otherwise tamper with safety equipment.
- For all work on the system that cannot be carried out from the ground, use stable, safe and self-standing access aids (e.g. stepladders).

#### 2.1.2 Pressure-related hazards

- Components can be under pressure. There is a risk of injuries and damage to property due to escaping water and unexpected movement of components. Check the system's pressure lines at regular intervals.
- Before starting any repair and maintenance work, make sure that all affected components are depressurised.

#### 2.1.3 Electrical hazards

There is an immediate danger of fatal injury from electric shock when touching live parts. Damage to the insulation or individual components can be lethal.

- Only have qualified electricians carry out electrical work on the product.
- In case of damage to live components, switch off the voltage supply immediately and arrange for repair.
- Switch off the supply voltage before working on electrical components. Discharge residual voltage.
- Never bridge electrical fuses. Do not disable fuses. Use the correct current ratings when replacing fuses.
- Keep moisture away from live parts. Moisture can cause short-circuits.

## 2.1.4 Groups of persons requiring protection

- Children must not play with the product.
- This product is not designed to be used by persons (including children) with reduced capabilities, lack of experience or lack of knowledge. Unless they are supervised, have been instructed on the safe use of the product and understand the resulting hazards.
- Children should be supervised to make sure that they do not play with the product.
- Cleaning and maintenance must not be carried out by children.

## 2.2 Product-specific safety instructions

### 2.2.1 Signals and warning devices on the product

#### Labels on the product



Risk of electric shock

- ▶ Obey all warnings and safety instructions.
- ▶ Immediately replace illegible or damaged symbols and pictograms.

## 3 Product description

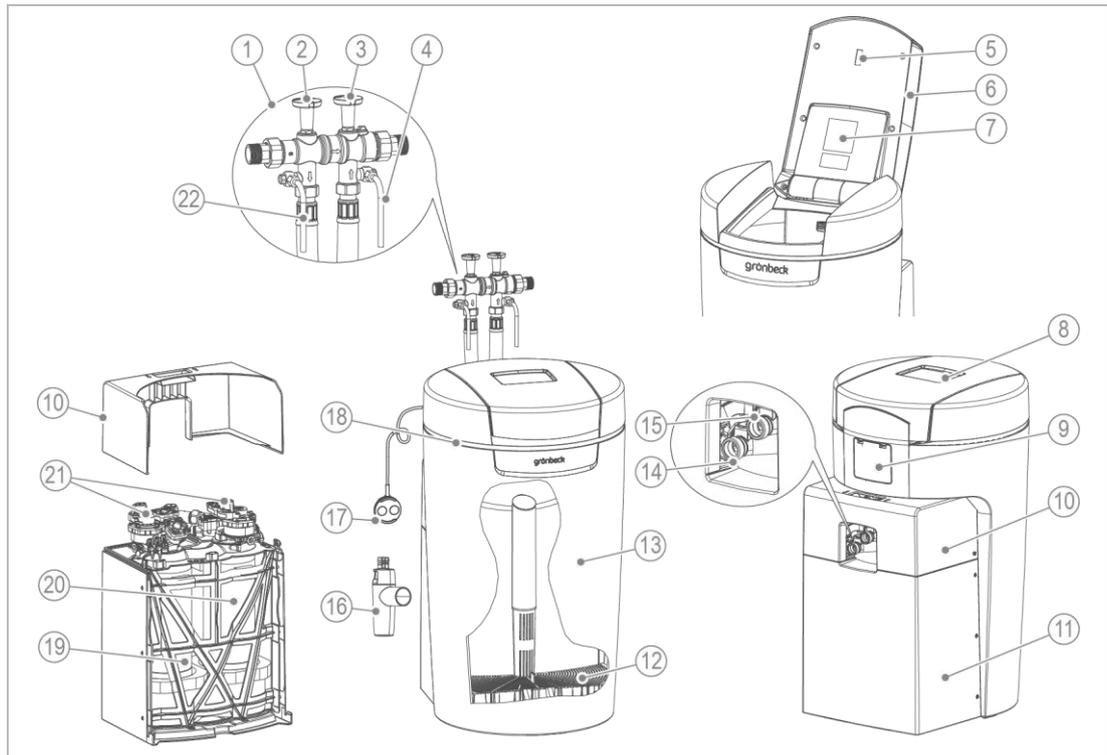
### 3.1 Intended use

- The hygiene system safeliQ:EB must only and exclusively be used for the reduction of germs in microbiologically contaminated, cold drinking water.
- The hygiene system safeliQ:EB features a hygiene unit to reduce micro-organisms. The retention rate for *Pseudomonas aeruginosa* and *Escherichia coli* is 99.99 %.
- The hygiene system safeliQ:EB is suitable for the supply of hygienically treated water in installations with a nominal flow of up to 3.0 m<sup>3</sup>/h. Apart from single and multi-family households of max. 5 persons, this also includes kindergartens and commercial properties.
- The hygiene system safeliQ:EB is designed for the prophylactic hygiene treatment of drinking water if microbiological contamination occurs.
- The service life of the hygiene elements is 250 m<sup>3</sup> or 2 years, whichever comes first. After the service life has expired, the hygiene elements must be replaced by technical service personnel. In case of higher water demands or continuous flows, we recommend using modular safeliQ systems.

#### 3.1.1 Foreseeable misuse

- The safeliQ hygiene system must not be operated with water originating from private water supply systems.

## 3.2 Product components



Designation	
1	Connection block
2	Raw water shut-off valve
3	Shut-off valve for hygienically treated water
4	Sampling valve for hygienically treated water
5	Sensor of salt supply indicator
6	Brine tank lid
7	Type plate
8	Control unit (display)
9	Cover of connections (customer interface)
10	Housing of technical equipment, upper part
11	Housing of technical equipment, lower part

Designation	
12	Sieve bottom
13	Brine tank
14	Connection for hygienically treated water
15	Raw water connection
16	Drain connection DN 50 acc. to DIN EN 1717
17	Water sensor
18	Illuminated LED ring
19	Hygiene unit 1
20	Hygiene unit 2
21	Control valves
22	Sampling valve for raw water

### Salt supply indicator

Once per disinfection process, a light sensor checks the filling level of the salt tablets. If the filling level is below the minimum, the control unit outputs a warning message. The control unit calculates how many days the salt supply is expected to last and indicates this value in days.

### Illuminated LED ring

The illuminated LED ring is designed as a visual signal during water treatment, operation and in case of a malfunction. In the standard setting, the illuminated LED ring behaves as follows:

- Lights up during water treatment
- Lights up during operation of the control unit
- Intermittent flashing in case malfunctions do occur
- Intermittent flashing in case of pre-alarm salt supply

The illuminated LED ring can be set to continuous illumination or be deactivated completely.

#### **Water sensor**

The water sensor detects water at the installation site of the safeliQ, reports this via the control unit of the safeliQ or via Grünbeck's myProduct app and triggers an audio signal (if activated).

#### **Drain connection**

The DN 50 drain connection with siphon is used for professional installation in accordance with DIN EN 1717.

### **3.3 Functional description**

#### **3.3.1 Process**

By way of electrostatic interaction, the hygiene unit fixes micro-organisms (e.g. bacteria) on the hygiene membrane. When flowing through the hygiene membrane, the micro-organisms are physically removed from the water. The fixed micro-organisms are inactivated by disinfection at regular intervals.

#### **3.3.2 Function**

The time for the system disinfection is scheduled in a time period where usually little water is consumed. Alternatively, the time of disinfection can be set at a fixed time or flexibly per day of the week.

For hygienic reasons, the safeliQ system initiates a disinfection process every three days.

### **3.4 Permissible regenerant**

safeliQ hygiene systems must only be operated with the regenerant below:

- Salt tablets according to DIN EN 973 type A

### **3.5 Product registration**



Registering your product extends your warranty by 1 year.

You can register your product as indicated below:

- Registration on Grünbeck's website ([www.gruenbeck.com](http://www.gruenbeck.com)).
- Registration using Grünbeck's myProduct app (refer to chapter 7.3).
- Registration via the enclosed postcard.

### 3.6 Accessories

You can retrofit your product with accessories. Please contact your local Grünbeck representative or Grünbeck's headquarters in Hoechstädt/Germany for details.

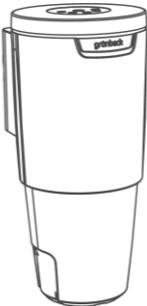
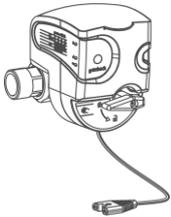
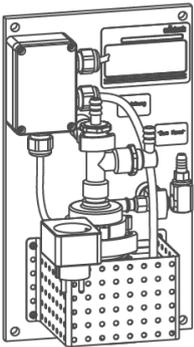
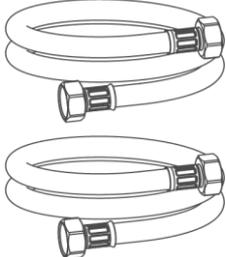
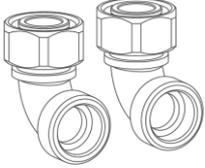
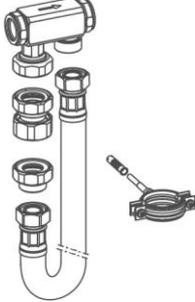
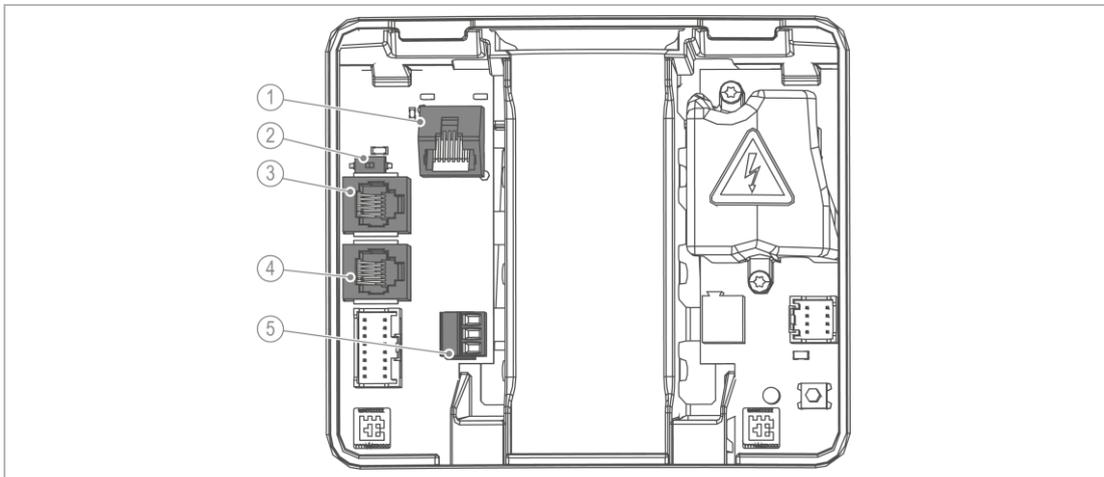
Illustration	Product	Order no.
	<b>Dosing system exaliQ:KC6-e</b>	<b>117 460</b>
	<b>Dosing system exaliQ:SC6-e</b>	<b>117 465</b>
<p>Electronically controlled dosing technology to protect the water pipe against corrosion or to stabilise the total hardness. Due to the integrated iQ interface, no additional water meter fitting is required.</p>		
	<b>Safety device protectliQ:A25</b>	<b>126 405</b>
<p>Product to protect against water damage in one and two-family homes. For other sizes, please inquire.</p>		
	<b>Delivery pump for regeneration water</b>	<b>188 800</b>
<p>To discharge the regeneration water into drain pipes located at a higher level.</p>		
	<b>Extension kit for connection hoses DN 25</b>	<b>187 660e</b>
<p>To extend the hose to 1.6 m.</p>		

Illustration	Product	Order no.
	<b>90° connection angle - 1" (2 pieces)</b> To direct the connection hoses closer along the safeliQ in case of confined installation conditions.	<b>187 865</b>
	<b>Installation kit softliQ</b> Space-saving combined connection of hygiene system and filter.	<b>188 865</b>

## 3.7 Inputs and outputs of the control unit

The control unit features voltage-free inputs and outputs (refer to chapter 7.8)

### 3.7.1 Data circuit board



Designation	Designation
1 LAN connection	4 iQ Comfort 2
2 DIP switch	5 Water sensor (digital input)
3 iQ Comfort 1	

- ▶ Disconnect the water sensor if you want to assign the digital input a different function.
- ▶ Use LiYY 2x0.5 mm<sup>2</sup> or similar line as connection cable. (A larger line cross-section is unsuitable.)

### Water sensor (digital input)

Pin configuration

- Upper terminal + middle terminal = Water sensor
- Lower terminal + middle terminal = Disinfection release or disinfection lock
- ▶ Do not apply voltage signals to any of the 3 terminals.

### iQ Comfort interfaces

The iQ Comfort interfaces are designed for interconnecting Grünbeck products such as exaliQ, for instance.

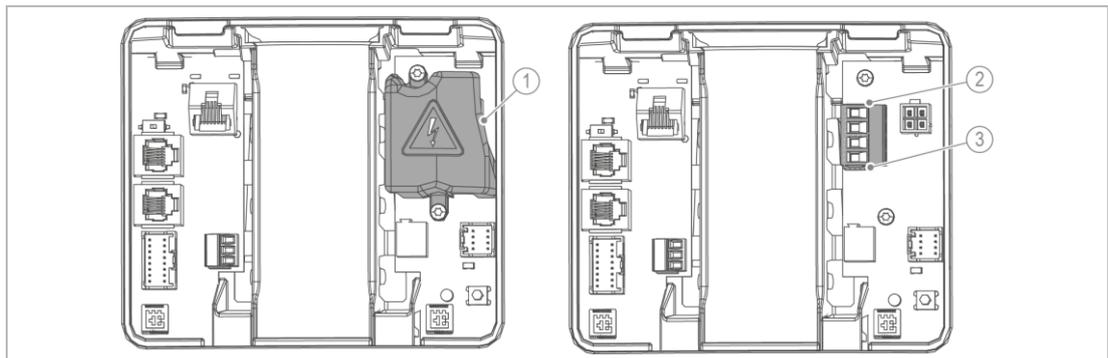
- ▶ Switch the DIP switch to ON (left position) to enable the iQ Comfort interfaces.

## 3.7.2 Power circuit board



**WARNING** Electrical voltage beneath the touch protection

- Electric shock
- ▶ Pull the mains plug before you remove the touch protection.



Designation		Factory setting
1	Touch protection	
2	Fault signal contact (upper two terminals)	max. 230 V/max. 1 A Normally closed
3	Programmable output (lower two terminals)	max. 230 V/max. 1 A Delivery pump for regeneration water

1. Remove the touch protection to access the power circuit board.
2. Use the following connection lines for connection to the fault signal contact or the programmable output:
  - Flexible lines of H05xx F 2x0.75 mm<sup>2</sup> quality or similar because consumers operated with mains voltage might be connected.
3. After the connection has been made, attach the touch protection.

## 4 Transport, set-up and storage

### 4.1 Shipping/Delivery/Packaging

The system is fixed on a pallet at the factory and secured against tipping.

- ▶ Upon receipt, immediately check for completeness and transport damage.
- ▶ In case of visible transport damage, proceed as follows:
  - Do not accept the delivery or only accept it under reserve.
  - Record the extent of damage on the transport documents or on the delivery note of the carrier.
  - Initiate a complaint.
- ▶ Only ship the product by forwarding agent (not by a parcel service provider).

### 4.2 Transport/Set-up

- ▶ Transport the product to the installation site in an upright position and in its original packaging.
- ▶ Obey the symbols and instructions on the packaging.
- ▶ Only remove the packaging shortly before installation.
- ▶ Have two people carry the product.
- ▶ Use the recessed grips for carrying.

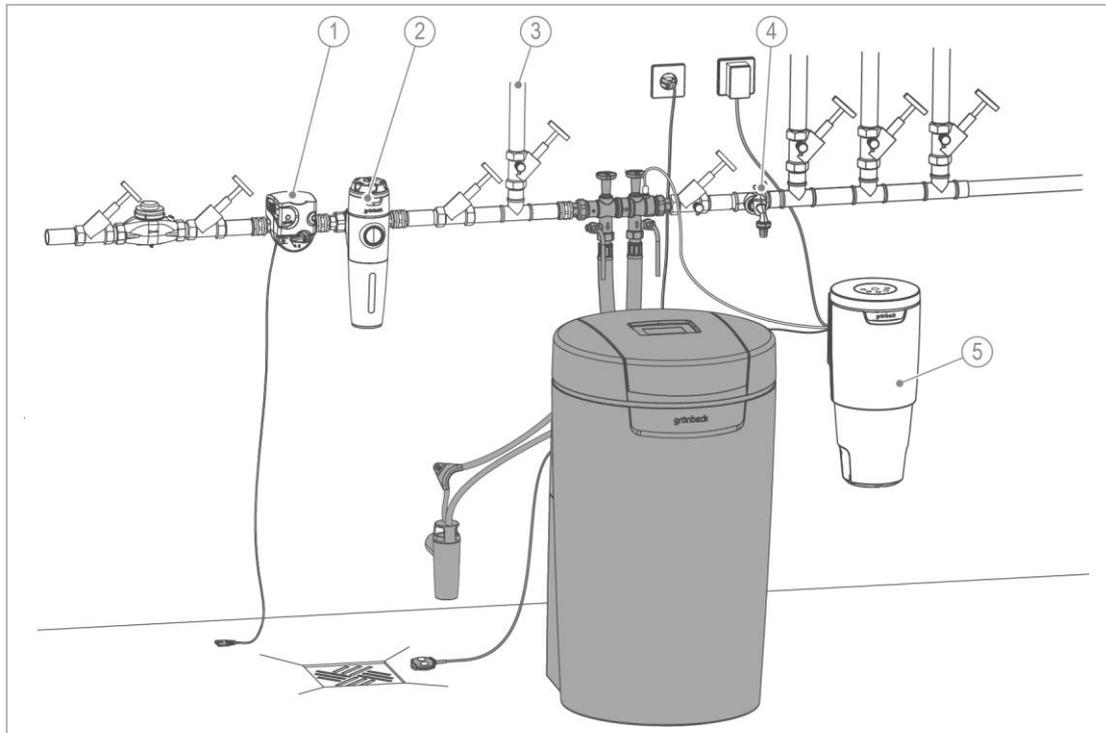
### 4.3 Storage

- ▶ Protect the product from the impacts below when storing it:
  - Dampness, moisture
  - Environmental impacts such as wind, rain, snow, etc.
  - Frost, direct sunlight, severe heat exposure
  - Chemicals, dyes, solvents and their vapours

## 5 Installation



The installation of a hygiene system represents a major intervention into the drinking water system and must be performed by a qualified specialist only.



### Designation

- |   |                               |
|---|-------------------------------|
| 1 | Safety device protectliQ      |
| 2 | Drinking water filter pureliQ |
| 3 | Garden water pipe             |

### Designation

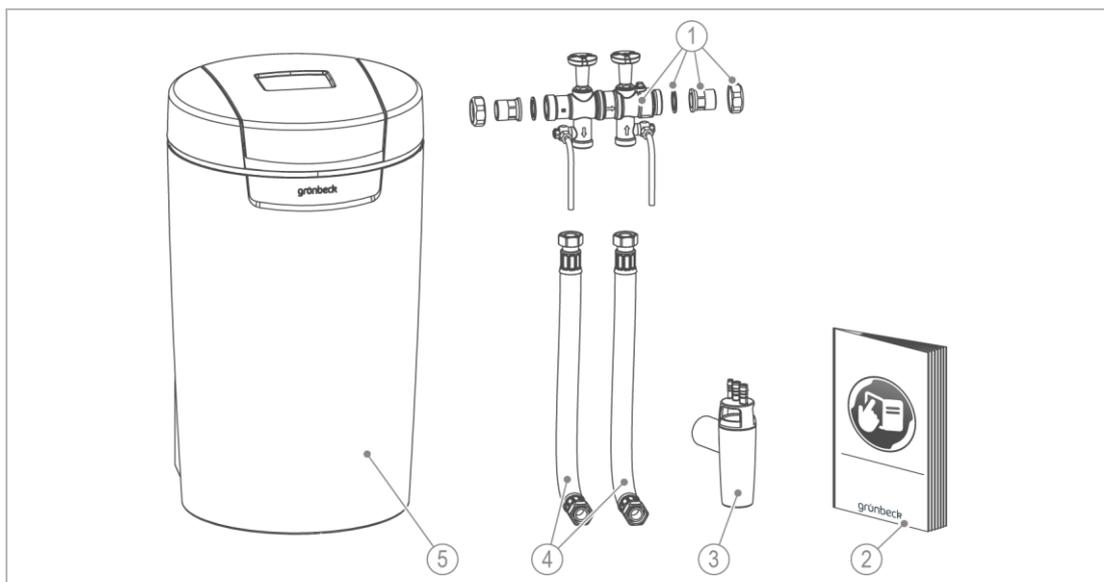
- |   |                        |
|---|------------------------|
| 4 | Water withdrawal point |
| 5 | Dosing system exaliQ   |

### 5.1 Requirements for the installation site

- Obey the local installation directives, general guidelines and technical specifications.
- The functionality of the system is guaranteed when using drinking water as per German Drinking Water Ordinance (TrinkwV). Increased turbidity, within the limit values, can lead to an increased pressure loss and reduce the service life of the hygiene elements.
- The installation site must be frost-proof and protect the product from direct sunlight, chemicals, dyes, solvents and their vapours.
- A drinking water filter and, if required, a pressure reducer (e.g. fine filter pureliQ:KD) must be installed upstream of the product.

- For electrical connection, a Schuko socket is required within a distance of approx. 1.2 m. The socket outlet requires permanent power supply and must not be coupled with light switches, emergency heating switches or the like.
- A drain connection (DN 50) must be available to discharge the disinfection water.
- A floor drain suitable for the respective system size must be available at the installation site. Otherwise, a safety device such as a protectliQ (refer to chapter 3.6), or a safety device with water stop of the same quality must be installed. Floor drains that discharge to a lifting system do not work in case of a power failure.
- Make sure that lifting systems are resistant to salt water or use our delivery pump for regeneration water (refer to chapter 3.6).
- The connection block features a non-return valve on the inlet side. Safety relief valves must be installed in flow direction downstream of the safeliQ.
- A water withdrawal point must be available near the product.
- In case of water pipes made of copper and/or galvanised steel, we recommend dosing exaliQ mineral solutions for corrosion protection (refer to chapter 3.4).

## 5.2 Checking the scope of supply



Designation		Designation	
1	Connection block including water meter screw connection	4	2 Connection hoses
2	Operation manual	5	Completely assembled hygiene system
3	Drain connection DN 50 acc. to DIN EN 1717		

► Check the scope of supply for completeness and damage.

## 5.3 Installing the product



**WARNING** Contaminated drinking water due to stagnation

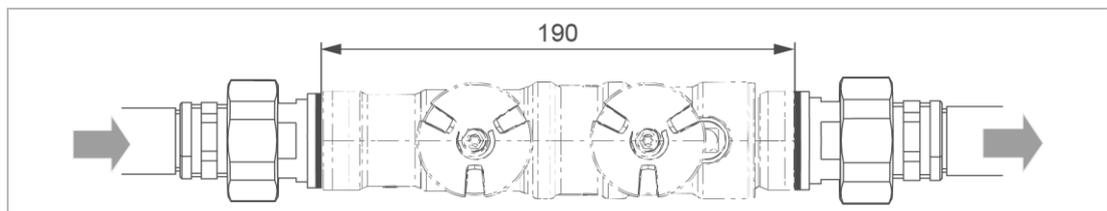
- Infectious diseases
- ▶ Do not connect the product to the drinking water system until immediately before start-up/commissioning.
- ▶ Only carry out the leak test during start-up/commissioning.



Do not install the connection block until immediately before start-up/commissioning or bypass it with a hose. There is no overflow valve in the connection block, therefore no water can flow without a connected system.

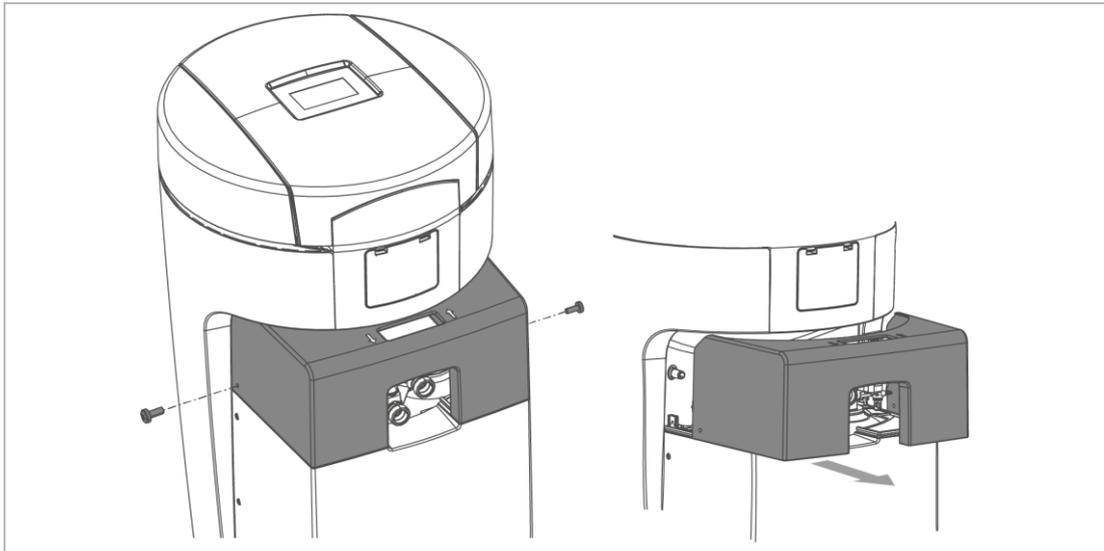
### 5.3.1 Installing the connection block

The connection block can be installed horizontally or vertically.

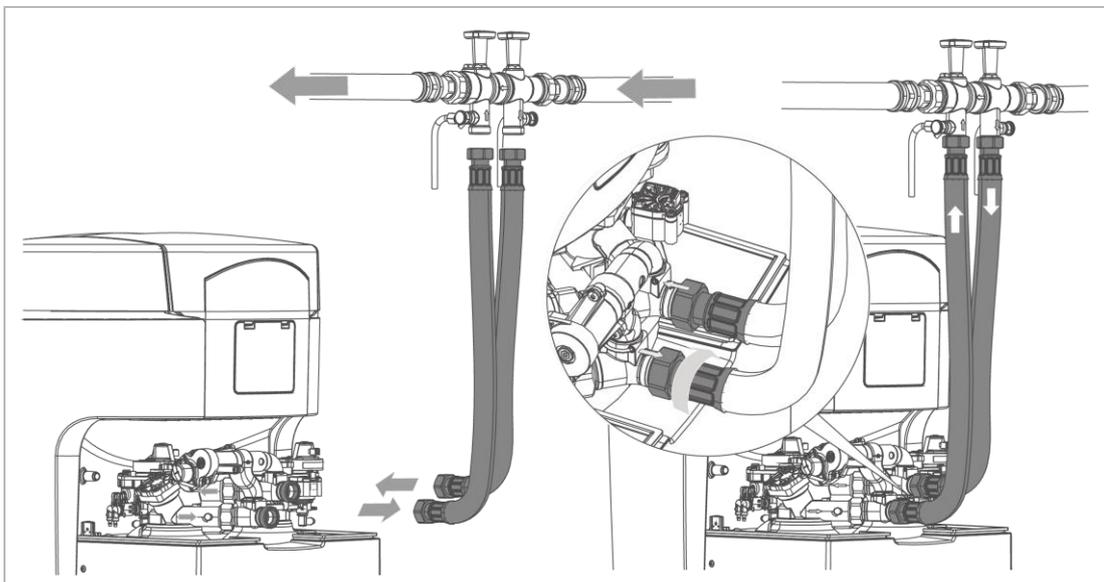


- ▶ Always use the connection block supplied with the product.
1. Install the water meter screw connection in the pipe.
  2. Check the flow direction.
  3. Respect the flow direction on the connection block (indicated by an arrow).
  4. Make sure that the strainer insert is inserted on the inlet side.
  5. Mount the connection block by tightening the union nuts without mechanical stress.
- » The connection block is installed.

### 5.3.2 Installing the connection hoses



1. Loosen both screws on the side of the upper part of the housing for the technical equipment.
2. Remove the upper part of the housing for the technical equipment.
3. Respect the flow direction indicated by arrows on the connection block and on the control valve.

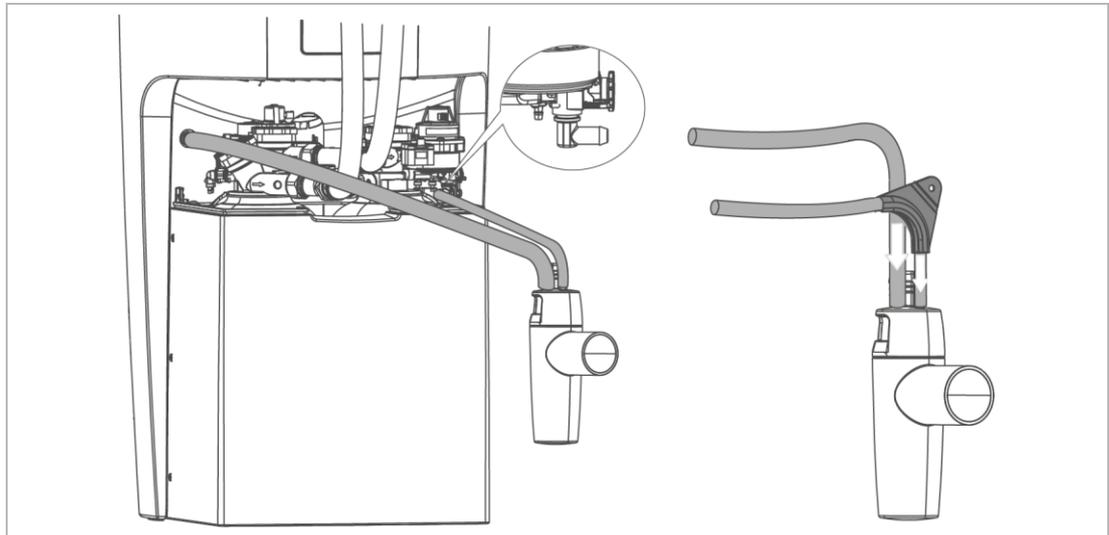


4. Install the connection hoses using suitable tools.
  - » The connection hoses are installed.

### 5.3.3 Establishing the waste water connection

**NOTE** Waste water backing up due to kinked hoses.

- Water damage
- ▶ Run the hoses to the drain with a downward slope and without any kinks.



1. Shorten the flushing water hose (Ø 12 mm) to the required length.
2. Fasten the flushing water hose.
  - » The disinfection water emerges under pressure.
3. Shorten the overflow hose (Ø 16 mm) to the required length.
4. Run the overflow hose to the drain with a downward slope.
5. Fasten the overflow hose.



If the flow pressure is at least 3 bar, the flushing water hose can be routed up to 2 m above the floor. Connecting the overflow hose is not possible then, however.

- » The installation is completed.
- ▶ Protect the product from contamination until start-up/commissioning by slipping the protective cover (packaging) over the product.

## 6 Start-up/commissioning

### 6.1 Putting the product into operation

The start-up program assists you in starting up the product. The display guides you step-by-step. Input is required at some points, however.

- ▶ Follow the instructions on the touchscreen (refer to chapter 7.1).
- Use  or  to navigate through the program.
- Use  to go to the previous menu level.
- Use  to confirm your selection and to proceed to the next menu level.

#### 6.1.1 Initial start-up/commissioning and automatic start of the start-up program

- ▶ Have salt tablets at hand.
1. Plug in the mains plug.
  2. Choose the language you want.
  3. Select the continent where the system is installed.
  4. Select  **Guided start-up**.
    - » The start-up program starts.

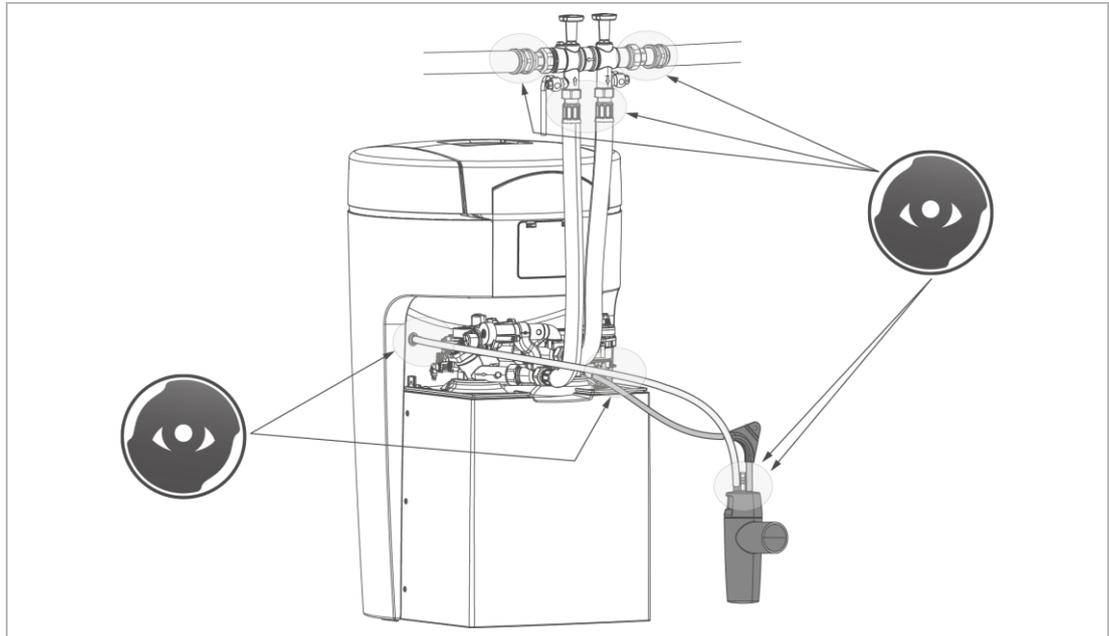
#### 6.1.2 Sequence of the start-up program

1. Confirm the proper installation of the product.
2. Select the drain connection used.
3. Check whether the lines to the drain connection have been laid with a downward slope.
4. Place the water sensor flat on the floor.
5. Do not fill any water into the brine tank.
6. Fill salt tablets into the brine tank.
7. Set the time.
8. Set the date.
  - » The positioning process of the control valve starts.
9. Open the raw water shut-off valve.
10. Open the shut-off valve for hygienically treated water.
  - » Water flows through the flushing water hose to the drain.

## Venting program

The venting program runs automatically in 11 steps.

### 11. Start the venting program.



### 12. Visually check the connection points for leaks.

## Test disinfection

The test disinfection takes approx. 33 minutes.

### 13. Start the test disinfection

- » After conclusion of the test disinfection, the start-up program is completed.
- ▶ Check that the water sensor is lying flat on the floor.
- ▶ Fill in the start-up/commissioning log (refer to chapter 13).
- » Start-up is completed.

### 6.1.3 Manual start of the start-up program



The start-up program cannot be started while the disinfection process is in progress.

Menu level>Start-up

- ▶ Press and hold  for 2 seconds.
- ▶ Follow the instructions on the display.

The sequence of the steps is analogous to the automatic start-up-program.

## 6.2 Handing over the product to the owner/operator/operating company

- ▶ Explain to the owner/operating company how the hygiene system works.
- ▶ Use the manual to brief the owner/operator/operating company and answer any questions.
- ▶ Inform the owner/operator/operating company about the need for inspections and maintenance.
- ▶ Inform the owner/operating company about the replacement interval of the hygiene elements.
- ▶ Hand over all documents to the owner/operator/operating company for keeping.

# 7 Operation/handling

**NOTE** The valves of the system are operated electrically.

- Water can flow to the drain if there is a power failure during disinfection.
- ▶ In the event of a power failure, check your product and shut off the water supply, if necessary.

## 7.1 Touchscreen

### 7.1.1 Basic display

By default, the touchscreen is switched off.

- Tapping the touchscreen activates it.
- » If there is no tap for 2 minutes, the control unit returns to the basic display. The touchscreen switches off.
- » Parameters that have not been saved are discarded.



Designation	
1	Menu level (is always displayed)
2	Work area/information display (changing symbols)

Designation	
3	Control elements (changing symbols)

### 7.1.2 Menu level

To access a menu, tap the corresponding button. The selected button is displayed in yellow. In the menus, you can start actions or change settings.

Illustration	Explanation
	<p><b>Information</b></p> <p>This menu offers useful information on the hygiene system.</p>
	<p><b>Manual system disinfection</b></p> <p>In this menu, you can start a system disinfection manually (refer to chapter 7.6).</p>
	<p><b>Settings</b></p> <p>In this menu, you can adapt your hygiene system individually (refer to chapter 7.2).</p>
	<p><b>Start-up/commissioning</b></p> <p>In this menu, you can start the automatic start-up program (refer to chapter 6.1).</p>

### 7.1.3 Information display

Illustration	Explanation
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>1</p>  </div> <div style="text-align: center;"> <p>2</p>  </div> </div>	<p>blue</p> <p>Hygiene unit in operation</p> <p>The system capacity decreases from top to bottom. One bar corresponds to 20 %.</p> <p>The highlighted bars indicate the available system capacity.</p> <hr/> <p>grey</p> <p>Hygiene unit in disinfection</p> <p>The system capacity increases from bottom to top. One bar corresponds to 20 %.</p> <p>The highlighted bars indicate the available system capacity.</p>
	<p><b>Current flow rate</b></p> <p>The current flow rate is displayed as a numerical value and in the form of a "tachometer". If the nominal flow of the system is exceeded, the circular segments are red.</p>
 <p>Service overdue by ... days</p>	<p><b>Yellow symbol</b></p> <p>Maintenance due!</p> <ul style="list-style-type: none"> <li>▶ Contact technical service.</li> <li>▶ Have the hygiene elements replaced.</li> </ul>
 <p>Leak at the installation site of the safeliQ</p>	<p><b>Yellow symbol</b></p> <p>Check the system site (detection by way of water sensor) for leaks and close the main valve of the building installation, if necessary.</p>

Illustration	Explanation
 <p>... days</p>	<p><b>Yellow symbol</b></p> <p>The salt supply will be used up soon. The expected time for the salt to last is displayed in days.</p> <ul style="list-style-type: none"> <li>▶ Fill salt tablets into the brine tank.</li> </ul>
	<p><b>Red symbol</b></p> <p>The hygiene system is not working properly.</p> <ul style="list-style-type: none"> <li>▶ Fill salt tablets into the brine tank.</li> <li>▶ Wait for 10 minutes.</li> <li>▶ Start a manual disinfection (refer to chapter 7.6).</li> </ul>
	<p><b>Red symbol</b></p> <p>The hygiene system is not working properly. A malfunction has occurred (refer to chapter <b>Fehler! Verweisquelle konnte nicht gefunden werden.</b>).</p>
	<p><b>Wi-Fi symbol</b></p> <p>This is displayed when there is a Wi-Fi connection to a router.</p>
	<p><b>LAN symbol</b></p> <p>This is displayed when there is a LAN connection to a router.</p>
	<p><b>Cloud symbol</b></p> <p>This is displayed when there is a connection to the Grünbeck Cloud.</p>

### 7.1.4 Control elements

Button	Description
	Returning to the basic display
	Scrolling through the menu level
	Marking a selection, scrolling to the menu items, selecting settings
	Returning to the previous menu level, aborting unwanted actions
	Confirming display messages and saving settings

Buttons that currently do not have a function are displayed in light green.

To change a value or content, tap the corresponding field.  
The field turns white and can be changed.

In some extensive menus, functionally related parameters are grouped together into tabs under the header. Tapping the tab opens the corresponding page. You can switch between the tabs using  or .

## 7.2 Menu structure

Values that can be selected or changed are shown in *italics*.

Menu	Menu items	Values/settings	
Information	Basic display	Refer to chapter 7.1.1	
	System data	System flow rate Service life of hygiene unit Remaining water volume	
	Counter readings, date and time	Disinfection Perform maintenance in xx days Date and time (display)	
	Contact details of installer 	<i>Name</i> <i>Phone no.</i> <i>Email</i> Technical service The technical service menu is reserved for technical service personnel as well as for qualified specialists trained by Grünbeck and is protected by a code.	
Manual disinfection	 Press and hold for 2 seconds to start.		
Settings	Language	<i>German</i>	<i>Dutch</i>
		<i>English</i>	<i>Danish</i>
		<i>French</i>	<i>Italian</i>
		<i>Spanish</i>	<i>Russian (planned)</i>
		<b>Date, time, time synchronisation</b>	
	Date, time	Current time	Current continent
		Current date	Current time zone
	Time synchronisation	Switch-over DST to ST	
		Get date/time automatically (NTP)	
		URL NTP server	
<b>Cloud connection, Wi-Fi/LAN connection, network status</b>			
Cloud connection	Connection to the Grünbeck Cloud		
	Pairing with Grünbeck Cloud user account		
	URL Cloud		
	URL certificate		
Wi-Fi/LAN connection	Network type Router connection Automatic IP address (DHCP) Automatic Wi-Fi connection (WPS) Wi-Fi search		
Network status	Parameter, value (display only)		
Time of disinfection	<i>Automatic</i>	<i>Fixed</i>	
	<b>Display, audio signal, illuminated LED ring</b>		
Display – Display in standby	<i>Deactivated</i>	<i>Activated</i>	
	Audio signal – Behaviour in case of malfunctions	<i>Deactivated</i>	<i>Activated</i>
Audio signal enabled from ... to ...			

Menu	Menu items	Values/settings
	Illuminated LED ring – function setting	<i>Water treatment + operation + malfunction</i> <i>Operation + malfunction</i> <i>Malfunction</i> <i>Permanent illumination</i> <i>Deactivated</i>
	Illuminated LED ring – Illuminated LED ring flashes in the event of a signal	<i>Deactivated</i> <i>Activated</i>
	Illuminated LED ring Brightness	...%
	Flushing+ Time	<i>Activated</i> <i>Deactivated</i>
<b>Updates and profiles, manual update</b>		
	 When switching to manual software updates, the latest safety features and function are not automatically available to you.	
	Software update	<i>Automatic</i> <i>Manually</i>
	Saving Settings profile	No / Yes The parameter settings are saved here as a "Private" profile in the Grünbeck Cloud.
	Loading Settings profile	Private profile                      Installer profile
<b>Manual update</b>		
	Software update	 Press and hold for 2 seconds to check for updates.
	Resetting factory settings	<i>Start</i>
<b>Device info</b>		
		Software version Hardware version Bootloader version Serial number of control unit
	Consumption history	Water consumption Salt consumption
	Disinfection history	
Start-up/ commissioning	Start-up/commissioning	 Press and hold for 2 seconds to start.

## 7.3 Connection to the Grünbeck Cloud



The use of the Grünbeck Cloud and app functionalities depends on the service availability of the required Azure services in the data centre region of the respective country. Geopolitical changes or restrictions in the respective country can limit or prevent the availability of the services of the data centre currently located in the EU.

It is possible to control your safeliQ hygiene system via a mobile device and to request information.

To do so, Grünbeck's myProduct app must be installed on your mobile device.

The connection between your hygiene system and the mobile device does not work directly, but via the Grünbeck Cloud.

The connection between Grünbeck's myProduct app and the safeliQ controller is established as follows:



Designation		Designation	
1	Grünbeck product	3	Grünbeck Cloud
2	Router	4	Mobile device

As soon as a user account has been created via Grünbeck's myProduct app and the anonymous data is assigned to your user account by pairing, the data is personalised as defined by the Data Protection Act.

### 7.3.1 Installing Grünbeck's myProduct app

Grünbeck's myProduct app is the link between your Grünbeck product and your mobile device. You can access your Grünbeck product all over the world.



- ▶ Download Grünbeck's myProduct app and install it on your mobile device.
- ▶ Create your personal user account.
- ▶ In Grünbeck's myProduct app add your safeliQ to your user account using 
- ▶ Follow the instructions of Grünbeck's myProduct app.

### Product registration

Using Grünbeck's myProduct app, you can conveniently register your product.

- ▶ Call up **Registration** and **Product registration** in the device overview of Grünbeck's myProduct app.
- ▶ Enter your personal data.
  - » Registering your product extends your warranty by 1 year.

## 7.3.2 Allowing the connection to the Grünbeck Cloud

After the connection to the Cloud has been allowed and the connection to the router has been established, the control unit automatically checks whether a new firmware update is available in the Cloud.

- ▶ Do not interrupt the power supply while a firmware download and processing is in progress (max. 20 minutes).

If your safeliQ hygiene system is connected to your user account in the Grünbeck Cloud, you will be notified by email in the event of a malfunction.

## 7.3.3 Establishing a connection to the router

Menu level>Settings>Wi-Fi/LAN connection



As soon as the connection to the Grünbeck Cloud has been allowed and a connection to the router has been established, the control unit cyclically sends anonymous data to the Grünbeck Cloud.

## 7.3.4 URL certificate

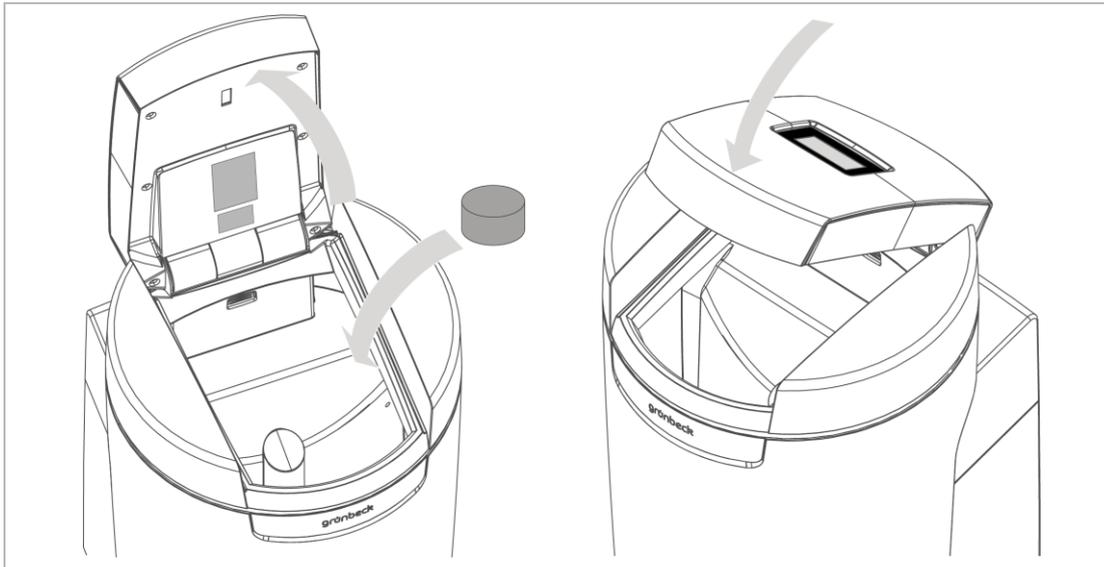
To make sure that the connection to the Grünbeck Cloud is secure, the control unit always loads the current URL certificate automatically.

The following entry must be available under Settings/Cloud connection/URL certificate:

**prodeugruenbeckfirmware.blob.core.windows.net/cert**

- ▶ Check whether this entry is there.
- ▶ Add the entry, if necessary.

## 7.4 Refilling salt tablets



The salt supply in the brine tank must always be higher than the water level. Normally, the water level is approx. 1 cm above the sieve bottom.

1. Open the brine tank lid.



The sensor of the salt supply indicator is located in the brine tank lid. This sensor does not work with laser light and thus is safe for the eyes. The function of the salt supply indicator is explained in chapter 3.2.

2. Fill salt tablets into the brine tank.
3. Dispose of the dust-like fine fraction from the bag with your residual waste.
4. Close the brine tank lid.
5. Document the refill in the operation log (refer to chapter 13).

## 7.5 Replacing the hygiene elements



The hygiene elements must be replaced by technical service personnel only.

The service life of the hygiene elements is 250 m<sup>3</sup> or 2 years, whichever comes first.

- ▶ Notify technical service as soon as the display message **Maintenance due!** is shown.

## 7.6 Starting the manual disinfection

Menu level>Manual disinfection/Disinfection

A manual disinfection is required in the cases below:

- If the product is put into operation again after a longer period of standstill.
- After maintenance or repair work has been performed.
- After a prolonged power failure.

## 7.7 Setting the time of disinfection

Menu level>Settings>Time of disinfection

1. Use  and  to select the required function.
2. Confirm with .



Select a time at which you have no water consumption for > 1 h, e.g. at 02:00 o'clock at night.

3. Choose **Define time x**.
4. Enter the time.
5. Confirm with .

## 7.8 Installer level (Code 005)



The settings described here must be made by qualified specialists only.

While the function below is in progress, the product must not be disconnected from mains:



- Filling operating water into brine tank

Otherwise, the reference position of the line that is not in the operation must be found manually afterwards (grey symbol in the basic display).

Menu level>Information>Contact data of installer

1. Tap .
  2. Enter the Code using the numerical keypad.
  3. Confirm with .
- » You can change parameters and values.

## Menu structure

Menu items		Settings/remarks
Wi-Fi access point (Can only be selected in connection with Grünbeck's complementary mySetting app for qualified specialists.)	Page 1/2	Activate
		Deactivate
	Page 2/2	IP address
		Password
Line 1	Page 1/2	System flow rate, l/h
		Remaining capacity, m <sup>3</sup>
		Disinfection step
Line 2	Page 1/2	System flow rate, l/h
		Remaining capacity, m <sup>3</sup>
		Disinfection step
Total flow	(Display only)	Peak value in parallel operation, m <sup>3</sup> /h for xxxxx, min
Flow rate Line 1	(Display only)	Peak value Line 1, m <sup>3</sup> /h for xxxxx, min
Flow rate Line 2	(Display only)	Peak value Line 2, m <sup>3</sup> /h for xxxxx, min
Water volumes	(Display only)	Total water Line 1, m <sup>3</sup>
		Total water Line 2, m <sup>3</sup>
		Make-up water volume, l
Counter readings	(Display only)	Salt consumption, kg
		Disinfection counter
Find referencing Line 1	Start	Moving to reference position. Disinfection in progress is aborted. After completion, the factory setting is active again.
Find referencing Line 2	Start	
Filling operating water into brine tank	Start	Filling the brine tank to minimum water level (e.g. after cleaning the brine tank). After completion, the factory setting is active again.
Test disinfection Line 1	Start	Functional check of all components involved in the disinfection.
Test disinfection Line 2	Start	
Test disinfection Lines 1 & 2	Start	
Disinfection time	Automatic (factory setting)	
	Fixed	Programming a fixed time. Disinfection only takes place if required.
	Weekly timer	Mon ... Sun Time of disinfection on each day of the week (factory setting: Mon - Fri at 7:00 am)
Saving Settings profile	None (factory setting)	
	Yes	Saving all current parameter settings of the control unit in the Grünbeck Cloud, so that they can be downloaded to the control unit again later, if necessary. Here, the parameter settings are saved as "Installer" profile in the Grünbeck Cloud.
Function Programmable output	Delivery pump for regeneration water (factory setting)	This setting is required in conjunction with the delivery pump for regeneration water available as an accessory (refer to chapter 3.6). Contact closed (delivery pump for regeneration water is running) during the disinfection steps First filtrate, Salting, Slow rinse and Backwash.
	Disinfection message	Contact closed during the entire disinfection process.

Menu items		Settings/remarks
Function Fault signal contact	Normally closed (N.C. = normally closed) (factory setting)	Contact normally closed. Open in the event of a fault signal.
	Normally open (N.O. = normally open)	Contact normally open. Closed in the event of a fault signal.
Function Programmable input	Leak detection (factory setting)	If the water sensor detects a leak at the installation site of the safeliQ, the message <b>Leak at safeliQ installation site</b> is displayed.
	Disinfection lock	The disinfection lock is active as long as the contact at the programmable input is closed; after a power failure, manually released and automatic regenerations take priority. A disinfection that has already been started will not be aborted.
	Disinfection release	Starting disinfection when the contact at the programmable input closes.
Service program Replacement of hygiene element		After pressing the indicated button for 2 seconds, the service program "Replacement of hygiene element" starts. Afterwards, the water volume of the new hygiene elements and the duration of the maintenance interval must be reset.

## 8 Maintenance and repair

Maintenance and repair includes cleaning, inspection and maintenance of the product.



### WARNING

Contaminated drinking water

- Infectious diseases
- ▶ Pay attention to hygiene when working on the product.



The responsibility for inspection and maintenance is subject to local and national requirements. The owner/operator/operating company is responsible for compliance with the prescribed maintenance and repair work.



By concluding a maintenance contract you make sure that all maintenance work will be carried out on time.

- ▶ Only use genuine spare and wearing parts from Grünbeck.

### 8.1 Cleaning

- ▶ Only clean the outside of the product.
- ▶ Do not use any strong or abrasive cleaning agents.
- ▶ Wipe the housing with a damp cloth.



The technical service personnel clean the brine tank once a year during maintenance.

### 8.2 Intervals



By way of regular inspections and maintenance, malfunctions can be detected in time and product failures can be prevented.

DIN EN 806-5 recommends semi-annual and annual maintenance.

Activity	Interval	Execution
Inspection	2 months	<ul style="list-style-type: none"> <li>• Check for function</li> <li>• Check for leaks</li> <li>• Check salt supply</li> </ul>
Maintenance	6 months	<ul style="list-style-type: none"> <li>• Evaluate condition and consumption of salt</li> <li>• Check water sensor</li> </ul>
	annually	<ul style="list-style-type: none"> <li>• Check operating values and function</li> <li>• Clean the components</li> <li>• Check wearing parts and replace them, if necessary.</li> </ul>
	2 years or 250 m <sup>3</sup>	<ul style="list-style-type: none"> <li>• Replacement of hygiene elements</li> </ul>

## 8.3 Inspection

You as owner/operator/operating company can carry out the regular inspections yourself. Regular inspections increase the operational reliability of your product.

- ▶ Carry out an inspection at least every 2 months.

To carry out an inspection, proceed as follows:

1. Check that there are enough salt tablets in the brine tank.



The level of salt tablets in the brine tank must always be higher than the water level. Normally, the water level is approx. 1 cm above the sieve bottom.

2. Check the connection hoses for leaks.
3. Check the control valve to the drain for leaks.



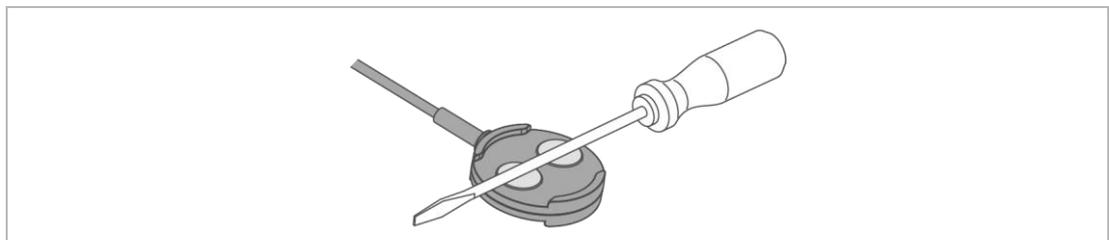
No water must drip from the flushing water hose during operation (blue symbol in the basic display).

## 8.4 Maintenance

### 8.4.1 Semi-annual maintenance

Proceed as follows to carry out semi-annual maintenance:

1. Evaluate the salt consumption subject to the water volume consumed.
2. Check the condition of the salt (no salt clumps!).  
Break up incrustations with a suitable tool.
3. Check the water sensor for function by bridging it with a metal object.



- » The water sensor is working if the hygiene system issues a warning message after 30 seconds at the latest.

## 8.4.2 Annual maintenance



Carrying out annual maintenance work requires specialist knowledge. This kind of maintenance work must be carried out by technical service personnel only.

In addition to semi-annual maintenance, the work below must be carried out as well:

### Operating values

1. Read the water and flow pressure.
2. Read the domestic water meter.
3. Read the counter reading Disinfection in the control unit.
4. Read the counter reading Hygienically treated water volume in the control unit.
5. Read out the error memory.

### Maintenance work on the lines

The work below must be carried out on every line.

6. Check the hose connections for leaks and damage.
7. Check the water meter for hygienically treated water for pulse output (current flow during operation, refer to chapter 7.1)
8. Check all cables and connections for damage and a tight fit.
9. Check the injector and the injector sieve and clean them, if necessary.
10. Check the brine filling orifice in the brine connection angle (red).
11. Check the brine valve and the level electrodes and clean them, if necessary.
12. Clean the brine tank.
13. Start a manual disinfection.
14. Check the suction power of the injector.
15. Check the chlorine current during salting.
16. Check the disinfection flow in the installer level for function during backwash.
17. Check the control valve at the drain outlet in operating position for leaks (flushing water hose, filling hose and suction hose).
18. Check the filling hose and the suction hose to the brine valve for leaks.
19. Reset the service interval, if activated.
20. Record the maintenance in the operation log (refer to chapter 13).

## 8.5 Consumables

Product	Quantity	Order no.
Regeneration salt tablets as per DIN EN 973 type A	kg 25	127 001
Hygiene element for safelIQ:EB30	pc 1	525 604e

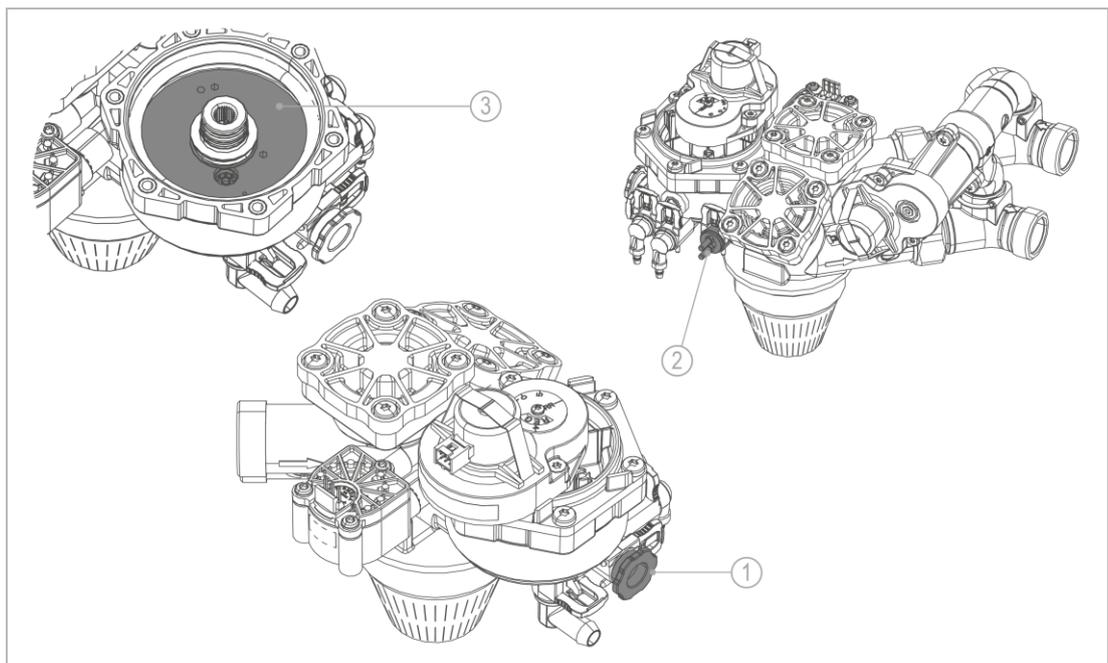
## 8.6 Spare parts

For spare parts and consumables, please contact your local Grünbeck representative who you may find on the internet at [www.gruenbeck.com](http://www.gruenbeck.com).

## 8.7 Wearing parts

The wearing parts are listed below:

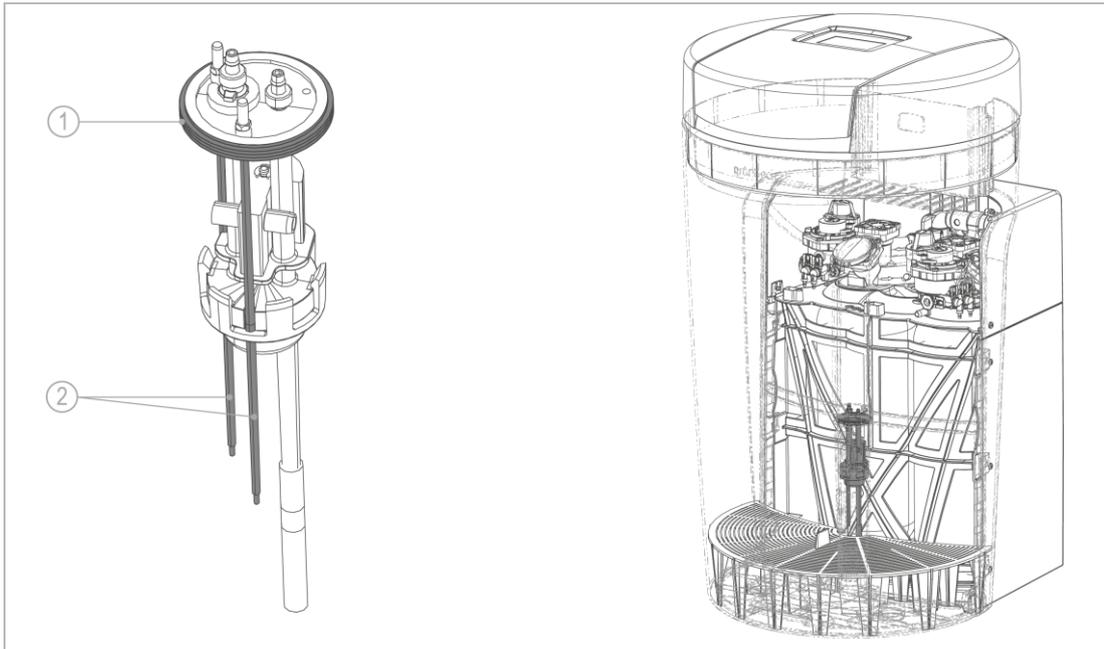
- Control valve: Seals, pair of discs, injector and chlorine cell



Designation	
1	Injector (with circlip)
2	Chlorine cell (with circlip)

Designation	
3	Pair of regeneration discs (with flow stabiliser)

- Brine valve: Seals and electrodes



**Designation**

1 Seal

**Designation**

2 Electrodes

# 9 Troubleshooting



**WARNING**

Risk of contaminated drinking water due to stagnation.

- Risk of infectious diseases.
- ▶ If malfunctions do occur, have them rectified immediately.

The hygiene system safeliQ:EB30 indicates malfunctions on the display. As soon as a fault appears, the touchscreen changes to the basic display and remains active until the condition has been rectified.

- ▶ If you cannot eliminate malfunctions with the instructions given below, contact the technical service.
- ▶ Have your system data (refer to chapter 1.2) at hand.

## 9.1 Display messages

1. Acknowledge the fault or warning with **Rectify**.
2. If the fault occurs again, compare the display message with the table below.

### 9.1.1 Warning signals (yellow symbols)

Display	Explanation	Remedy
 <b>Maintenance due!</b> Notify technical service	80 % – Hygiene unit 80 % exhausted 90 % – Hygiene unit 90 % exhausted, please arrange maintenance appointment 96 % – Hygiene unit 96 % exhausted, please arrange maintenance appointment 98 % – Hygiene unit 98 % exhausted, please arrange maintenance appointment immediately	▶ Contact technical service.
	100 % – Hygiene unit exhausted, please have maintenance carried out immediately	▶ Have the hygiene elements replaced by technical service.
 Service overdue by ... days	Only displayed if maintenance interval is activated.	▶ Contact technical service.

Display	Explanation	Remedy
 Leak at safelIQ installation site	Water sensor has electrical connection.	<ul style="list-style-type: none"> <li>▶ Check whether water is leaking. If necessary, close the main valve of the building installation.</li> </ul>
 <b>Salt supply low!</b> Please refill! Sufficient for: xy days (Order no. 127 001)	Salt supply low.	<ul style="list-style-type: none"> <li>▶ Fill salt tablets into the brine tank.</li> <li>▶ Acknowledge with <b>Rectify</b>.</li> </ul>

### 9.1.2 Fault signals (red symbols)

Display	Explanation	Remedy
 <b>Power failure &gt; 5 minutes</b>	Only displayed if detection was activated by technical service personnel. Upon return of power, the hygiene system carries out a disinfection. In the event of a power failure, a disinfection in progress is stopped and continued afterwards.	<ul style="list-style-type: none"> <li>▶ Check the electrical connection.</li> <li>▶ Reset the clock of the hygiene system if there is a power failure &gt; 3 days (refer to chapter 7.2).</li> <li>▶ Start a manual disinfection (refer to chapter 7.6).</li> </ul>
 <b>Salt supply used up!</b> Refill immediately! (Order no. 127 001)	Hollow area below the salt.	▶ Break up incrustations with a suitable tool.
	Salt supply used up.	<ul style="list-style-type: none"> <li>▶ Fill salt tablets into the brine tank.</li> <li>▶ Acknowledge with <b>Rectify</b>.</li> </ul>
	Water pressure too low.	▶ Increase the flow pressure to at least 2.0 bar.
 <b>Drive failure</b> Disinfection control valve!	Chlorine cell worn. Brine filling orifice, injector, injector sieve or brine valve clogged.	▶ Contact technical service.
	Step monitoring of disinfection motor or connecting cable defective.	▶ Contact technical service.
 <b>Disinfection water meter</b> Volume not reached!	Disinfection water meter does not provide any pulses. Connecting cable defective. Water supply is interrupted. Safety float on brine valve closed.	<ul style="list-style-type: none"> <li>▶ Check water supply.</li> <li>▶ Contact technical service.</li> </ul>

Display	Explanation	Remedy
 <b>Water meter for hygienically treated water defective</b>	Connecting cable defective.	<ul style="list-style-type: none"> <li>▶ Check water supply.</li> <li>▶ Contact technical service.</li> </ul>
 <b>Disinfection water meter defective!</b>	Connecting cable defective.	<ul style="list-style-type: none"> <li>▶ Check water supply.</li> <li>▶ Contact technical service.</li> </ul>
 <b>System is not drawing brine from brine tank effectively</b>	Minimum contact during Salting not reached. Monitoring time exceeded. Injector clogged or raw water pressure too low.	<ul style="list-style-type: none"> <li>▶ Contact technical service.</li> </ul>
 <b>Nominal flow exceeded</b>	Only displayed if monitoring was activated by qualified specialist. System is being operated with excessive flow rates.	<ul style="list-style-type: none"> <li>▶ Reduce flow rate.</li> <li>▶ If the fault persists, contact technical service.</li> </ul>
 <b>Water loss to drain</b>	Water loss to drain.	<ul style="list-style-type: none"> <li>▶ Contact technical service.</li> </ul>
 <b>Failure of power supply to drives!</b>	Short-circuit at the motor or at the connecting cable to the motor.	<ul style="list-style-type: none"> <li>▶ Contact technical service.</li> </ul>

### Fault signals during start-up/commissioning

Display	Explanation	Remedy
 <b>Error during start-up (Venting)</b>	Time monitoring of venting (backwash) has responded. No flow detected at the disinfection water meter.	<ul style="list-style-type: none"> <li>▶ Check whether the shut-off valves on the connection block are open.</li> </ul>
 <b>Error during start-up (Filling brine tank)</b>	Time monitoring for filling the brine tank has responded.	<ul style="list-style-type: none"> <li>▶ Check whether the raw water shut-off valve is open.</li> <li>▶ Acknowledge with <b>Rectify</b>.</li> <li>▶ Repeat start-up/commissioning.</li> </ul>

Display	Explanation	Remedy
 <b>Error during start-up</b> (Chlorine current too low)	Chlorine monitoring has tripped during test disinfection.	<ul style="list-style-type: none"> <li>▶ Fill salt tablets into the brine tank.</li> <li>▶ Acknowledge with <b>Rectify</b>.</li> <li>▶ Repeat start-up/commissioning.</li> </ul>
 <b>Error during start-up</b> (Referencing)	Step monitoring of disinfection motor or connecting cable defective.	<ul style="list-style-type: none"> <li>▶ Acknowledge with <b>Rectify</b>.</li> <li>▶ Repeat start-up/commissioning.</li> <li>▶ Contact technical service if the fault reoccurs.</li> </ul>

## 9.2 Other observations

Observation	Meaning	Remedy
No water	Hygiene system does not have a permanent power connection.	▶ Check the power connection.
	Water meter for hygienically treated water does not provide any pulses.	▶ Contact technical service.
		▶ Check whether the shut-off valves on the connection block are open.
Water pressure at the withdrawal point is too low. (Pressure loss too high.)	Hygiene element exhausted.	▶ Contact technical service.
Start-up program: During the venting program or the test disinfection, the display remains unchanged for more than 20 minutes.	Connection hoses are mixed up (raw water and hygienically treated water).	<ul style="list-style-type: none"> <li>▶ Check the connection hoses.                             <ul style="list-style-type: none"> <li>▶ Close both shut-off valves on the connection block.</li> <li>▶ Start a manual disinfection.</li> <li>▶ Swap the connection hoses.</li> <li>▶ Open the shut-off valves.</li> </ul> </li> </ul>

For information on malfunctions regarding the Grünbeck Cloud, go to the following address on the internet: <https://www.gruenbeck.de/en/become-a-water-expert/faq/>



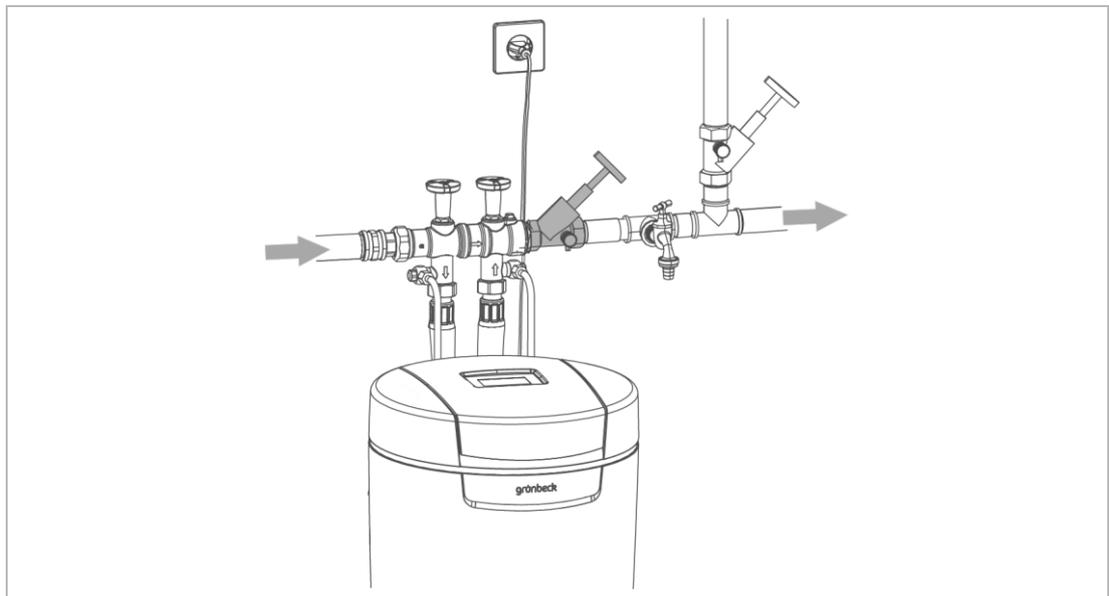
## 10 Decommissioning

### 10.1 Temporary standstill

Your hygiene unit will disinfect after 4 days, even if the capacity has not been exhausted. The stagnation of water is prevented. It is not necessary to temporarily shut down your product.

- ▶ Leave your product connected to the power and water supply.

If you still want to temporarily shut down your product, proceed as follows:



- ▶ Close the shut-off valve downstream of the product.
- » The product remains in an operating state which is considered to be safe with regard to hygiene and which is admissible according to DIN EN 19636-100.

### 10.2 Final shutdown

Refer to the next chapter.

# 11 Dismantling and disposal

## 11.1 Deleting personal data

To protect your personal data, it must be deleted before disposal.

- ▶ Please contact Grünbeck's technical service on this.

## 11.2 Dismantling



The work described here represents an intervention into your drinking water system. Have this work carried out by qualified specialists only.

1. Close the raw water shut-off valve.
2. Open a water withdrawal point.
3. Wait for a few seconds.
  - » The pressure in the product and the pipe network is being relieved.
4. Close the water withdrawal point.
5. Unplug the mains plug.
6. Keep a collecting vessel (e.g. a bucket) handy to catch escaping water.
7. Disconnect the connection hoses from the product.
8. Disconnect the connection hoses from the connection block.
9. Remove the connection block.
10. Close the gap in your drinking water installation, e.g. by using an adjusting piece (order no. 128 001).
11. Drain the brine tank.
12. Drain all liquids from the product.

## 11.3 Disposal

- ▶ Obey the applicable national regulations.

### Packaging

- ▶ Dispose of the packaging in an environmentally sound manner.

#### NOTE

Danger to the environment due to incorrect disposal

- Packaging materials are valuable raw materials that can be reused in many cases.
- Incorrect disposal can cause hazards to the environment.
- ▶ Dispose of packaging materials in an environmentally sound manner.
- ▶ Obey the local disposal regulations.
- ▶ If necessary, commission a specialist company with the disposal.

### Product



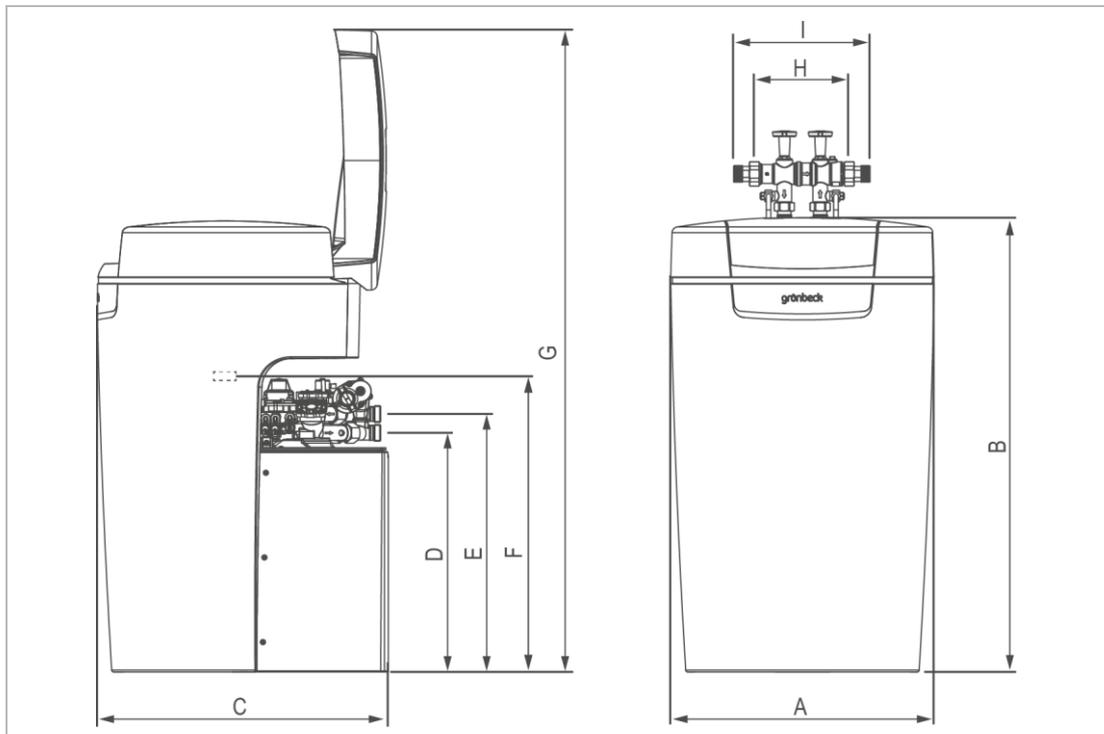
If this symbol (crossed-out wheellie bin) is on the product, this product or its electrical and electronic components must not be disposed of as household waste.

- ▶ Find out about the local regulations on the separate collection of electrical and electronic products.
- ▶ Make use of the collection points available to you for the disposal of your product.
- ▶ If your product contains batteries or rechargeable batteries, dispose of them separately from your product.



For more information on take-back and disposal, go to [www.gruenbeck.de](http://www.gruenbeck.de).

## 12 Technical specifications



Dimensions and weights		safeliQ:EB30	
A	System width	mm	525
B	System height	mm	912
C	System depth	mm	580
D	Connection height of control valve (hygienically treated water; outlet)	mm	480
E	Connection height of control valve (raw water; inlet)	mm	518
F	Height of safety overflow of brine tank	mm	540
G	Height with open lid	mm	1290
H	Installation length without screw connection	mm	190
I	Installation length with screw connection	mm	271
	Operating weight, approx.	kg	125
	Shipping weight, approx.	kg	26

Connection data		safeliQ:EB30	
Nominal connection diameter		DN 25 (1" male thread)	
Drain connection		≥ DN 50	
Rated voltage range		V	100 – 250
Rated frequency		Hz	50 – 60
Rated load (during disinfection, temporarily)		W	14
Power input during softening, with display, Wi-Fi and illuminated LED ring being switched off		W	< 3.5
Protection/protection class		IP54/□	
Wi-Fi frequency band		GHz	2.4

Performance data		safeliQ:EB30
Nominal pressure	PN	10
Operating pressure (recommended)	bar	2.0 – 8.0 (4.0)
Nominal flow at a pressure loss of 1.0 bar	m <sup>3</sup> /h	3.0
Disinfection time (per hygiene unit)	min	25
Disinfection time (both hygiene units)	min	50
Replacement interval of hygiene elements (recommended)	years	< 2
Replacement interval of hygiene elements (recommended)	m <sup>3</sup>	< 250

Filling volumes and consumption data		safeliQ:EB30
Salt consumption per disinfection	kg	0.176
Regeneration salt supply	kg	≤ 95
Flushing water flow	m <sup>3</sup> /h	≤ 0.3
Total waste water volume per disinfection (per hygiene unit)	l	31
Number of hygiene units	pcs	2

General data		safeliQ:EB30
Water temperature	°C	5 – 30
Ambient temperature	°C	5 – 25
Humidity (non-condensing)	%	≤ 90
<b>Order no.</b>		<b>525 410</b>

# 13 Operation log



- ▶ Document the initial start-up/commissioning and all maintenance activities.
- ▶ Copy the maintenance report.

## Hygiene system safeliQ:EB30

Serial no.: \_\_\_\_\_

### 13.1 Start-up/commissioning log

Customer			
Name:			
Address:			
Installation/Accessories			
safeliQ connected to Cloud	<input type="checkbox"/> Wi-Fi	<input type="checkbox"/> LAN	<input type="checkbox"/> No
Drinking water filter (make/type):			
Drain connection acc. to DIN EN 1717	<input type="checkbox"/> Yes		<input type="checkbox"/> No
Floor drain available	<input type="checkbox"/> Yes		<input type="checkbox"/> No
Safety device	<input type="checkbox"/> Yes		<input type="checkbox"/> No
Regeneration water lifting system	<input type="checkbox"/> Yes		<input type="checkbox"/> No
Make:			
Dosing	<input type="checkbox"/> Yes		<input type="checkbox"/> No
Active agent:			
Operating values			
Water pressure	bar		
Domestic water meter reading	m <sup>3</sup>		
Remarks			
Start-up/commissioning			
Company:			
Service technician:			
Work time certificate (no.):			
Date/signature:			

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# EU Declaration of Conformity

In accordance with the Radio Equipment Directive 2014/53/EU, Appendix VI



This is to certify that the system designated below meets the safety and health requirements of the applicable European guidelines in terms of its design, construction and execution.

This certificate becomes void if the system is modified in any way not approved by us.

## Hygiene system safeliQ:EB

### System no.: Refer to type plate

The aforementioned system also complies with the following directives and provisions:

- RoHS 2011/65/EU

The following harmonised standards have been applied:

- EN 60335-1:2012 + AC:2014 + A11:2014
- EN 61000-3-2:2014 Class A
- ETSI EN 300 328 V 2.1.1 (2016-11)
- EN 61000-6-2:2005 + AC:2005
- EN 61000-6-3:2007 + A1:2011+AC:2012

The following national standards and regulations have been applied:

- ETSI EN 301 489-1 V2.1.1 section 8 and/or 9 (version included in addition: V1.9.2)
- ETSI EN 301 489-17 V3.1.1

Responsible for documentation:

Mirjam Müller

Manufacturer:

Grünbeck Wasseraufbereitung GmbH  
Josef-Grünbeck-Str. 1  
89420 Hoechstädt/Germany

Hoechstädt/Germany, 18/03/2021

ppa. Dietmar Ladenburger  
Technical Director  
Member of the Executive Board

# Notes

## **Publisher's information**

### **Technical documentation**

Should you have any questions or suggestions regarding this operation manual, please contact Grünbeck Wasseraufbereitung GmbH's Department for Technical Documentation directly.

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