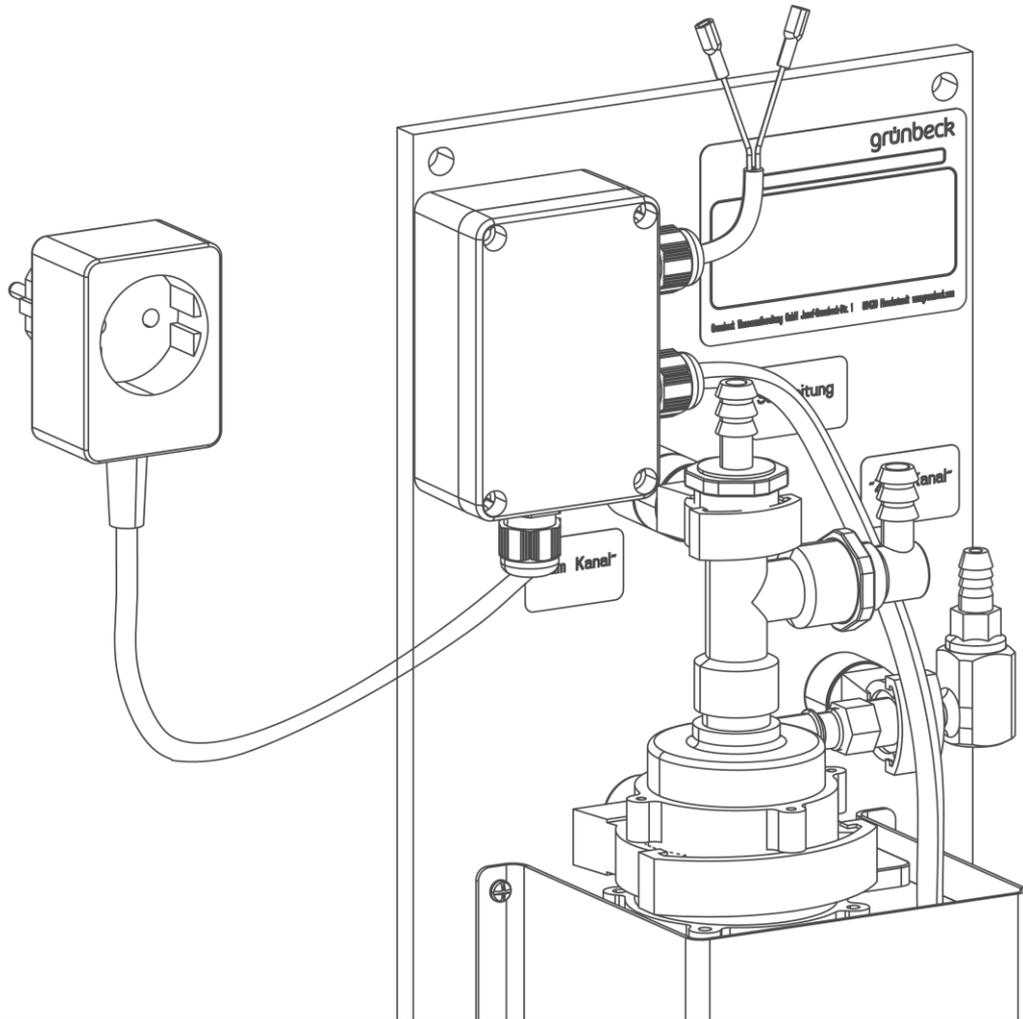


We understand water.



Accessories | Delivery pump for regeneration water

Operation manual

grünbeck

**General Contact**  
Germany

**Sales**  
Phone +49 9074 41-0

**Technical Service**  
Phone +49 9074 41-333  
Fax +49 9074 41-120

**Availability**  
Monday to Thursday  
7:00 am - 6:00 pm

Friday  
7:00 am - 4:00 pm

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# 1 About this manual

## 1.1 Other applicable documents

The following documents shall be deemed as applicable documents for the delivery pump for regeneration water:

- The operation manual of the water softener used.

## 1.2 Target group

The target group of this manual is Grünbeck's technical service/authorised service company or qualified specialists trained by Grünbeck.

## 1.3 Storage of documents

Keep this manual and all other applicable documents, so that they are available when needed.

## 1.4 Symbols used



This symbol identifies information and instructions that you must comply with for your own personal safety as well as to avoid damage to property.

---



This symbol identifies instructions that you must comply with in order to avoid damage to property.

---



This symbol identifies important information about the product or its handling.

---



This symbol identifies work that may only be carried out by a qualified specialist. In Germany, the installation company must be registered in an installation directory of a water supply company acc. to §12(2) AVB Wasser V (German Ordinance on General Conditions for the Supply of Water).

---



This symbol identifies work that may only be performed by Grünbeck's technical service/authorised service company or by qualified specialists trained by Grünbeck.

---



This symbol identifies work that may only be carried out by qualified electronics experts according to the VDE guidelines or according to the guidelines of similar local institutions.

---

## 1.5 Typographical conventions

The following typographical conventions are used in this manual:

Description	Presentation
Single-step instructions or instructions where the sequence of the actions is unimportant	▶ Action
Multi-step instructions where the sequence of the actions must be observed	<ol style="list-style-type: none"> <li>1. First action               <ol style="list-style-type: none"> <li>a First step</li> <li>b Second step</li> </ol> </li> <li>2. Second action</li> </ol>
Result of an instruction	» Result
Lists	<ul style="list-style-type: none"> <li>• Listed item               <ul style="list-style-type: none"> <li>• Listed subitem</li> </ul> </li> </ul>
Menu paths	Status level>Menu level>Submenu
Display texts	Display text
Operating elements	Button/key

## 1.6 Validity of the manual

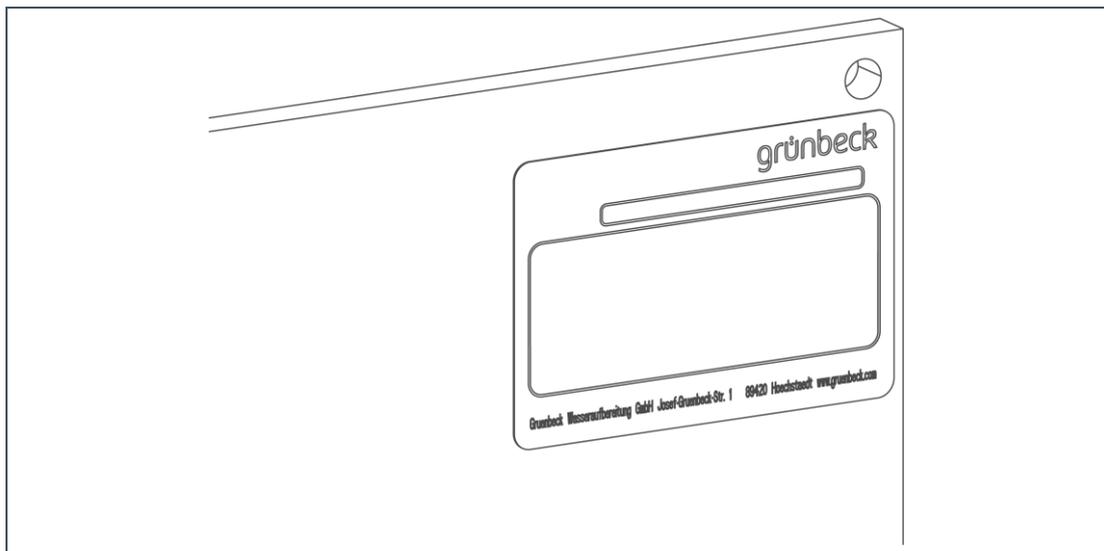
This manual applies to the following products:

- Delivery pump for regeneration water for softliQ, safeliQ, Weichwassermeister GSX, WINNI-mat VGX

## 1.7 Type plate

The type plate is located at the upper right of the mounting plate.

Please specify the data shown on the type plate in order to speed up the processing of your inquiries or orders. Therefore, enter the necessary information in the table below to have it readily available whenever necessary.



- Product designation: Delivery pump for regeneration water
- Order no.: 188 800
- Serial no.: \_\_\_\_\_

## 2 Safety



**WARNING:** Contamination of drinking water due to improper handling.

- Risk of infectious diseases.
- ▶ Have the installation, start-up and annual maintenance carried out by qualified specialists only.

### 2.1 Safety measures

- Carefully read this manual before operating your product.
- Install the product in a frost-free room. Otherwise, the system may suffer irreparable damage. Water damage may occur as a result.
- Only use genuine spare parts for maintenance or repair. If unsuitable spare parts are used, the warranty for your product will be void.
- Do not use any products which have a damaged mains cable. This can lead to injuries due to electric shock. Have damaged mains cables replaced without delay.
- Only have persons working on your system that have read and understood the present manual and that are qualified to do such work due to their vocational training.
- Only operate the product if all components are installed properly.
- Safety equipment must never be removed, bridged or otherwise tampered with.

### 2.2 Technical safety instructions

This manual contains information and instructions that you must comply with for your own personal safety as well as to avoid damage to property. The information and instructions are highlighted by a warning triangle and have the following structure:



**CAUTION:** Type and source of danger.

- Possible consequences
- ▶ Preventive measures

The following signal words were defined subject to the degree of danger and may be used in the present document:

- **DANGER** means that serious or fatal injuries will occur.
- **WARNING** means that serious or fatal injuries may occur.
- **CAUTION** means that minor injuries may occur.

- **NOTE** (without a warning triangle) means that damage to property may occur.

## 2.3 Regulations

When installing and starting up the system, amongst others, comply with the following regulations and guidelines:

- Statutory regulations on environmental protection
- Provisions of the employers' liability insurance companies
- DIN EN 806 Specifications for installations inside buildings conveying water for human consumption
- VDI 6023 parts 5 - 7

## 2.4 Responsibilities of the qualified specialist and/or the specialist company

Comply with the following instructions to ensure the proper and safe functioning of the product:

- Only perform activities described in this manual.
- Perform all activities in accordance with all applicable standards and regulations.
- Brief the owner/user on the function and operation of the product.
- Advise the owner/user of the maintenance of the product.
- Inform the owner/user about possible dangers that can arise during the operation of the product.

## 2.5 Responsibilities of the owner/user

Comply with the following instructions to ensure the proper and safe functioning of the product:

- Only entrust qualified experts such as qualified specialists or specialist companies with installation, start-up and maintenance.
- Have the product explained to you by the qualified specialist.
- Only perform activities described in this manual.
- Do not carry out any activities that are explicitly designated for a qualified specialist.
- Only use this product as intended.
- Make sure that the required inspection and maintenance work is carried out.
- Keep this manual.

## 3 Product description

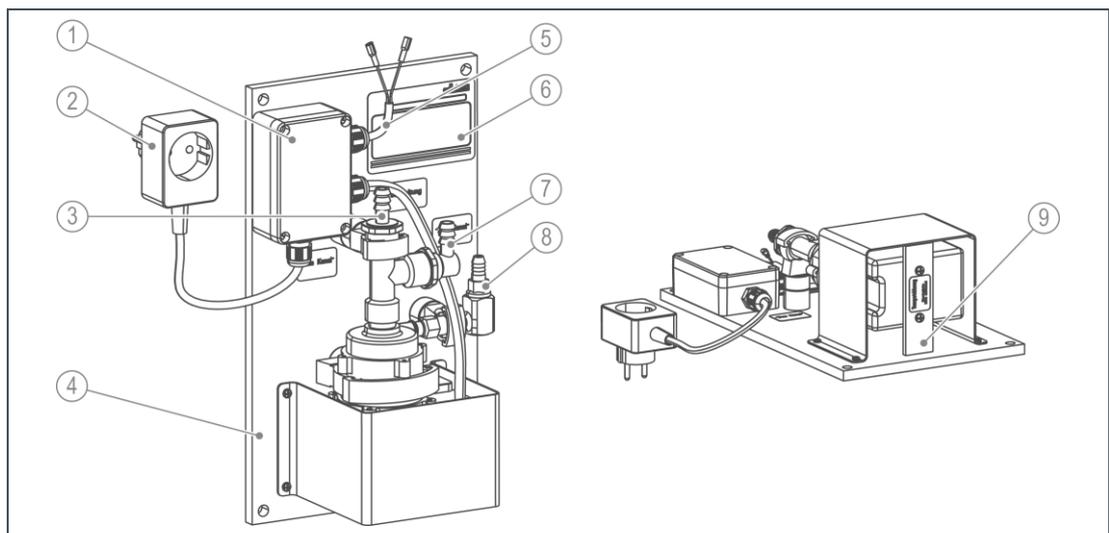
### 3.1 Intended use

The delivery pump for regeneration water is used to drain regeneration water in case of drain heights of up to 2.5 m above the control valve.

It can be used with the following systems:

- softliQ:SC/MC all sizes
- softliQ:SD23
- softliQ:MD all sizes
- softliQ:PA20
- safeliQ:EA30
- softliQ:PB20
- safeliQ:EB30
- Weichwassermeister GSX
- WINNI-mat VGX

### 3.2 Product components

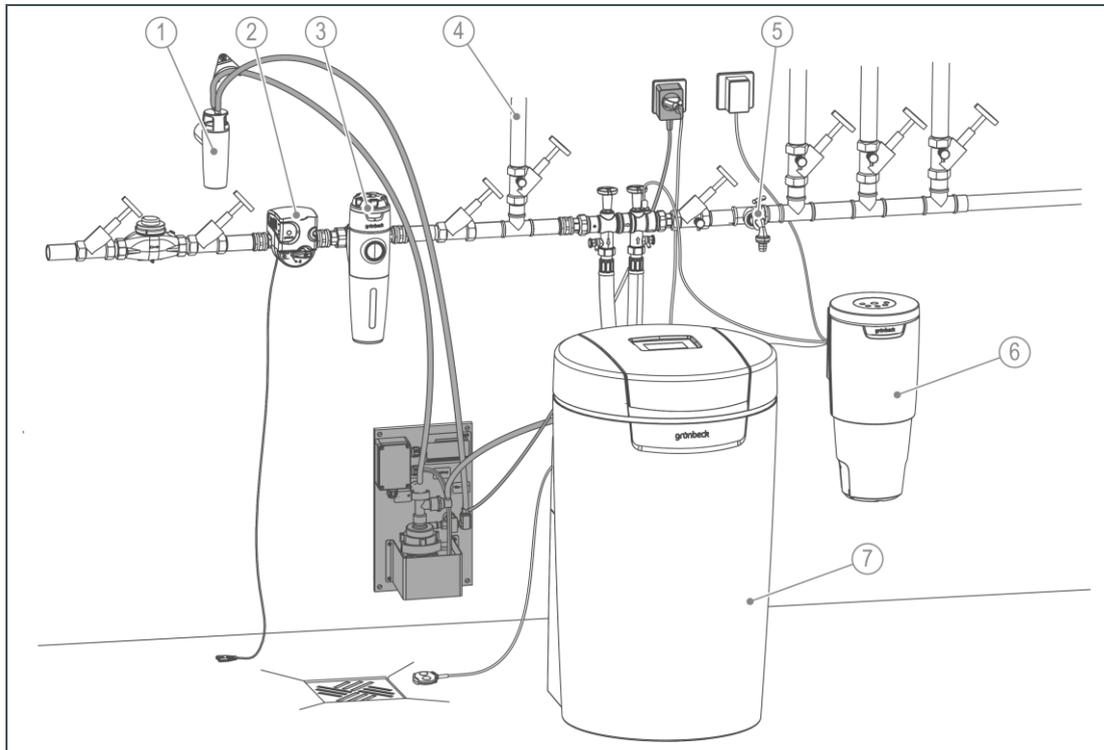


Item	Designation	Item	Designation
1	Junction box	2	Mains adaptor plug
3	Ventilation line	4	Fastening plate
5	Connection line	6	Type plate
7	Connection of suction line (to the system)	8	Connection of pressure line
9	Transport lock		

### 3.3 Functional description

Once the regeneration is initiated, the delivery pump for regeneration water is powered via the control unit of the water softener (voltage-free contact) and pumps the regeneration water into the drain located at a higher level.

## 4 Installation

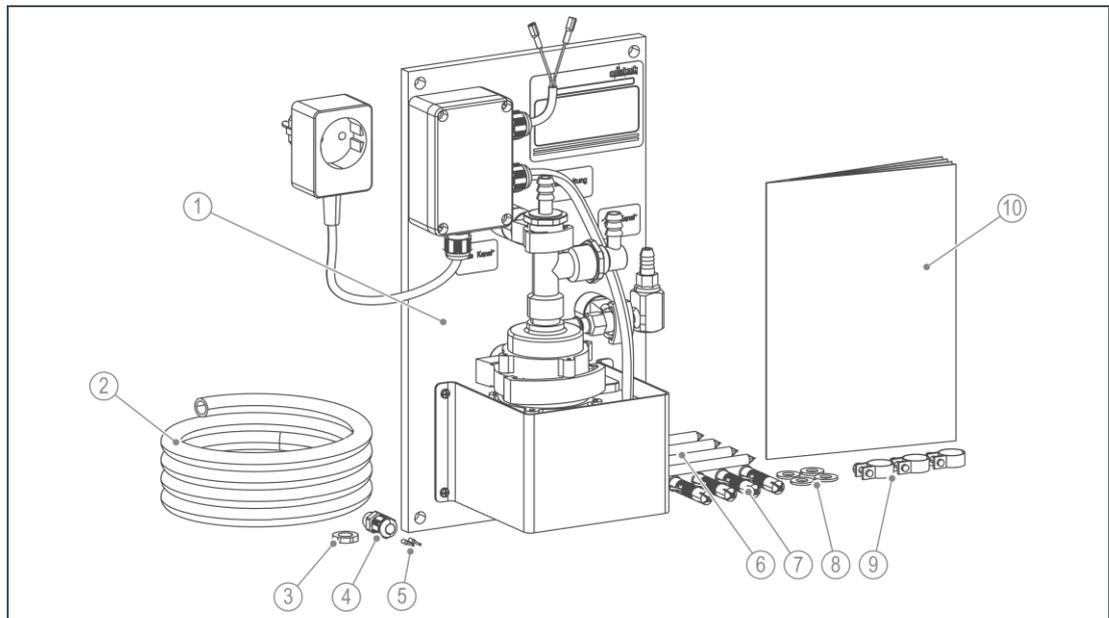


Item	Designation	Item	Designation
1	Drain connection DN 50 acc. to DIN EN 1717	2	protectliQ safety device
3	Drinking water filter pureliQ	4	Garden water pipe
5	Water withdrawal point	6	Dosing system exaliQ
7	Water softener softliQ		

### 4.1 Requirements in relation to the installation site

Observe local installation directives, general guidelines and technical specifications. The installation site must be frost-proof and ensure the system's protection from chemicals, dyes, solvents and vapours.

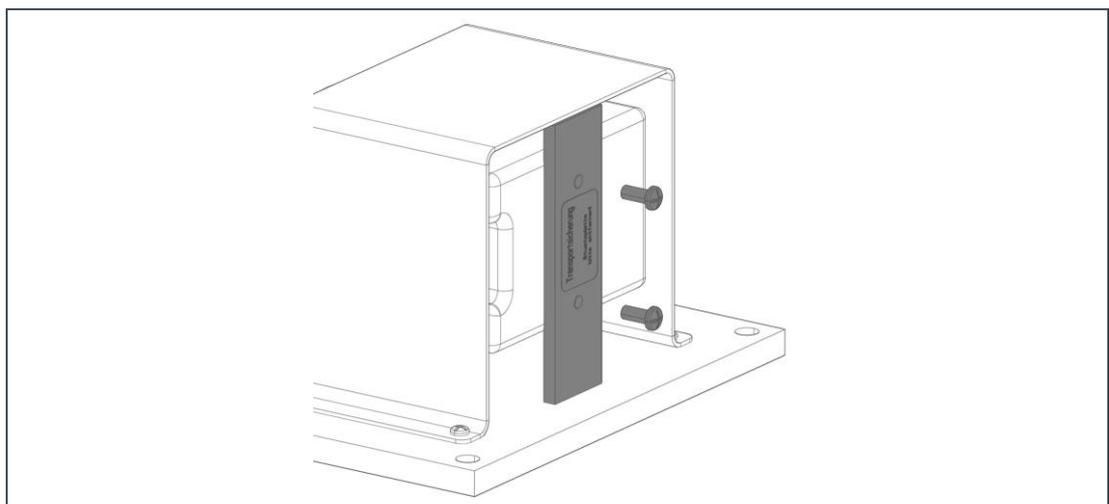
## 4.2 Checking the scope of supply



Item	Designation	Item	Designation
1	Delivery pump for regeneration water	2	Hose
3	Union nut	4	Cable screw connection
5	Wire end ferrule	6	Screw
7	Dowel	8	Washer
9	Hose clip	10	Operation manual

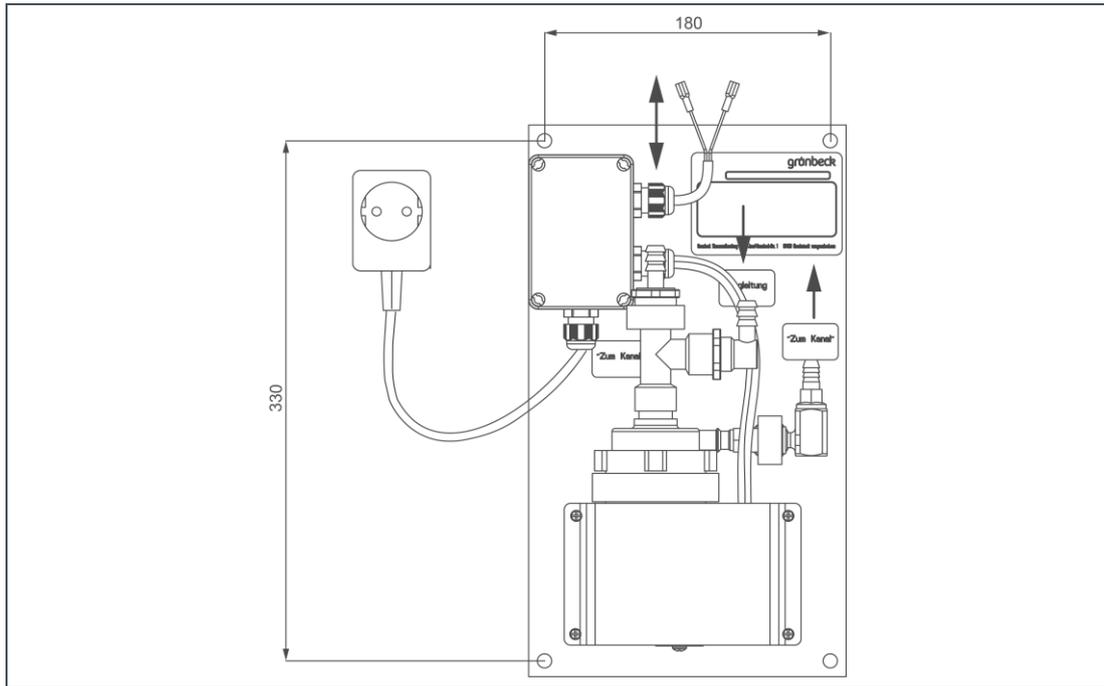
## 4.3 Preliminary work

### 4.3.1 How to remove the transport lock

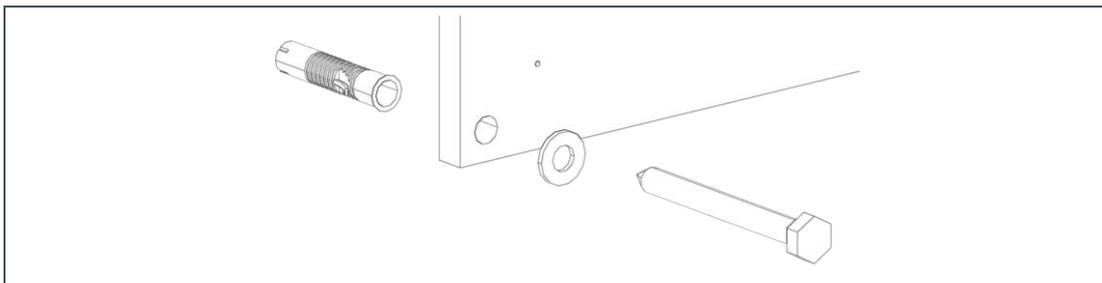


1. Unscrew the 2 screws at the bottom of the delivery pump for regeneration water.
2. Remove the transport lock.

## 4.4 Wall mounting



The delivery pump for regeneration water can be mounted to a wall using the screws included in the scope of supply. Use different mounting material, if necessary, depending on the wall. Install the delivery pump for regeneration water in such a way that the flushing water hose of the water softener can be laid with a downward slope to the suction side of the delivery pump for regeneration water.



## 4.5 How to install the product

### 4.5.1 Water connection

1. Shorten the flushing water hose (outside diameter 12 mm) of the system to the required length (between system and delivery pump for regeneration water).
2. Mount the flushing water hose onto the connection nozzle of the suction hose (refer to chapter 1.1, item 7).
3. Fasten the flushing water hose by means of a hose clip.
4. Fasten the 2 hoses of the delivery pump for regeneration water to the connection nozzles of the pressure lines (refer to chapter 1.1, items 3 and 8).
5. Direct the hoses from the delivery pump for regeneration water to the drain connection.
6. Shorten the 2 hoses of the delivery pump for regeneration water to the required length.
7. Fasten the hoses with the retaining clip of the drain connection.
8. Plug the hoses onto the drain connection.

#### Without Grünbeck drain connection

9. Fasten the hoses as per DIN EN 1717 (free outlet).
10. Direct the hose of the brine tank overflow (outside diameter 16 mm) with a downward slope into a vessel.

### 4.5.2 Electrical connection (system and delivery pump for regeneration water)



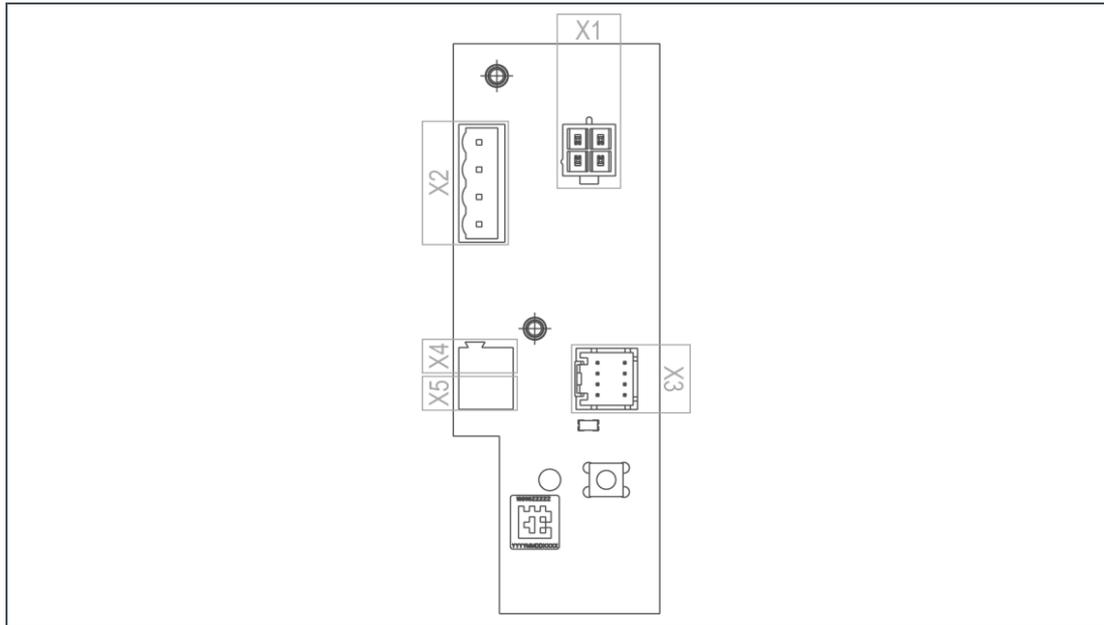
These tasks may only be performed by trained electronics experts according to the VDE guidelines or according to the guidelines of a similar local institution.



Do not plug the mains adapter plug on the mains cable of the delivery pump for regeneration water into a socket until the connecting cable to the water softener has been connected there.

#### softliQ:SD23, softliQ:MD, softliQ:PB, safeliQ:EB

1. Open the hinged lid at the rear of the brine tank.



Terminal	Function	Colour	Signal	Remarks
X1	Connection to softliQ circuit board, X1	Refer to main circuit board	-	-
X2	Fault signal contact, programmable output Max. load rating each 250 VAC/1A	-	1 (top)	Fault signal contact
		-	2	-
		-	3	programmable output
		-	4 (below)	-
X3	none	-	-	Not used
X4	none	-	-	Not used

2. Unscrew the two screws at the upper part of the housing of the technical equipment.
3. Remove the upper part of the housing of the technical equipment
4. Pull the mains plug.
5. Open the two fastening screws at the touch guard (dart of lightning sticker).
6. Thread the pump's connection line from the bottom through the rectangular hole towards the power add-on board.
7. Connect the two stranded wires of the pump's connection cable to the lower two clips of the green, 4-pin connector. Labelling on the power add-on board = "prog. output x2"
8. In order to relieve the strain on the cable, hook the pump's connection cable into one of the cable strain reliefs.
9. Remount the touch guard and close the hinged lid.

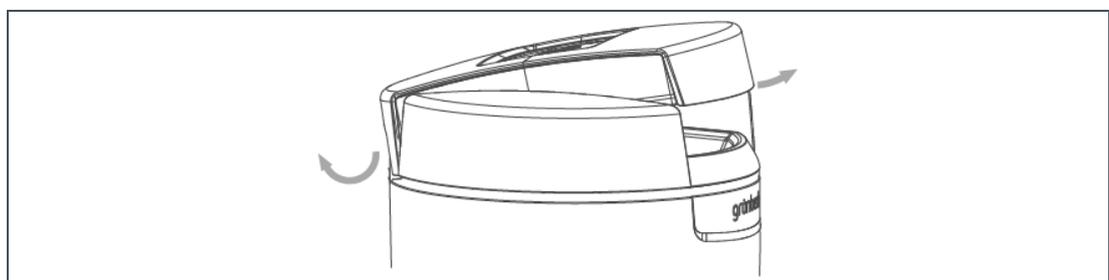
10. Plug on the housing of the technical equipment and fasten the screws.
11. Plug in the mains adapter plug of the delivery pump for regeneration water together with the mains plug of the system.

**softliQ:SC, softliQ:MC, softliQ:PA, safeliQ:EA**

1. Pull the mains plug of the system.
2. Unscrew both the screws at the side of the upper part of the housing for the technical equipment.
3. Remove the upper part of the housing of the technical equipment.
4. Open the lid of the brine tank.
5. Loosen the 4 screws (softliQ:SC) or 6 screws (softliQ:MC, softliQ:PA, safeliQ:EA) on the bottom part of the lid.



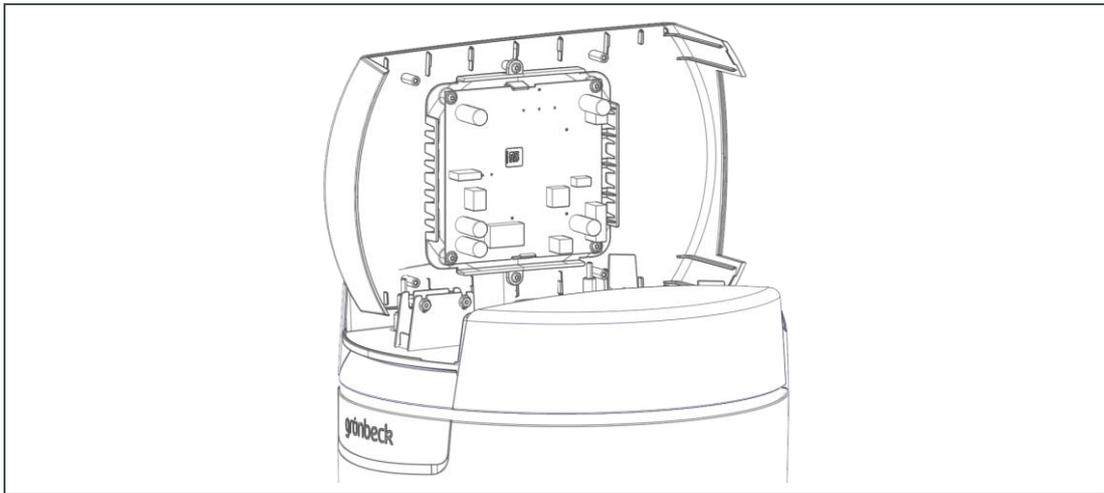
6. Release the snap between the upper and lower part of the lid. (2 x at the rear of the housing, 2 x at the front of the housing).



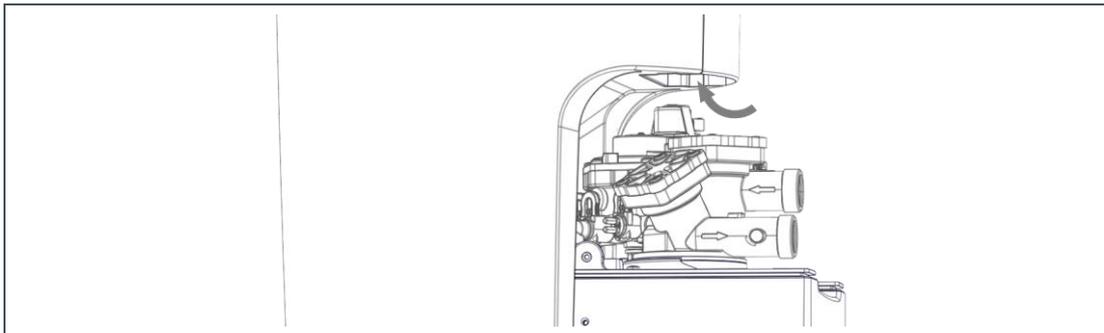
7. Plug the upper part including the electronics onto the lower part.



We recommend putting a soft cloth or similar in between.



- 8. Direct the pump's connection line from the bottom into the cable duct of the softliQ system.

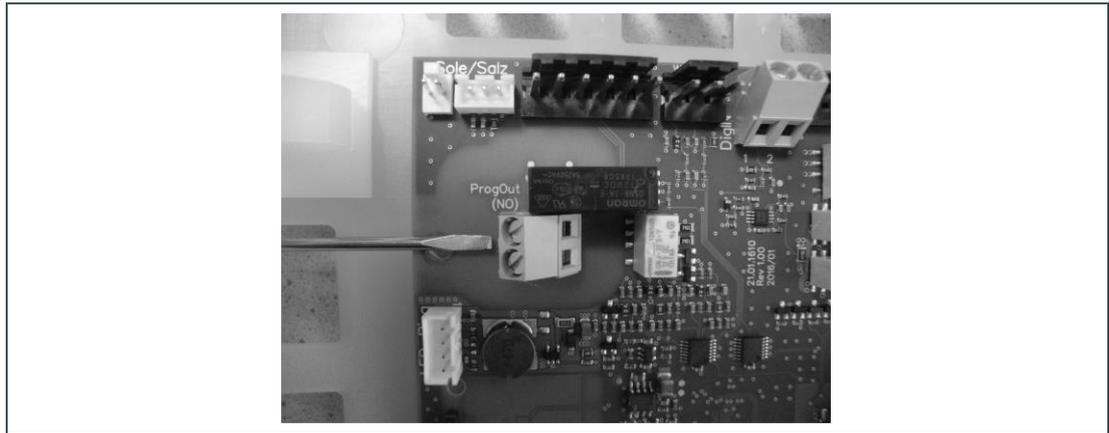


- 9. Relieve the strain (via strain relief bar).
- 10. Make the wiring as indicated in the following illustration.

**softliQ:SC**



**softliQ:MC, softliQ:PA, safeliQ:EA**



11. Connect the strands of the wire end ferrules to the screw-type terminals of the voltage-free fault signal. (If required, the entire lid entity can be removed.)
12. Re-insert the electronics into the housing.
13. Reinstall all covers.
14. Plug in the mains adaptor plug of the delivery pump for regeneration water together with the mains plug of the system.

**Weichwassermeister GSX 10-I**

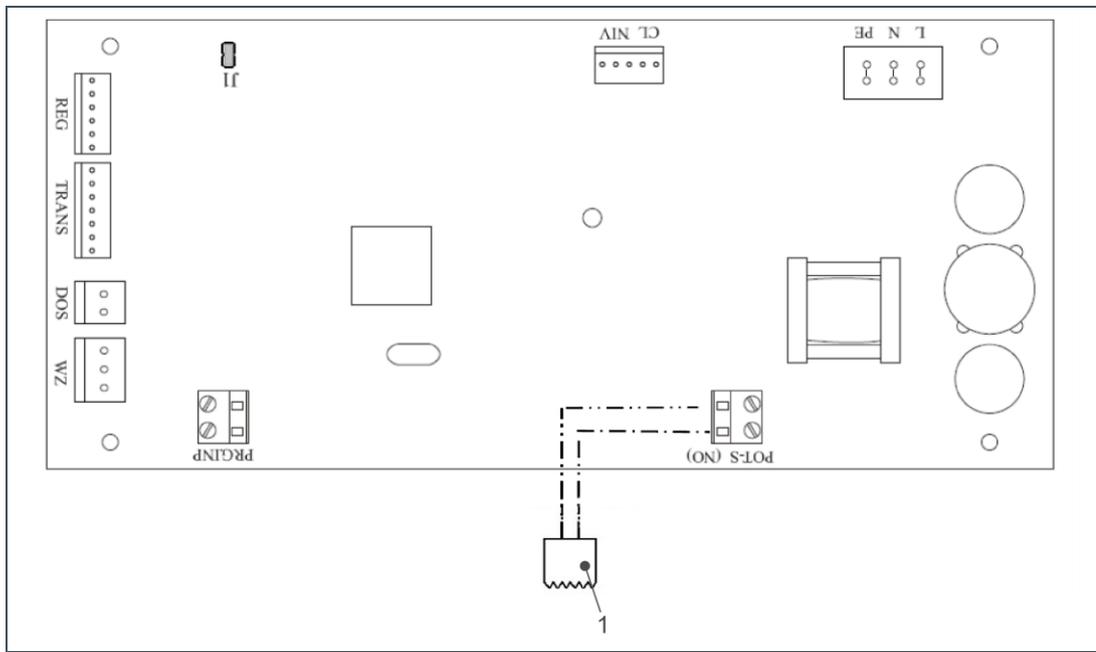
A 2-wire cable is already connected to the Weichwassermeister GSX 10-I's corresponding POT-S(NO) contact at the factory.

1. Pull the mains plug of the water softener.
2. Remove the cover of the junction box at delivery pump for regeneration water.
3. Disconnect the pump's connection line.
4. Connect the designated line of the water softener.
5. Reinstall the cover of the junction box.

**Weichwassermeister GSX 5/10**

1. Pull the mains plug of the water softener.
2. Remove the transparent cover.
3. Unscrew the 4 screws of the cover of the electronics.
4. Remove the cover of the electronics.
5. Break out an embossed bore.
6. Loosen the 2 torx screws connecting the electronics housing and the brine tank funnel.
7. Remove the electronics housing.
8. Mount the cable screw connection.

9. Direct the pump's connection line into the bottle tank from the rear through the opening provided there.
10. Pull the connection line of the delivery pump for regeneration water from the rear through the new cable bushing.
11. Make the wiring as indicated in the following illustrations.
12. Connect the wire end ferrules to the screw-type terminals.



Item	Designation
1	Connecting line to the delivery pump for regeneration water

13. Re-insert the electronics into the housing.
14. Reinstall all covers.
15. Plug in the mains adaptor plug of the delivery pump for regeneration water together with the mains plug of the water softener.

#### WINNI-mat VGX-N 9, 14, 19

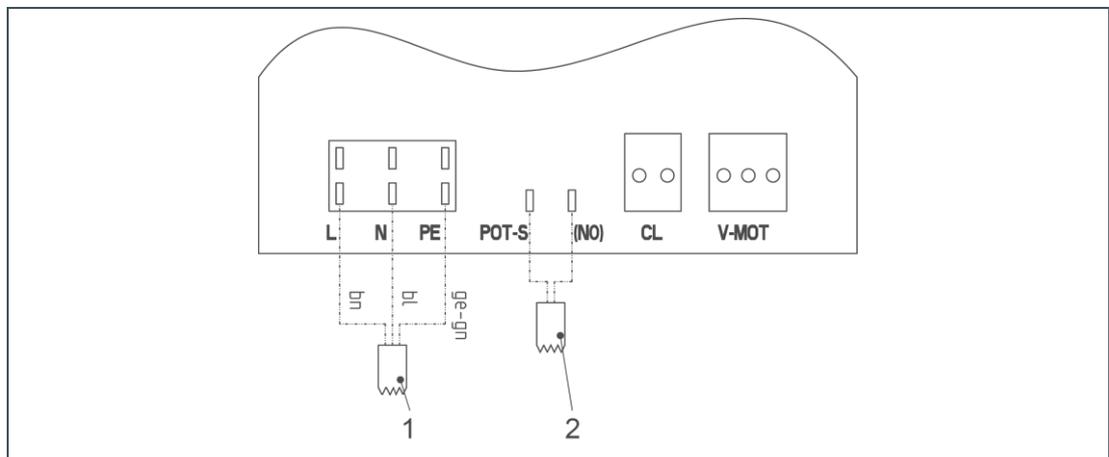
1. Pull the mains plug of the water softener.
2. Unscrew the 4 screws at the black lid of the housing.
3. Remove the black lid of the housing.
4. Unscrew the 4 screws of the cover of the electronics.
5. Remove the cover of the electronics.
6. Use a small screwdriver or similar to slide the retaining ring off the plastic mandrel.



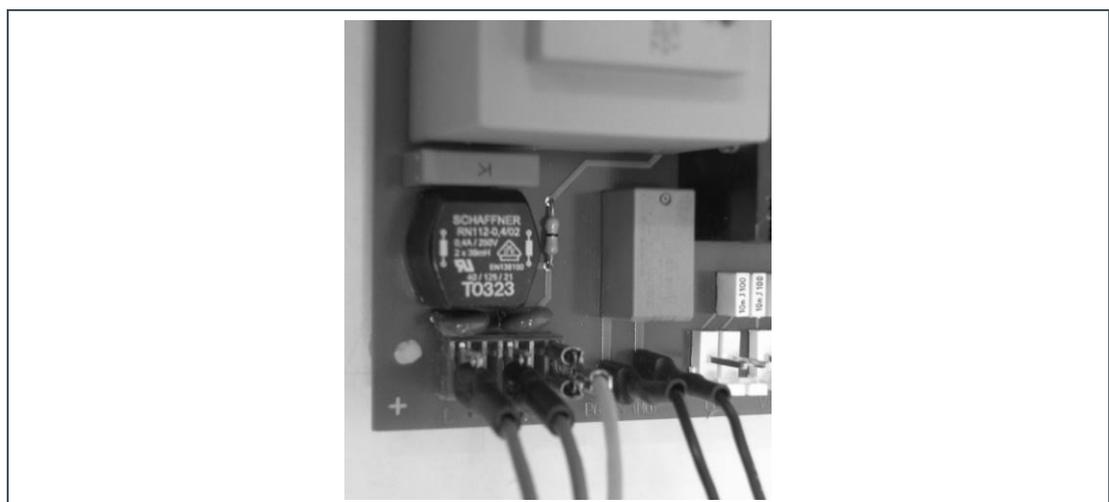
Note: Risk of malfunctions of the water softener.

- Malfunctions due to defective circuit boards may occur.
- ▶ Make sure not to damage the circuit board.

7. Unplug all connection lines.
8. Put the electronics aside.
9. Drill a hole with a  $\varnothing$  of 12 mm above the cable bushing of the mains cable.
10. Mount the cable bushing for the connection line of the pump.
11. Pull the connection line of the delivery pump for regeneration water from the rear through the new cable bushing.
12. Loosen the cable bushing of the electronics' mains cable from the rear.
13. Make the wiring as indicated in the following illustrations.
14. Instead of the wire end ferrules, mount the attached blade receptacles to the two stranded wires of the pump's connection line.
15. Plug the two blade receptacles of the pump's connection line onto the two flat pins POT-S (NO). (No matter in what order.)



Item	Designation	Item	Designation
1	Mains cable	2	Connecting line to the delivery pump for regeneration water



16. Connect the connection lines to the electronics once again.

17. Re-insert the electronics into the housing.
18. Tighten the cable bushing of the mains cable and the connection cable of the pump.
19. Carefully fasten the electronics retaining ring at the plastic mandrel.
20. Reinstall all covers and tighten them, if necessary.
21. Plug in the mains adaptor plug of the delivery pump for regeneration water together with the mains plug of the water softener.
22. Plug in the mains adaptor plug of the delivery pump for regeneration water together with the mains plug of the water softener.

## 5 Start-up

### 5.1 How to update the software

This step is only required for the following water softeners:

- WINNI-mat VGX

The following software versions are required for controlling the delivery pump for regeneration water:

Water Softener	Software version
WINNI-mat VGX	V1.43

#### 5.1.1 How to check the software version (not required for softliQ:SD23 and softliQ:MD)

Requirement: The display indicates the time (basic display).

1. Press the keys **P** and **▼** at the same time.
  - » 000 is flashing in the display and you have reached the Code level.
2. Enter the code 999 with **▼** and **▲**.
3. Press **P**.
  - » The software version is being indicated.
4. Press **▼** and **▲**.
  - » You have quit the Code level.

### 5.2 How to activate the control unit

#### 5.2.1 softliQ:SD23 and softliQ:MD, softliQ:PB and safeliQ:EB



The system is already preset to “delivery pump for regeneration water” upon delivery.

1. Basic display (rev meter).
2. Press 3 x **▶**.
3. Press
4. Enter the code 005 and confirm with **✓**.
5. Press **▶** repeatedly until the „function programmable output” is displayed. Press this text.

6. Press the selection indicated in the middle of the display, select „Delivery pump for reg. water“ by means of the arrow keys  or  and confirm with .

## 5.2.2 softliQ:SC



The system is already preset to “delivery pump for regeneration water” upon delivery.

Status level>Menu level>Technical service

1. Press .
2. Enter the code **113** with  and .
3. Confirm with .
4. Select the function “voltage-free contact” (factory setting).
5. Confirm with .
6. Select **delivery pump for regeneration water**.
7. Confirm with .

## 5.2.3 softliQ:MC, softliQ:PA, safeliQ:EA



The system is already preset to “delivery pump for regeneration water” upon delivery.

Status level>Menu level>Technical service

1. Press .
2. Enter the code **005** with  and .
3. Confirm with .
4. Select the **function voltage-free contact**.
5. Confirm with .
6. Select **delivery pump for regeneration water** (factory setting).
7. Confirm with .

## 5.2.4 Weichwassermeister GSX 5/10

Requirement: The display indicates the time (basic display).

1. Press the keys  and  at the same time.
  - » **000** is flashing in the display and you have reached the Code level.
2. Enter the code **113** with  and .

3. Press **P**.
4. Switch from **programmable output** to **delivery pump for regeneration water**.

### 5.2.5 WINNI-mat VGX

Requirement: The display indicates the time (basic display).

1. Press the keys **P** and **▼** at the same time.
  - » **000** is flashing in the display and you have reached the Code level.
2. Enter the code 909 with **▼** and **▲**.
3. Press **P**.
  - » The display indicates **E0 0**.
4. Press **▲** repeatedly until **SA 0** appears in the display.
5. Press **P**.
  - » **SA 0** starts flashing.
6. Press **▲** repeatedly until **SA 2** appears in the display (flashing).
7. Press **P**.
  - » **SA 2** is no longer flashing.
8. Press **▼** and **▲**.
  - » You have quit the Code level.

## 5.3 Functional test

5.3.1 softliQ:SC, softliQ:MC, softliQ:PA, safeliQ:EA, softliQ:SD23, softliQ:MD, softliQ:PB, safeliQ:EB

Figure	Explanation
	<b>Manual regeneration</b> In this menu, you can start a regeneration manually.

Status level>Menu level>Manual regeneration

- ▶ Press **ENTER** or the symbol (hand with arrow).  
For softliQ:SD23, softliQ:MD, softliQ:PB and safeliQ:EB press the indicated button for more than 2 seconds.  
For softliQ:SC, softliQ:MC, softliQ:PA and safeliQ:EA press both arrow keys for more than 2 seconds.
- » A manual regeneration is started.



In the 2. regeneration step “salting”, the delivery pump for regeneration water starts running.

At the end of the 5. regeneration step “washing out”, the delivery pump for regeneration water is switched off again.

In `Status level>Information>Information 1`, the regeneration is illustrated graphically.

---

### 5.3.2 Weichwassermeister GSX 5/10

▶ Press and hold  for more than 5 seconds.

» A manual regeneration is started.



The delivery pump for regeneration water starts running after approx. 5 seconds. The delivery pump for regeneration water is switched off again after approx. 20 minutes.

---

### 5.3.3 WINNI-mat VGX

▶ Press and hold  for more than 10 seconds.

» A manual regeneration is started.



The delivery pump for regeneration water starts running when the first arrow of the regeneration cycle appears on the display. The delivery pump for regeneration water is switched off again when all arrows of the regeneration cycle are shown on the display.

---

## 5.4 Handing over the product and the operation manual to the owner/user

▶ Enter the delivery pump for regeneration water into the operation log.

## 6 Disposal

- ▶ Comply with the applicable national regulations.

### 6.1 Packaging

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

### 6.2 Product



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

- ▶ Learn 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.



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

---

## 7 Technical specifications

Dimensions and weight		
Dimensions	mm	350 x 170
Empty weight	kg	3.3

Connection data		
Nominal connection diameter (hose) on pressure side	mm	10
Nominal connection diameter (hose) on suction side	mm	10
Max. power input	VA	60
Power supply	V/Hz	230/50
Protection/protection class		IP 54/⊕

Performance data		
Max. delivery head	m	2.5
Max. delivery rate	m <sup>3</sup> /h	0.43

General data		
Max. water temperature	°C	30
Max. ambient temperature	°C	40
<b>Order no.</b>		<b>188 800</b>



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

 +49 9074 41-0

 +49 9074 41-100

[info@gruenbeck.com](mailto:info@gruenbeck.com)  
[www.gruenbeck.com](http://www.gruenbeck.com)



For more information go  
to [www.gruenbeck.com](http://www.gruenbeck.com)