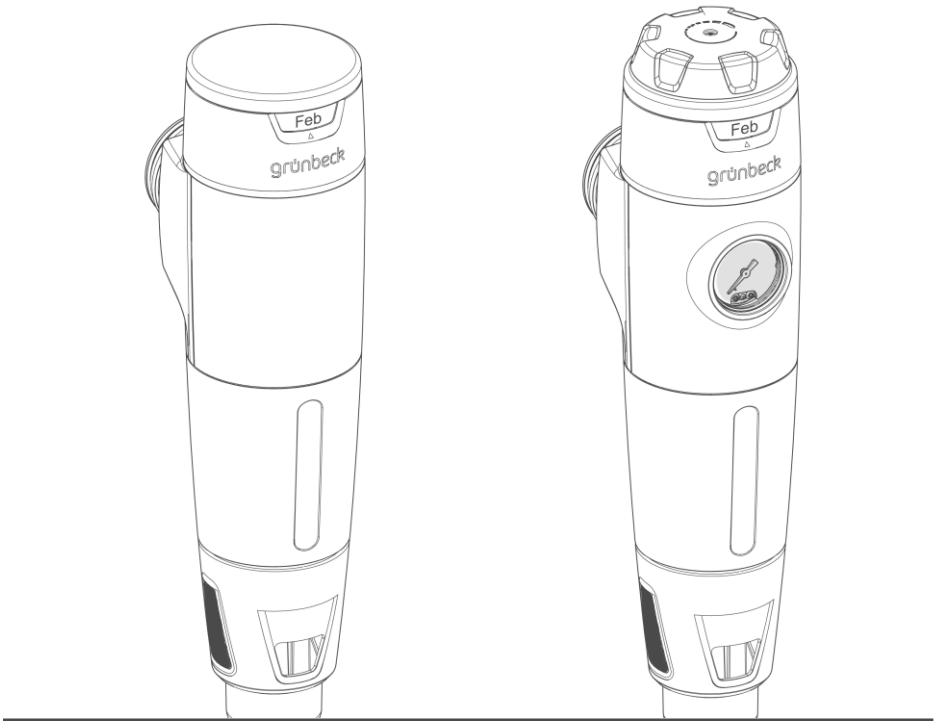


We understand water.



 cliQlock

Backwash filter | pureliQ:RX, pureliQ:RDX

Operation manual




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Availability

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

Friday
7:00 am – 4:00 pm

Subject to technical modifications.
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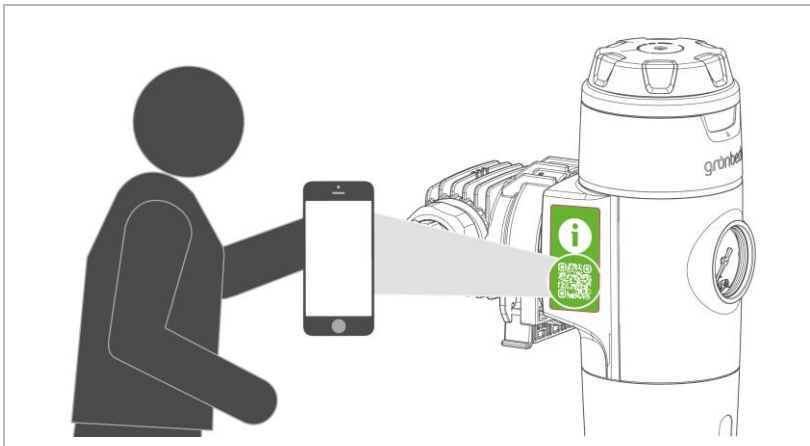
1 Introduction

This manual is intended for owners/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 component instructions contained therein before you operate your product.
- Comply with all safety information 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.

Retrieving information about the product



- ▶ Scan the QR code on the side of the product.
- » You will be redirected to the product page and can retrieve further information in the download area.

1.1 Validity of the manual

This manual applies to following products:

- Backwash filter pureliQ:RX (101000030000)
- Backwash filter pureliQ:RDX (101000040000)

1.2 Other applicable documents



In the interests of sustainability, we provide the product data sheet, checklists and these instructions on our homepage for you to download.

- Mounting instructions for the cliQlock basic module
- Product data sheet for the respective backwash filter
- Operation log with start-up report and maintenance checklists



You have the following options for accessing the applicable documents:

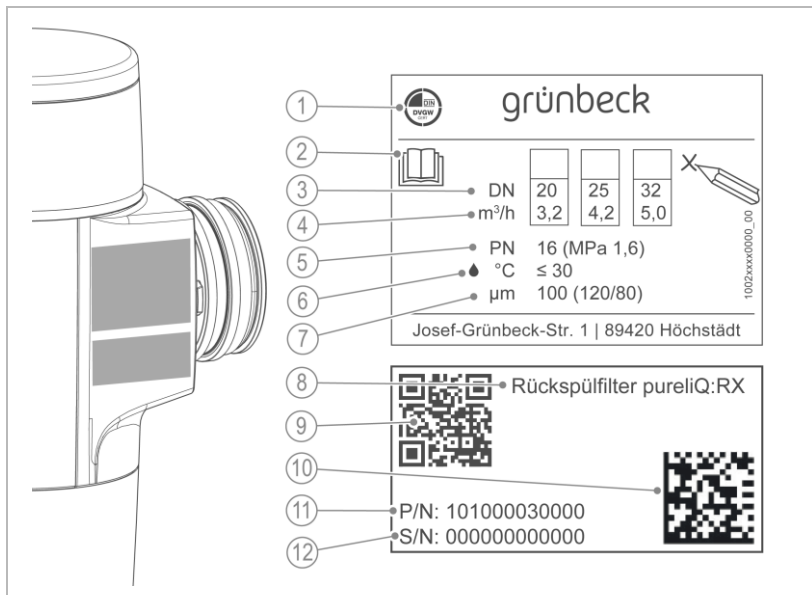
- Scan this QR code
- Use the link: qr.gruenbeck.de/044

1.3 Product identification

You can identify your product by means of the product designation and the order number on the type plate.

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









The type plate is located on the side of the filter.



| Designation | |
|-------------|-----------------------------|
| 1 | DVGW test mark |
| 2 | Obey the operation manual |
| 3 | Nominal connection diameter |
| 4 | Flow rate |
| 5 | Nominal pressure |
| 6 | Water temperature |

| Designation | |
|-------------|----------------------------------|
| 7 | Pore size |
| 8 | Product designation |
| 9 | QR Code for the operation manual |
| 10 | Data matrix code |
| 11 | Order no. |
| 12 | Serial no. |

1.4 Symbols used

| Symbol | Meaning |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------|
|  | Danger and risk |
|  | Important information or prerequisite |
|  | Useful information or tip |
|  | Written documentation required |
|  | Reference to further documents |
|  | Work that may only be carried out by qualified specialists |
|  | Work that must be carried out by qualified electricians only |
|  | Work that is only allowed to be carried out by technical service personnel |

1.5 Depiction of warnings




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



SIGNAL WORD Type and source of the hazard

- Possible consequences
- ▶ Preventive measures

The following signal words are defined depending on the degree of danger and might be used in this document:

| Warning symbol and signal word | Consequences when disregarding the information/instructions | |
|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------------------------------------------------------------|
|  DANGER | | Death or serious injuries |
|  WARNING | Personal injury | Possible death or serious injuries |
|  CAUTION | | Possible moderate or minor injuries |
| NOTE | Damage to property | Possible damage to components, the product and/or its functions, or anything in its vicinity |

1.6 Requirements for personnel

During the individual life cycle phases of the product, different people carry out work tasks on the product. The work require different qualifications.

1.6.1 Qualification of personnel

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

1.6.2 Authorisations of personnel

The following table describes which activities are allowed to be performed by whom.

| | User | Owner/ operating company | Qualified specialist | Technical service |
|---------------------------|------|--------------------------------|-------------------------|----------------------|
| Transport and storage | | X | X | X |
| Installation and mounting | | | X | X |
| Start-up | | | X | X |
| Operation and handling | X | X | X | X |
| Cleaning | X | X | X | X |
| Inspection | X | X | X | X |
| Maintenance | | X | X | X |
| semi-annually | | | X | X |
| annually | | | X | X |
| Troubleshooting | | X | X | X |
| Repair | | | X | X |
| Shutdown and restart | | | X | X |
| Dismantling and disposal | | | X | X |

1.6.3 Personal protective equipment

You do not need any protective equipment to operate the product.

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 or extensions on your product.
- Only use genuine spare parts for maintenance or repair.
- Keep the premises locked to prevent unauthorised access and to protect endangered 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.
- Be aware of a possible risk of slipping due to leaking water on the floor.

2.1.1 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 pressure lines and the product for leaks at regular intervals.
- Before starting repair and maintenance work, make sure that all affected components are depressurised.

2.1.2 Group 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.
- Cleaning and maintenance must not be carried out by children.

2.2 Product-specific safety instructions



WARNING

Excessive contamination of the filter element

- Risk of infection due to contamination
- ▶ Comply with the intervals and recommendations for inspection and maintenance of the filter.

- ▶ Do not unlock the cliQlock module system under pressure. Ensure that the water supply is shut off before unlocking the cliQlock modular system.

2.3 Conduct in emergencies

2.3.1 In case of water leaks

1. Close the shut-off valves for the water flow upstream and downstream from the product.
2. Locate the leak.
3. Eliminate the cause of the water leak.

3 Product description

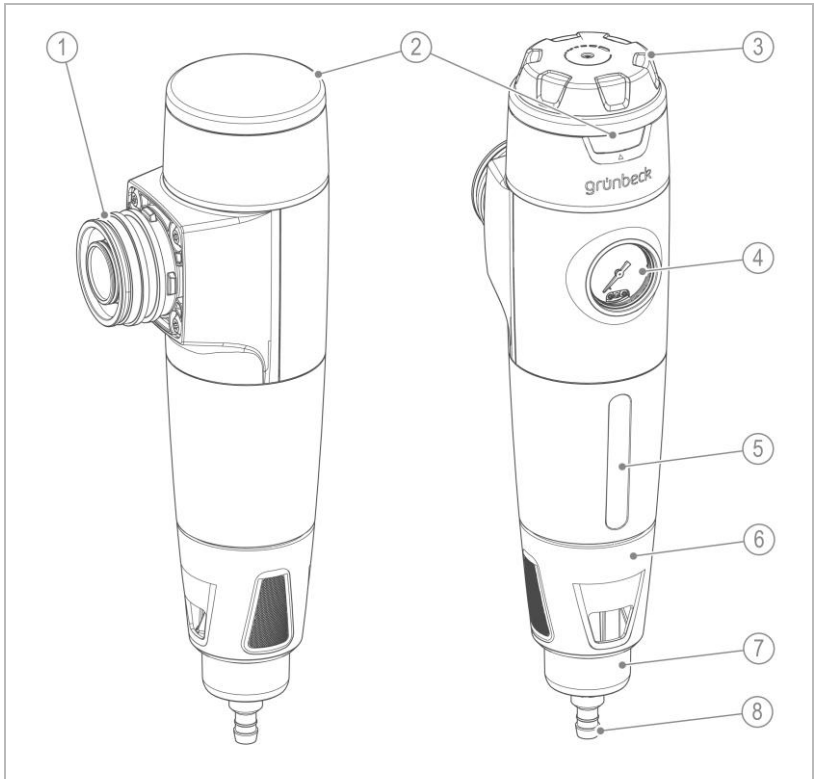
3.1 Intended use

- The backwash filters pureliQ:RX and pureliQ:RDX are designed for the filtration of drinking water.
- The backwash filter pureliQ:RDX with pressure reducer in addition is suitable for the adjustment of the outlet pressure on the withdrawal side in order to maintain the max. admissible operating pressure stipulated in DIN EN 806-2.
- The filters can be used for positive pressure and negative pressure applications. The backwash and the adjustment of the after-pressure on the withdrawal side, however, only works when applied in the positive pressure range.
- The filters are designed according to the stipulations of DIN EN 13443-1 and DIN 19628 and are intended for installation into the drinking water system according to DIN EN 806-2 (installation immediately downstream of the water meter).
- They protect the water pipes and connected water-carrying system parts from disturbances and corrosion damage due to undissolved impurities (particles) such as rust particles, sand, etc.
- The filters can only be used in combination with the cliQlock module system.

3.1.1 Foreseeable misuse

- The filters are not suitable for circulation water that is treated with chemicals.
- The filters are neither suitable for oils, greases, solvents, soaps and other lubricating media, nor for the separation of water-soluble substances.

3.2 Product components



Designation

- | | |
|---|--------------------------------------------|
| 1 | Slip-on coupling for cliQlock basic module |
| 2 | Maintenance ring with month indicator |
| 3 | Pressure reducer handwheel |
| 4 | Pressure gauge |

Designation

- | | |
|---|------------------------------|
| 5 | Inspection window |
| 6 | Backwash handwheel |
| 7 | Filter cylinder O-ring |
| 8 | Adapter for drain connection |

3.3 Functional description

The unfiltered drinking water flows into the filter through the inlet side and from the outside in through the filter element and to the pure water outlet. Thus, foreign particles of a size $> 100 \mu\text{m}$ are retained.

Depending on their size and weight, foreign particles stick to the filter element or they fall straight down into the filter cylinder.

By turning the backwash handwheel to the stop position, the drain is opened. The water flows through the primary screen to the filter element and then flows through the filter element in the reverse direction to normal filtration. Thanks to Grünbeck's innovative Vortex technology, particles sticking to the filter element are detached and washed out to the drain.

With the pureliQ:RDX backwash filter, the holding pressure on the withdrawal side can also be set to 1 - 6 bar using the pressure reducer (in accordance with DIN EN 1567).

4 Transport and storage

4.1 Transport

- ▶ Transport the product in its original packaging only.
- ▶ Obey the symbols and instructions on the packaging.

4.2 Storage

- ▶ When storing it, protect the product from the effects of the following:
 - Moisture, wetness
 - Environmental impacts such as wind, rain, snow, etc.
 - Frost, direct sunlight, severe heat exposure
 - Chemicals, dyes, solvents and their vapours

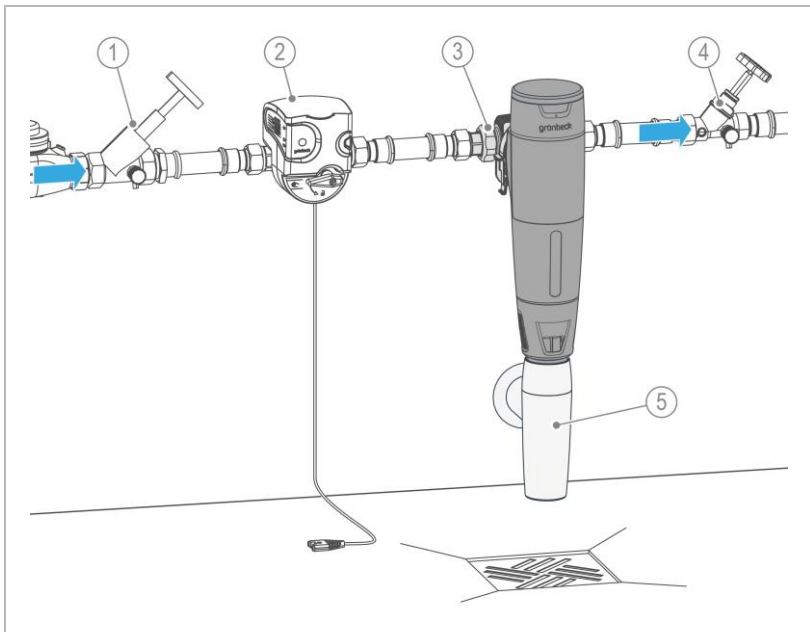
5 Installation



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

In accordance with DIN EN 806-2 and DIN EN 1717, the product is installed in the cold water pipe downstream of the water meter and upstream of distribution pipes and the appliances to be protected.

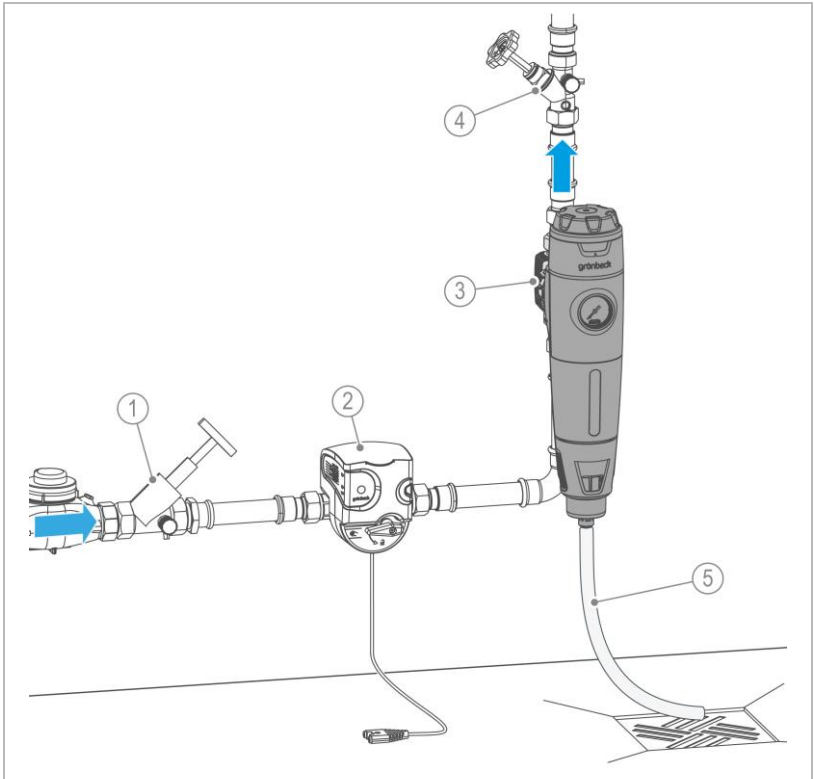
Installation example in horizontal pipe



| Designation | |
|-------------|--------------------------|
| 1 | Inlet shut-off valve |
| 2 | Safety device protectliQ |
| 3 | cliQlock basic module |

| Designation | |
|-------------|-------------------------------------------------------|
| 4 | Outlet shut-off valve |
| 5 | Drain connection DN 50 acc. to DIN EN 1717 (optional) |

Installation example in vertical pipe



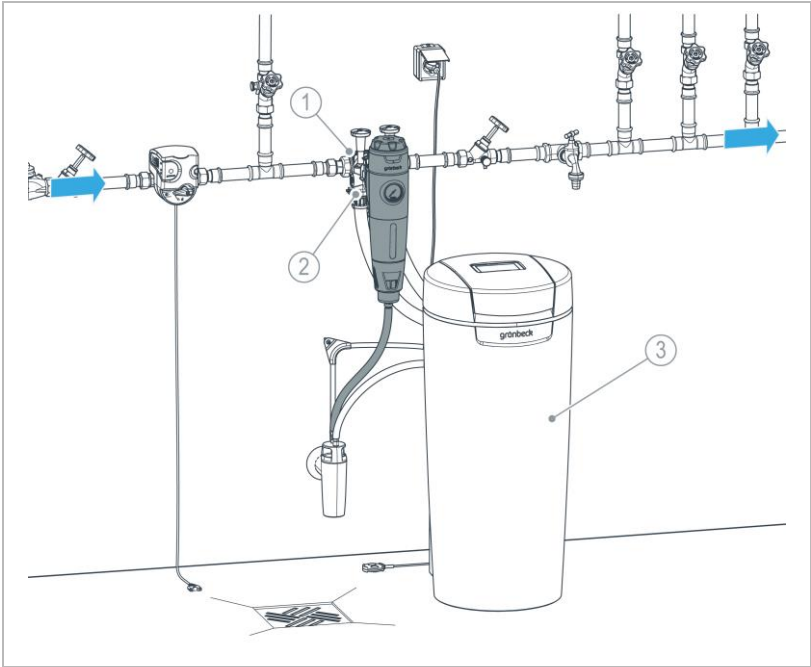
Designation

- 1 Inlet shut-off valve
- 2 Safety device protectliQ
- 3 cliQlock basic module

Designation

- 4 Outlet shut-off valve
- 5 On-site hose for hose adapter (optional)

Installation example in conjunction with softliQ:SE connection module



Designation

- 1 cliQlock basic module
- 2 softliQ:SE connection module

Designation

- 3 Water softener softliQ:SE

5.1 Requirements for the installation site

Obey the local installation directives, general guidelines and technical specifications.

- Protection from frost, severe heat exposure and direct sunlight
- Protection from chemicals, dyes, solvents and their vapours
- Ambient temperature and radiation temperature in the immediate vicinity
 - $\leq 25\text{ °C}$ for applications in the drinking water sector
 - $\leq 40\text{ °C}$ for purely technical applications
- Protection from heat sources (e.g. heating systems, boilers and hot water pipes)
- Access for maintenance work (take required space into consideration)
- Sufficiently illuminated as well as aerated and ventilated
- Pipe with sufficient load-bearing capacity to support the operating weight of the product

Required space

- There must be a clearance of at least 500 mm in front of the product for operation.

Water installation

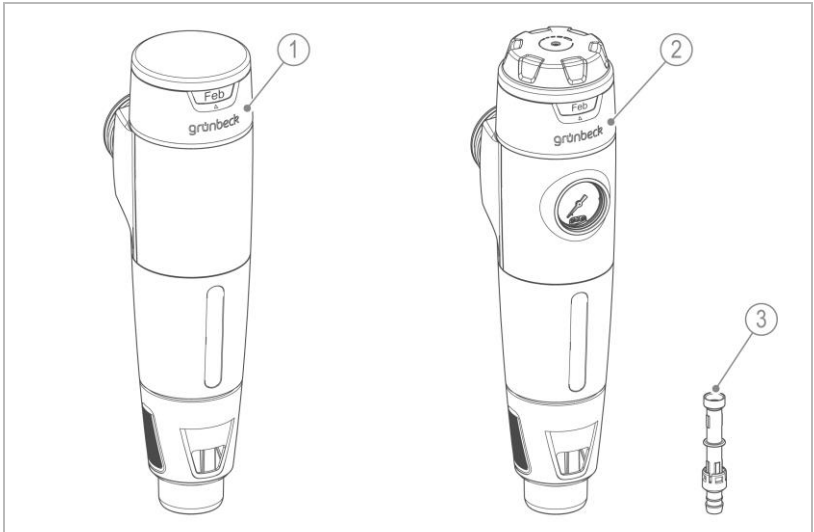
- Floor drain or corresponding safety device with water stop function (e.g. safety device protectliQ)
- Shut-off valves upstream and downstream of the product

5.2 Checking the scope of supply



Depending on your order, you will receive the backwash filter pureliQ:RX or the pureliQ:RDX backwash filter with pressure reducer.

The cliQlock basic module is not included in the scope of delivery.



Designation

- 1 Backwash filter pureliQ:RX
- 2 Backwash filter pureliQ:RDX

Designation

- 3 Hose adapter

- ▶ Check the scope of supply for completeness and damage.



The transparent plastic film serves as transport and dirt protection.

- ▶ Leave it on the product during assembly and the construction phase to prevent soiling of the white housing.

5.3 Water installation

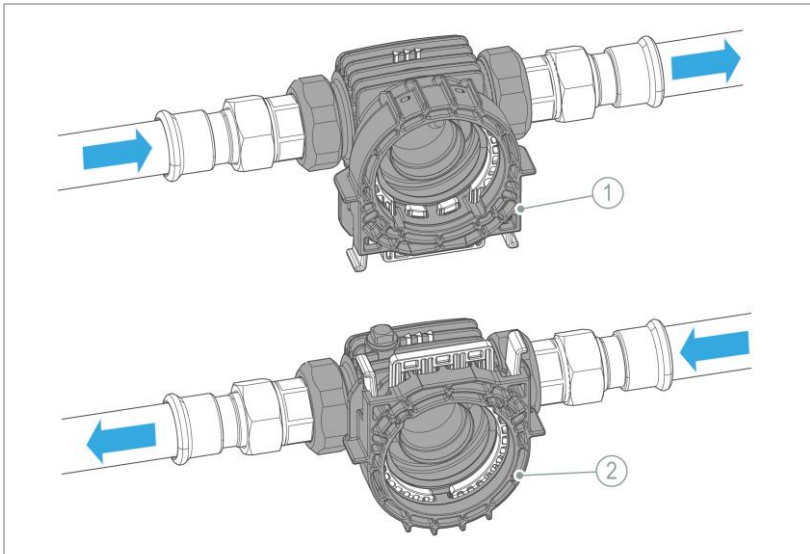


The cliQlock basic module must already be installed.
The filter can be mounted in a horizontal or vertical pipe.

5.3.1 Pre-installing the cliQlock basic module



Install the cliQlock basic module in accordance with the mounting instructions.

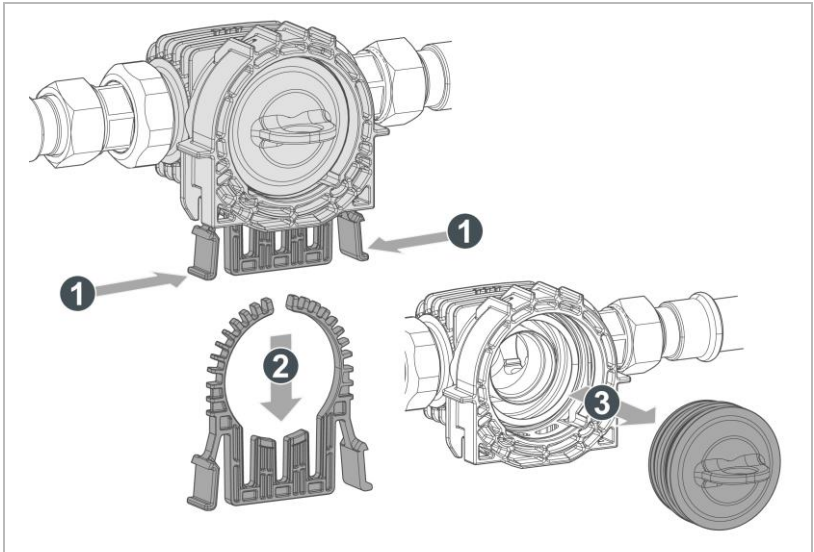


Designation

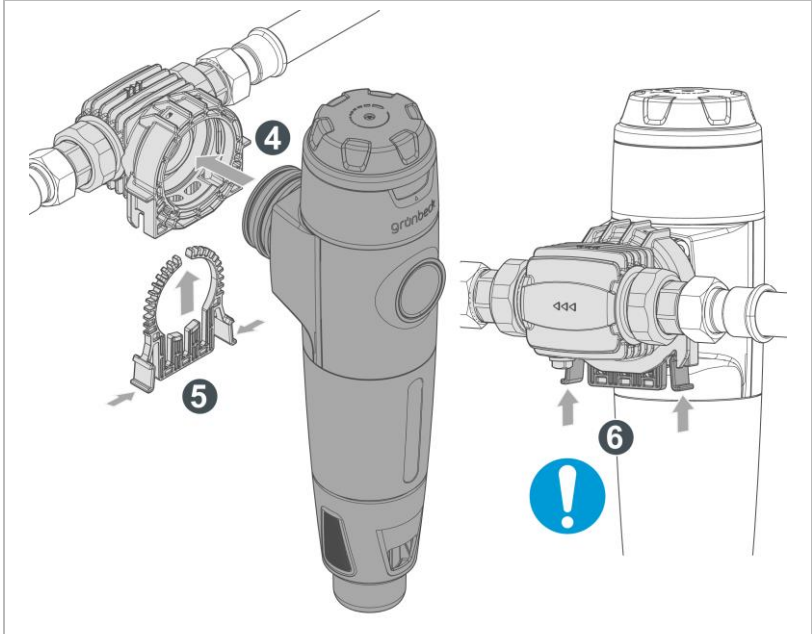
- 1 cliQlock basic module in flow direction from the left (bracket points downwards)
- 2 cliQlock basic module in flow direction from the right (bracket points upwards)

► Check that the cliQlock basic module is installed correctly according to the direction of flow.

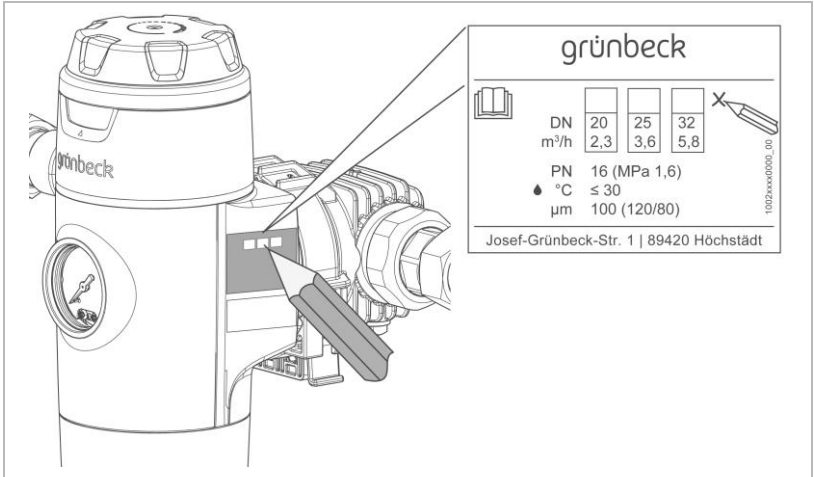
5.3.2 Connect the filter to the cliQlock basic module



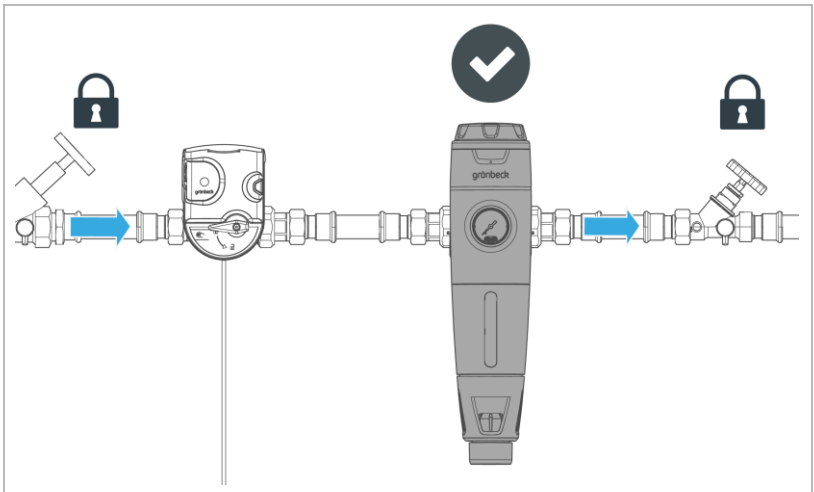
1. Press the cliQlock clamp together slightly.
2. Slowly pull the cliQlock clamp out.
3. Pull out the closing cap for the cliQlock module system, if available.
 - a Keep the closing cap for the cliQlock module system.



4. Insert the filter with the plug-in coupling into the cliQlock basic module as far as it will go.
 - a Check that the filter is fully inserted to the stop - otherwise the cliQlock clamp cannot be inserted.
5. Carefully insert the cliQlock clamp into the cliQlock basic module.
 - » The cliQlock clip clicks audibly into place.
6. Check that the cliQlock clamp and the filter are firmly seated in the cliQlock basic module.
 - a Slowly pull the cliQlock clamp out.



- Note the nominal connection diameter (DN) of the cliQlock basic module on the type plate.



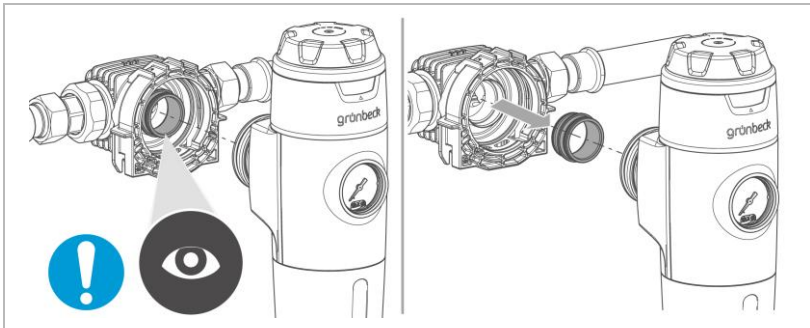
- » The filter is mounted in the cliQlock basic module.

5.3.3 Removing the filter from the cliQlock basic module

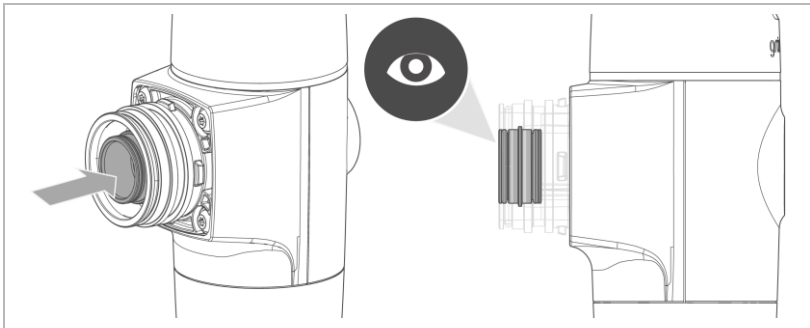


When removing the filter, the plug-in coupling can get stuck in the cliQlock basic module.

- ▶ Use hygiene gloves when carrying out this work.
- ▶ Observe the following when removing the filter:



1. Pull the plug-in coupling out of the cliQlock basic module by hand - do not use any tools.



2. Insert the plug-in coupling into the filter connection as far as it will go.

5.4 Installing the filter in the softliQ:SE connection module

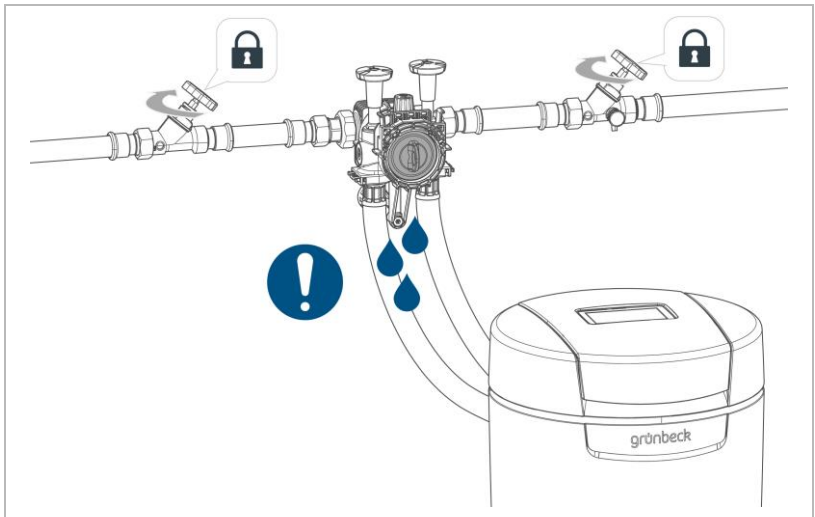


The pureliQ:RX/RDX filters for the cliQlock module system can be connected to the softliQ:SE connection module.



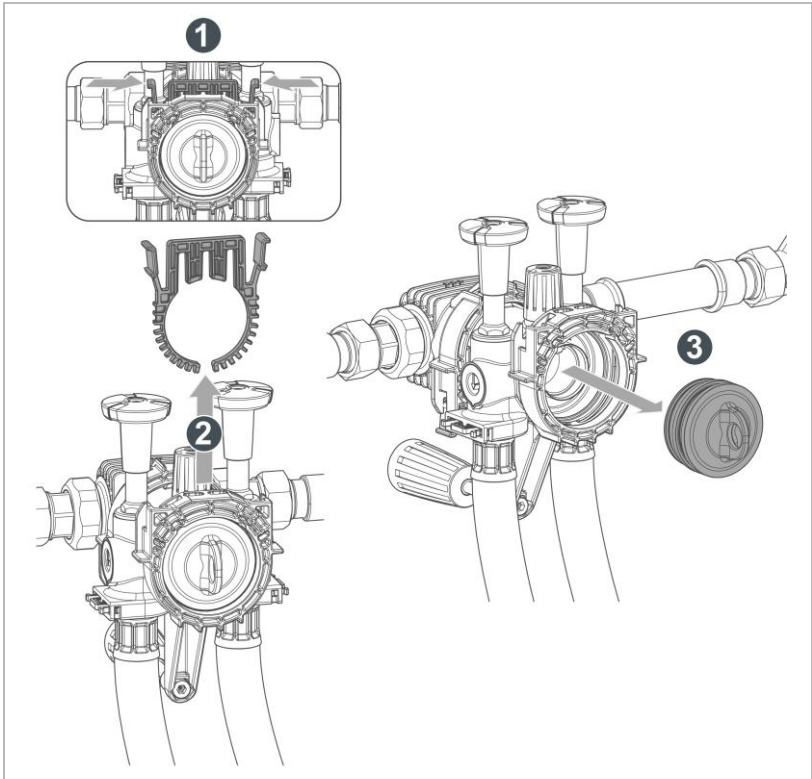
A small amount of water may escape when installing the filter.

► Install the filter as follows:



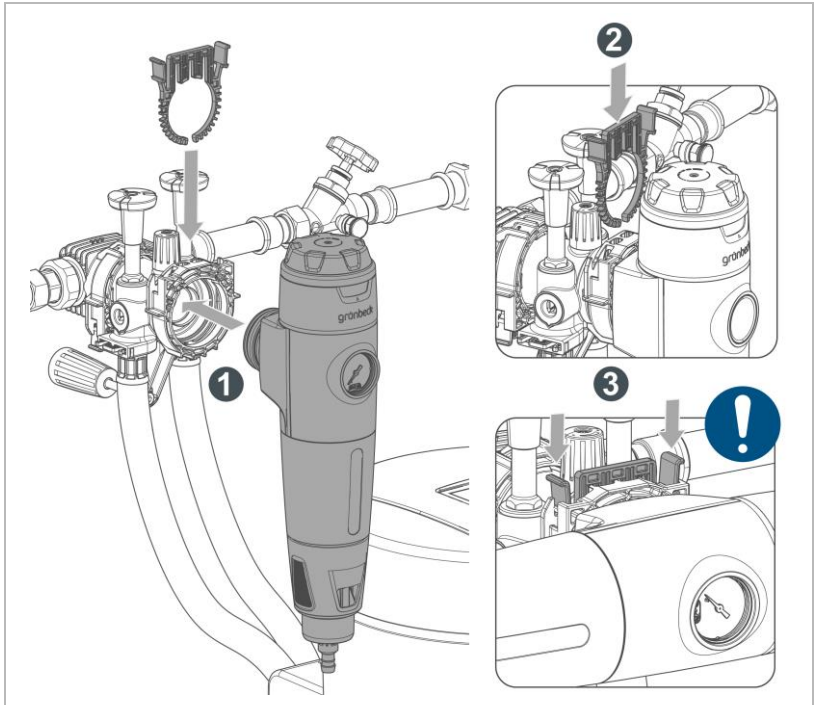
1. Close the shut-off valve upstream from the cliQlock module system.
2. Open a water withdrawal point and allow water to run until the pressure in the water pipe has been released.
3. Close the shut-off valve after the cliQlock module system.

5.4.1 Open the connection module

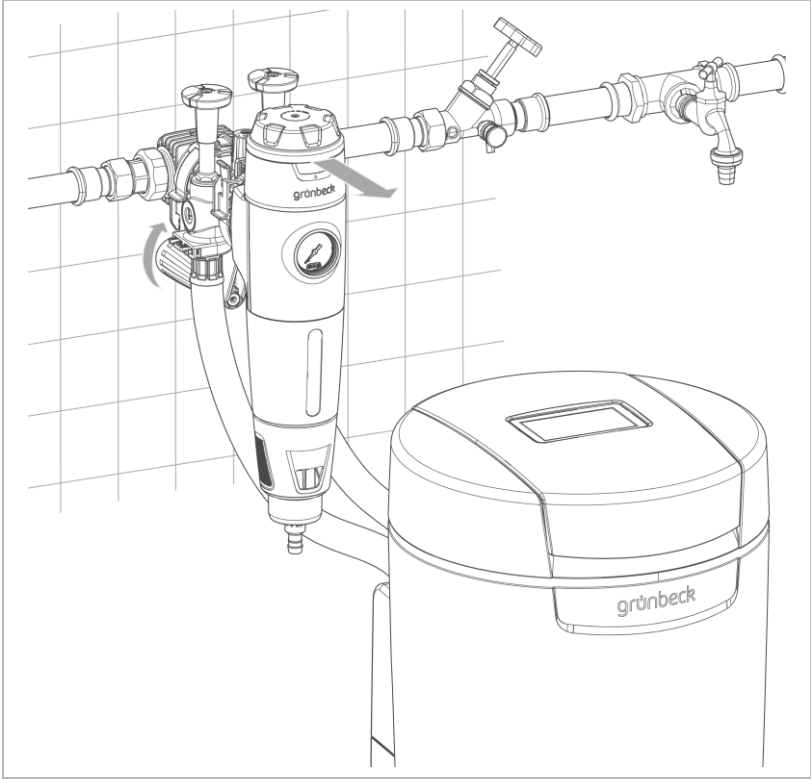


1. Press the cliQlock clamp together slightly.
2. Slowly pull the cliQlock clamp out.
3. Pull out the closing cap for the cliQlock.
 - a Keep the closing cap for the cliQlock.

5.4.2 Inserting the filter element



1. Insert the filter with the plug-in coupling into the cliQlock connection module as far as it will go.
 - a Check that the filter is fully inserted to the stop - otherwise the cliQlock clamp cannot be inserted.
2. Carefully insert the cliQlock clamp into the connection module.
 - » The cliQlock clip clicks audibly into place.
3. Check that the cliQlock clamp is firmly seated in the connection module.
 - a Pull gently on the cliQlock clamp.



4. Check the tight fit of the filter in the connection module.
 - a Pull gently on the filter.
 5. When mounting horizontally, ensure that the connection module with the filter is securely supported against the wall surface.
 - a If necessary, adjust the handwheel of the wall support until it presses against the wall surface.
- » The filter is mounted in the softliQ:SE connection module.

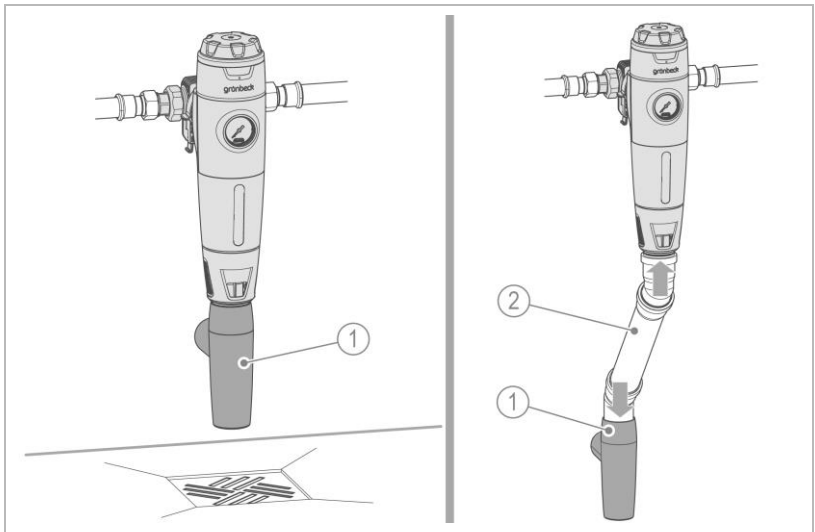
5.5 Attaching the backwash connection



If it is not possible to install a waste water pipe, the backwash water can be collected in a bucket/container.

5.5.1.1 Backwash water discharge with drain connection

The supplied hose adapter is not required for this variant. The free outlet is already integrated in the filter for this variant.



Designation

- 1 Drain connection DN 50 acc. to DIN EN 1717

Designation

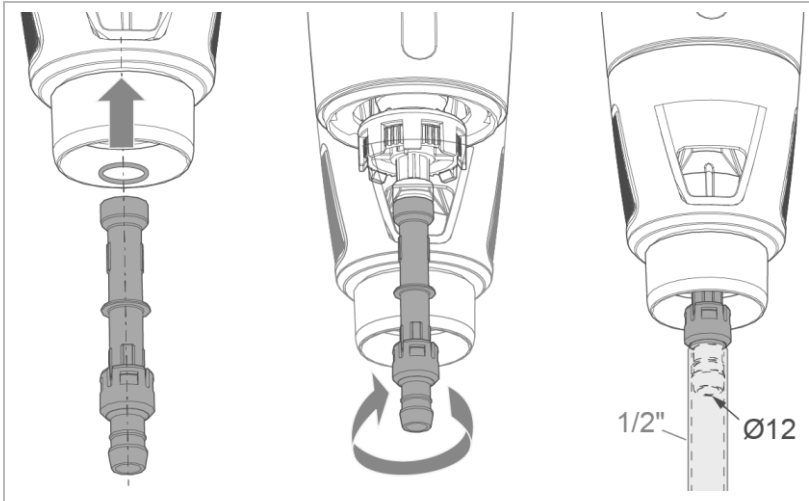
- 2 Waste water pipe on site



Refer to the installation instructions for the drain connection.

- ▶ Install the drain connection (not included in the scope of supply).
- ▶ Install a waste water pipe towards the drain.

5.5.1.2 Backwash water discharge with hose connection



1. Mount the hose adapter on the filter.



The hose is not included in the scope of supply.

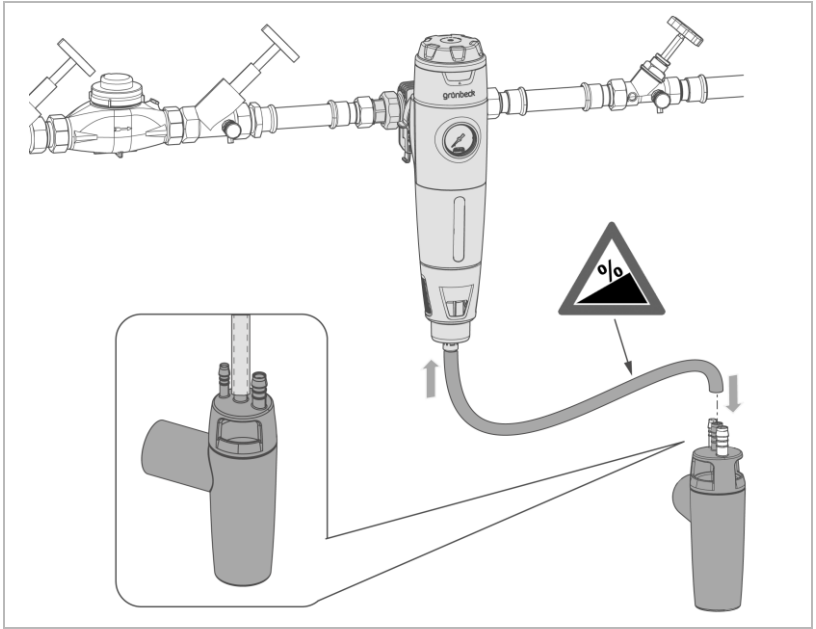
The hose length must not exceed 4 metres.

Longer hoses can lead to pressure loss and impair backwash.

NOTE

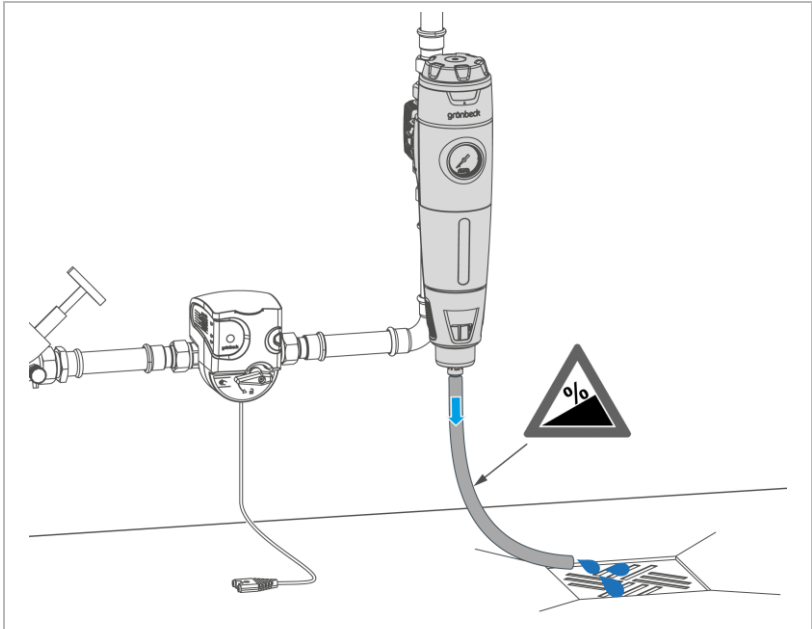
Stagnated water can remain in the hose due to insufficient slope.

- Bacterial growth in the filter
- ▶ Lay the hose with a downward slope.
- ▶ After backwashing, check that the water drains completely.
- ▶ If the water does not drain completely, remove the hose after backwashing.



2. Connect an on-site hose to the hose adapter and to the installed drain connection.

Alternative discharge of the backwash water

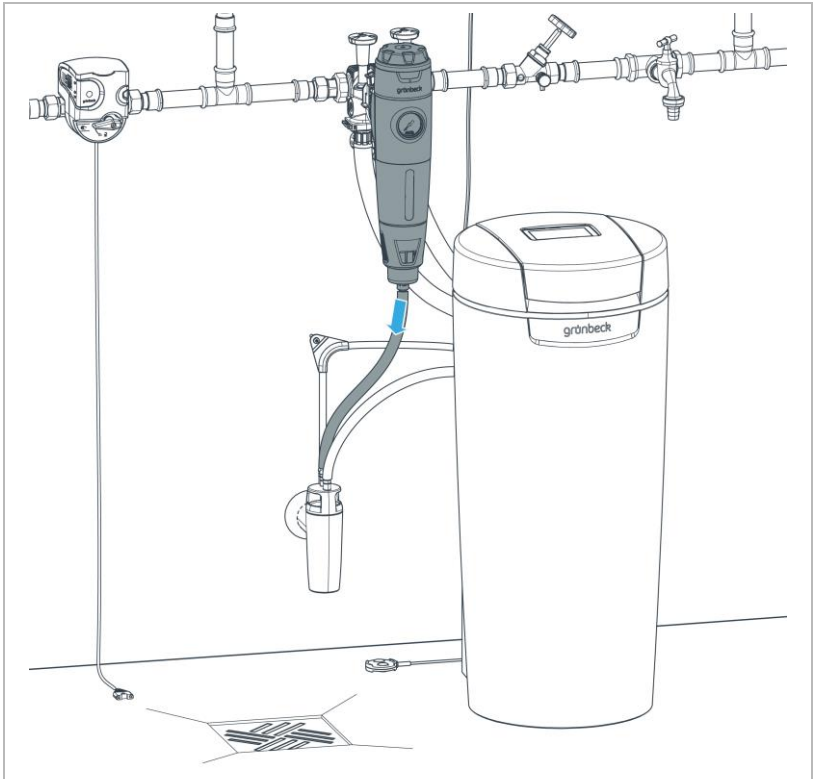


1. Connect an on-site hose to the hose adapter.
2. Lay the hose to the discharge point (e.g. bucket, drain or floor outlet).



- ▶ Make sure that there is a free outlet for the backwash water at the discharge point.

Drain the backwash water to the drain connection of the softliQ:SE water softener



1. Connect a hose provided by the customer to the hose adaptor and to the installed drain connection of the softliQ:SE.



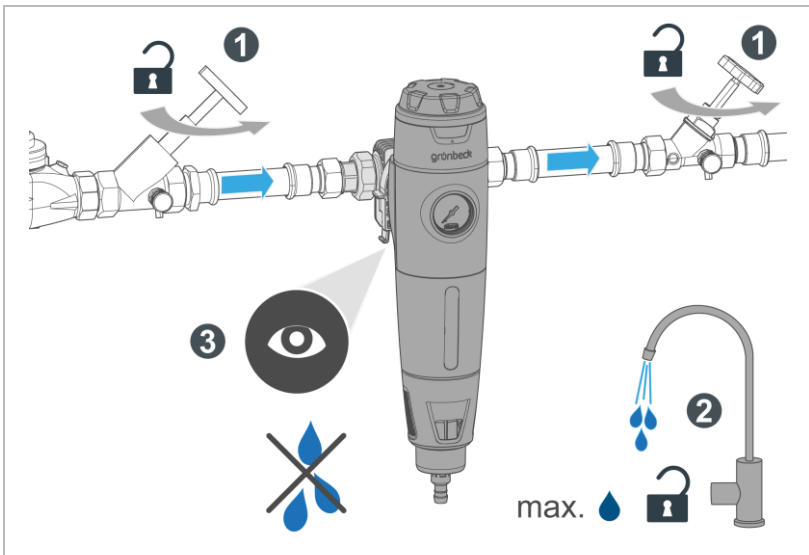
Refer to the operating instructions for the softliQ:SE water softener.

6 Start-up



The initial start-up of the product must be carried out by technical service personnel only.

6.1 Checking the product

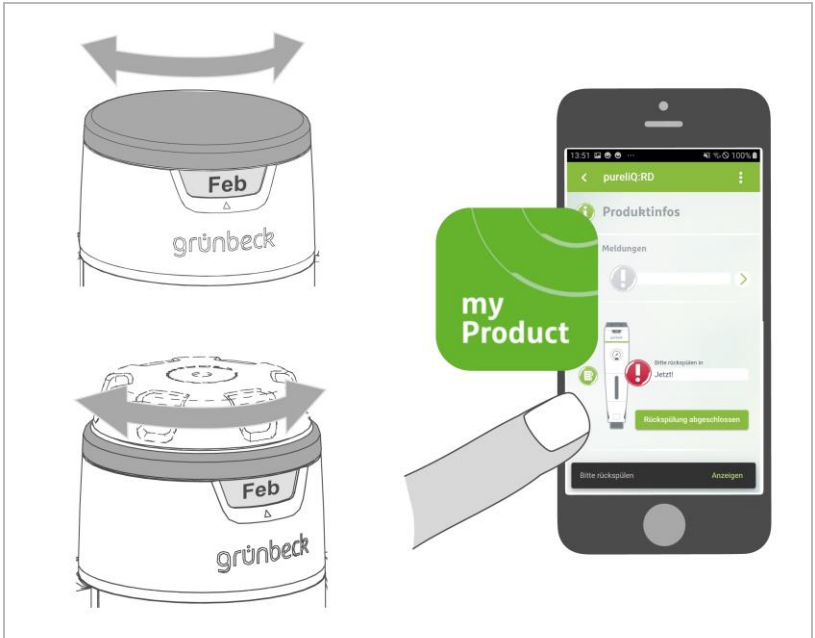


1. Open the shut-off valves.
2. Open the nearest water withdrawal point after the filter as far as it will go.
 - » The filter is vented.
3. Check the filter for leaks.
4. Enter the initial start-up in the operation log.

6.2 Setting the month display



Via Grünbeck's myProduct app, you will receive a message about the timely backwash of the filter (refer to chapter 7.1).

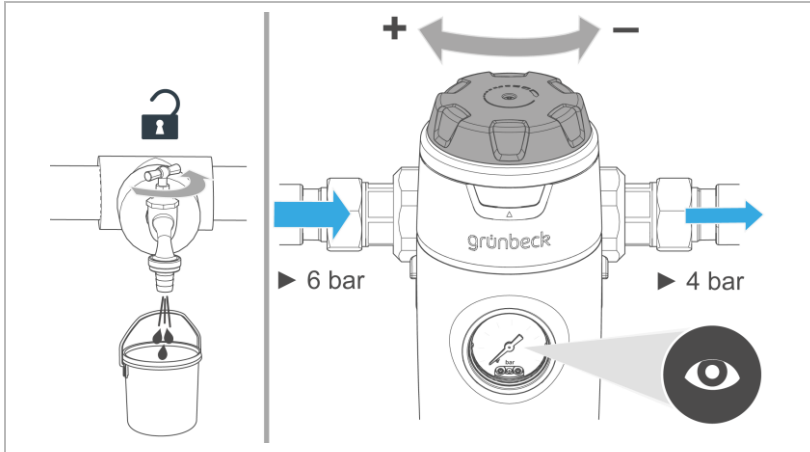


- ▶ Set the maintenance ring to the month of the next maintenance (alternatively, to the month of the next backwash – every six months at the latest).

6.3 Setting the pressure reducer (pureliQ:RDX)

The pressure reducer is factory-set to 4 bar.

You can change this value as follows:



1. Set the desired holding pressure on the handwheel for pressure reducer
(turn anti clockwise = pressure increase, turn clockwise = pressure reduction).
2. Open and close a water withdrawal point.
 - » The outlet pressure adjusts itself.
3. Read the actual outlet pressure on the pressure gauge.
4. Repeat steps 1. – 3. until the desired pressure is reached.
 - » The desired outlet pressure is set.



The outlet pressure is set according to DIN EN 806-2.

- Comply with the max. admissible operating pressure.

6.4 Handing over the product to the owner/operating company

- ▶ Explain to the owner/operating company how the product works.
- ▶ Use the manual to brief the owner/operating company and answer any questions.
- ▶ Inform the owner/operating company about the need for inspections and maintenance.
- ▶ Hand over all documents to the owner/operating company for storage.

6.4.1 Disposal of packaging

- ▶ Dispose of packaging material as soon as it is no longer needed (refer to chapter 11.2).

6.4.2 Storage of accessories

- ▶ Keep the accessories supplied for the product in a safe place.

7 Operation/handling

The product is operated automatically and does not require any manual operation.



CAUTION

Unlock the cliQlock module system under pressure

- Bumping, hitting through filter
- ▶ Shut off the water supply before operating the cliQlock module system.
- ▶ Ensure that the cliQlock module system is depressurised.

- ▶ Inspect the filter at regular intervals (refer to chapter 8.3).
- ▶ Carry out a backwash regularly (refer to chapter 8.4.1.1).
- ▶ Flush the filter after a temporary shutdown (refer to chapter 10.1).

7.1 Installing Grünbeck's myProduct app



You can register your product in the myProduct app. That way, you will receive a reminder to replace the filter element as well as additional information on your product.

- ▶ Download Grünbeck's myProduct app and install it on your mobile device.

8 Maintenance and repair

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



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



By concluding a maintenance contract you ensure that all maintenance work will be performed in due time.

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

8.1 Cleaning

NOTE

Do not clean the product with cleaning agents containing alcohol/solvents.

- These substances damage the plastic components.
- Varnished surfaces are affected.
- ▶ Use a mild/pH-neutral soap solution.
- ▶ Only clean the outside of the product.
- ▶ Do not use any strong or abrasive cleaning agents.
- ▶ Wipe the surfaces with a damp cloth.

8.2 Intervals



Regular work is necessary in order to ensure proper functioning of the product in the long term. DIN EN 806-5 recommends regular maintenance to ensure trouble-free and hygienic operation of the product.

- ▶ As the owner/operating company, determine which components have to be inspected and maintained at which intervals (load-dependent). These intervals are subject to the actual conditions, e.g.: Water condition, degree of impurities, environmental influences, consumption, etc.

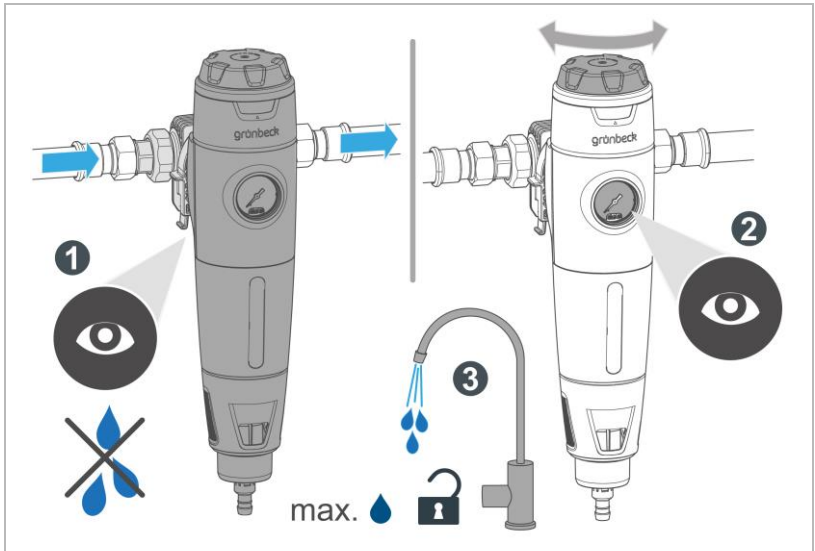
The following interval table shows the minimum intervals for the activities to be performed.

| Task | Interval | Activities |
|-------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inspection | 2 months | <ul style="list-style-type: none"> • Visually check for function and leaks • Read the pressure (for pureliQ:RDX) |
| Maintenance | 6 months | <ul style="list-style-type: none"> • Backwash • Check condition and leak tightness • Adjust the maintenance ring |
| | annually as needed | <ul style="list-style-type: none"> • Backwash • Check O-rings/seals for wear • Check that the filter and the cliQlock basic module are firmly seated |
| Repair | 5 years | <ul style="list-style-type: none"> • Recommendation: replace filter element, seals, backwash valve, spring assembly |
| | 10 years | <ul style="list-style-type: none"> • Recommendation: Replace the filter cylinder |

8.3 Inspection

You, as owner/operating company, can carry out the regular inspections yourself.

- Conduct an inspection at least every 2 months.



1. Check the installation for leaks and function.
 2. Read the static pressure (zero flow) of pureliQ:RDX.
 3. Fully open a water withdrawal point (generate max. flow) and read the flow pressure.
- Carry out a backwash in case of increasing contamination of the filter element and/or decreasing water pressure in the pipe network.

8.4 Maintenance



WARNING

Irregular backwash of the filter

- Risk of infection due to contamination
- ▶ Comply with the intervals for inspection and backwash of the filter.

8.4.1 Semi-annual maintenance

8.4.1.1 Filter backwash



During the backwash process, filtered pure water is still available.
We recommend repeating the backwash process 3 times.

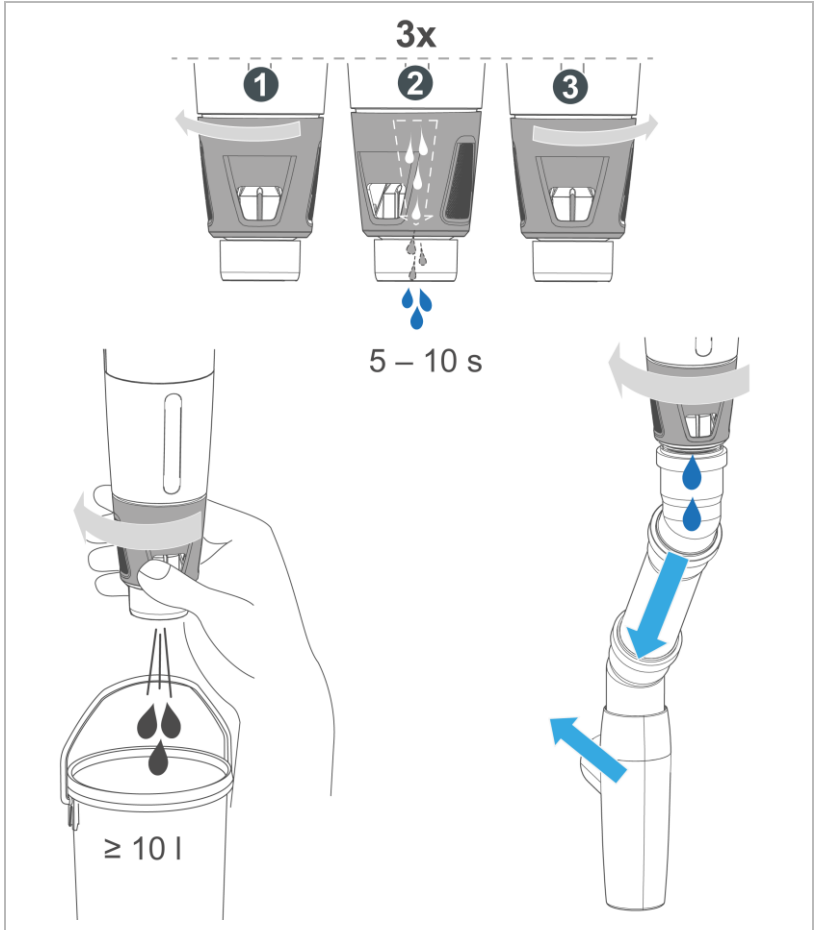
Backwash via hose connection

NOTE

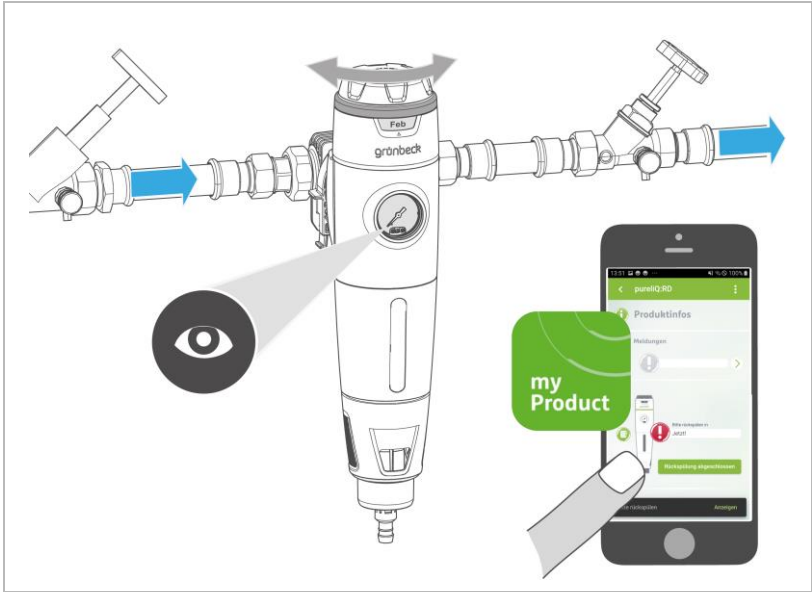
Stagnated water can remain in the hose due to insufficient slope.

- Bacterial growth in the filter
- ▶ After backwashing, check that the water drains completely.
- ▶ If the water does not drain completely, remove the hose after backwashing.

- ▶ For an installation without a duct connection or hose connection, place a 10 l bucket under the filter.



1. Turn the backwash handwheel to the left in the direction of the arrow as far as it will go.
2. Hold the backwash handwheel in this position for 5 – 10 seconds.
3. Turn the backwash handwheel to the right back to its initial position.



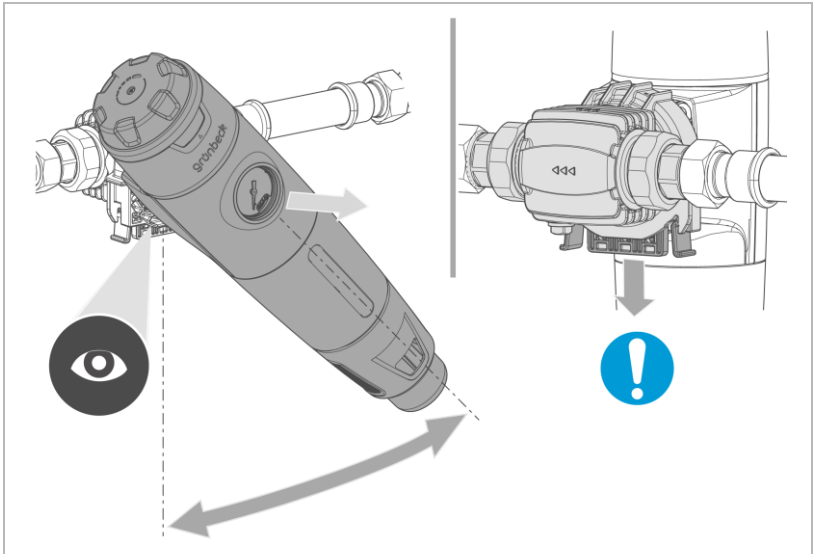
4. Check the water pressure of the pureliQ:RDX:
 - a Fully open a water withdrawal point and read the flow pressure on the pressure gauge.
 - b Close the water withdrawal point and read the static pressure (zero flow) on the pressure gauge.
 - c Adjust the holding pressure if required.
5. Set the date for the next maintenance (refer to chapter 6.2).
6. Confirm the backwash in the Grünbeck myProduct app, if registered.

8.4.2 Annual maintenance

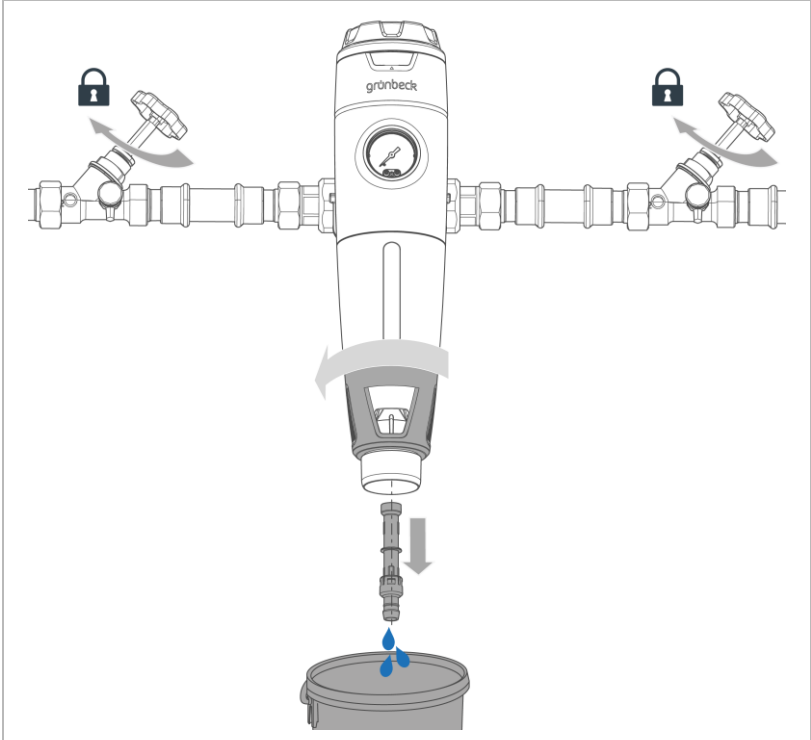


The work below must be carried out by a qualified specialist only.

If a leak or malfunction is detected, conduct a wear test in addition to the semi-annual maintenance:

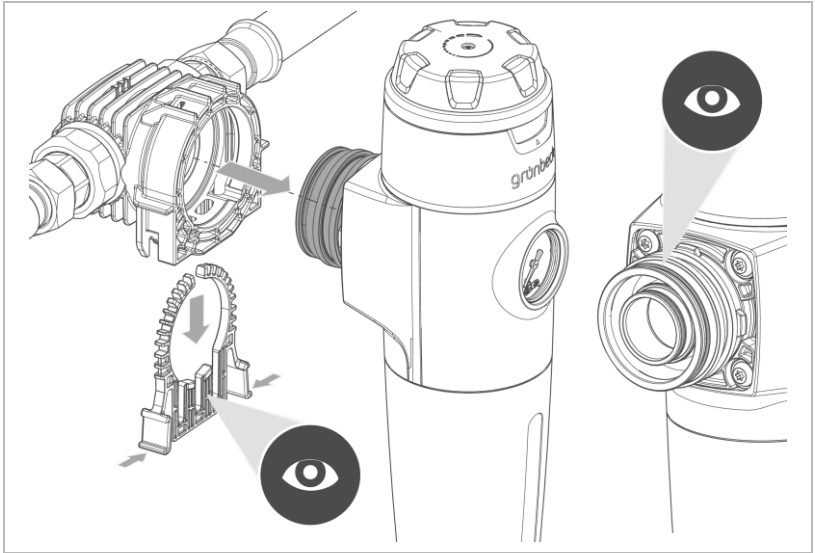


1. Check the tight fit of the filter on the cliQlock basic module.
 - a Pull on the filter plug and swivel it.
 - » The filter must not come loose from the cliQlock basic module.
 - » The connection point must not leak.
2. Pull on the cliQlock clamp without unlocking it.
 - » The cliQlock clamp must not come loose.

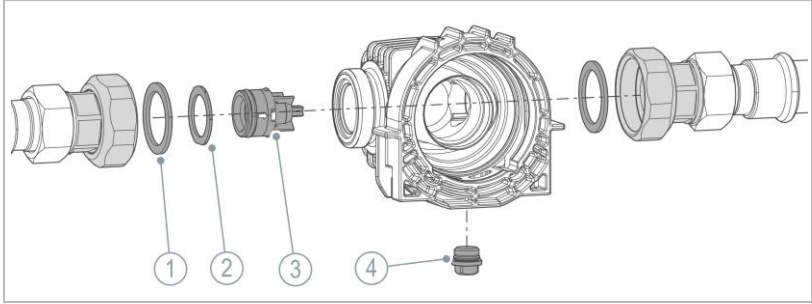


3. Close the shut-off valves at the inlet and outlet.
4. Carry out a backwash to relieve the water pressure in the filter and in the water pipe.
5. Dismantle the drain connection or the hose adapter (if fitted).

- If the connection point is leaking, proceed as follows.



6. Detach the filter from the cliQlock basic module.
 - a Pull out the cliQlock clamp.
 - b Carefully pull the filter out.
7. Check the O-rings on the plug-in coupling for wear.
8. Check the cliQlock clamp and the cliQlock basic module for cracks and warping.



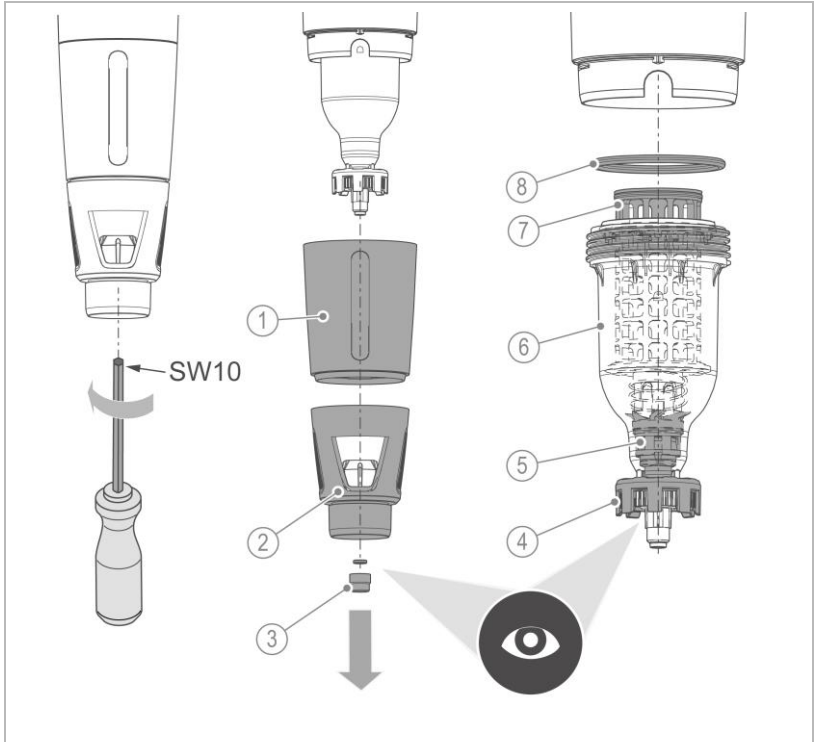
| Designation | Designation |
|---------------------------------------------------|-------------------------------------------|
| 1 Flat seals for the water meter screw connection | 3 Non-return valve |
| 2 Seal of the non-return valve | 4 Blind plug with O-ring for dosing valve |

9. If necessary, dismantle the cliQlock basic module and check the seals on the water meter screw connections for wear.

10. Check the non-return valve for wear.

11. Check the blind plug with O-ring for wear.

12. Replace worn components.



Designation

- 1 Filter bell cover
- 2 Backwash handwheel
- 3 Fastening nut incl. seal
- 4 Spring assembly

Designation

- 5 Backwash valve incl. seal
- 6 Filter cylinder
- 7 Filter element
- 8 O-ring filter cylinder

- 13.** Dismantle the backwash handwheel with the filter cylinder cover.
- 14.** Unscrew the filter cylinder.
- 15.** Check the O-rings and flat seals for wear and tear.
- 16.** Check the spring assembly and backwash valve for smooth running and damage.
- 17.** Check the filter element for damage and dirt deposits.
- 18.** Replace worn components (refer to chapter 8.7).
- 19.** Mount the filter and put the installation into operation (refer to chapter 6).

8.5 Spare parts

For an overview of the spare parts, refer to our spare parts catalogue at www.gruenbeck.com. You can obtain the spare parts from your local Grünbeck representative.

8.6 Wearing parts



Wearing parts are only allowed to be replaced by a qualified specialist.

Wearing parts are listed below:

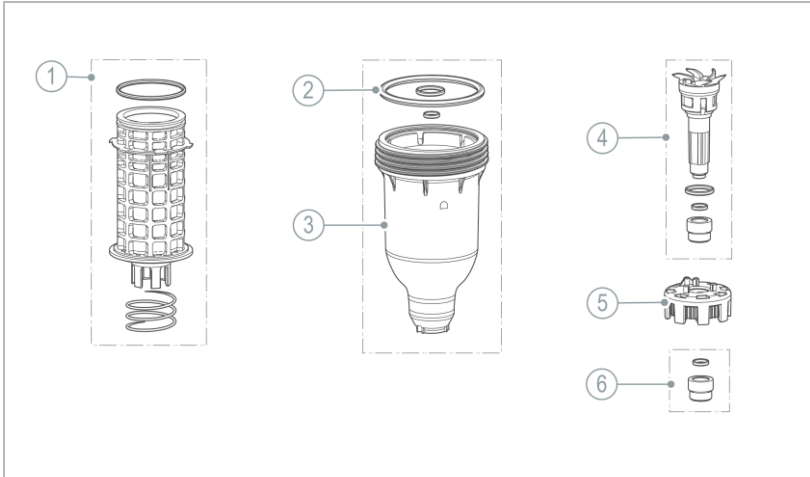
- Seals (O-rings)
(Seal set for filter cylinder and support mesh, order no. 101625e)
 - Filter element
 - Backwash valve
- ▶ Have the seals replaced in the event of leaks, damage or distortions.

8.6.1 Recommended replacement interval

- 5 years for filter element incl. seal, O-ring filter cylinder, backwash valve incl. seals, spring assembly
 - 10 years for filter cylinder
- ▶ Have defective or worn components replaced (refer to chapter 8.7).

8.7 Service Kits

8.7.1 Service kits for pureliQ:RX

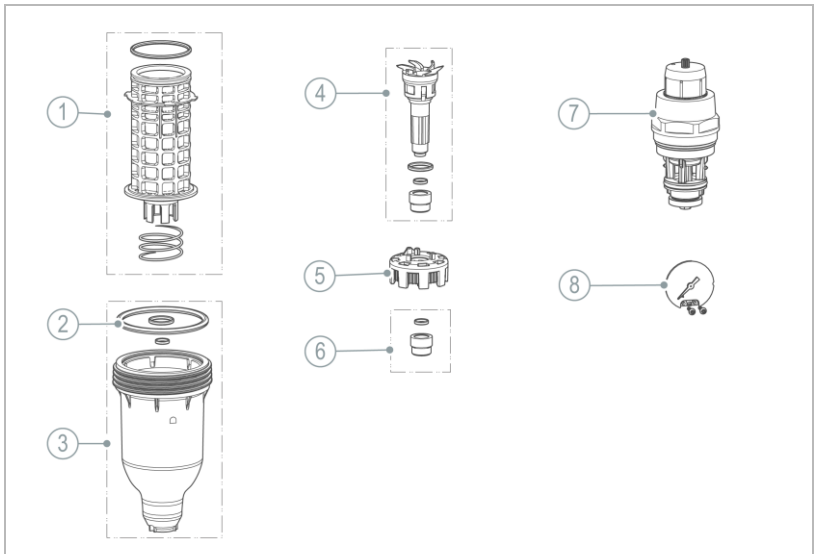


| Designation | |
|-------------|------------------------|
| 1 | Filter element |
| 2 | O-ring filter cylinder |
| 3 | Filter cylinder |

| Designation | |
|-------------|----------------------------|
| 4 | Backwash valve incl. seals |
| 5 | Spring assembly |
| 6 | Fastening nut incl. seal |

| Designation | consisting of | Order no. |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Service kit I | <ul style="list-style-type: none"> Filter element 100 µm incl. seal O-ring filter cylinder Backwash valve incl. seals Spring assembly | 101 676e |
| Service kit II | <ul style="list-style-type: none"> Service kit I Filter cylinder | 101 677e |

8.7.2 Service kits for pureliQ:RDX



Designation

- | | |
|---|----------------------------|
| 1 | Filter element |
| 2 | O-ring filter cylinder |
| 3 | Filter cylinder |
| 4 | Backwash valve incl. seals |

Designation

- | | |
|---|--------------------------|
| 5 | Spring assembly |
| 6 | Fastening nut incl. seal |
| 7 | Pressure reducer |
| 8 | Pressure gauge |

| Designation | consisting of | Order no. |
|------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------|
| Service kit III | <ul style="list-style-type: none"> • Service kit I • Pressure reducer • Pressure gauge | 101 678e |
| Service kit IV | <ul style="list-style-type: none"> • Service kit III • Filter cylinder | 101 679e |

| Tools required | Order no. |
|-----------------------------------------------------|------------------|
| Strap wrench (to remove the filter cylinder) | 105 805 |
| Pipe socket wrench (for pressure reducer cartridge) | 104 805 |
| Allen key 10 (for fastening nut) | |
| TORX T8 (pressure gauge) | |
| TORX T10 (pressure reducer adjusting cap) | |

9 Fault



WARNING

Contaminated drinking water due to stagnation

- Infectious diseases
- ▶ Have malfunctions eliminated immediately.

9.1 Observations

| Observation | Explanation | Remedy |
|----------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------------------------------------------|
| Water pressure at the withdrawal point too low (pressure loss too high) | The shut-off valves are not fully open | ▶ Fully open the shut-off valves |
| | The filter element is dirty | ▶ Carry out backwash |
| | The pressure reducer is not set correctly or is defective | ▶ Have the pressure reducer checked, adjusted or replaced by the technical service. |
| Taste of the treated water negatively affected | Excessive filter downtime | ▶ Withdraw water for several minutes ▶ Carry out backwash |
| Solids contained in the filtered water | Excessively high flow through the filter | ▶ Check filter element for damage or leaks |
| | Filter element damaged or not installed correctly | ▶ Have the filter element replaced by technical service |

BA_100263049900_en_015_pureitQ_RX-RDX

| Observation | Explanation | Remedy |
|------------------------------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Water loss in the system (leakage) | Faulty joint | <ul style="list-style-type: none">▶ Check O-rings and seals for deformations or wear and tear▶ Check filter head for damage▶ Check cliQlock basic module checked for damage▶ Have leaky components replaced by a qualified specialist |



If a fault cannot be rectified, further measures can be taken by the technical service.

- ▶ Contact technical service (for contact details, refer to inside cover sheet).

10 Decommissioning

It is not necessary to take your product out of operation.



In case of longer absences, e.g. holidays, precautionary hygiene measures according to VDI 3810-2 and VDI 6023-2 must be taken in order to maintain drinking water hygiene after downtimes.

10.1 Temporary standstill

- ▶ Perform the activities below if the drinking water system has not been used for a longer period of time:

After a downtime of \leq 4 weeks

- ▶ Open a water withdrawal point and completely flush the filter and the pipes.

After a downtime of $>$ 4 weeks

1. Carry out a backwash (refer to chapter 8.4.1.1).
2. Open a water withdrawal point and completely flush the filter and the pipes.

11 Dismantling and disposal

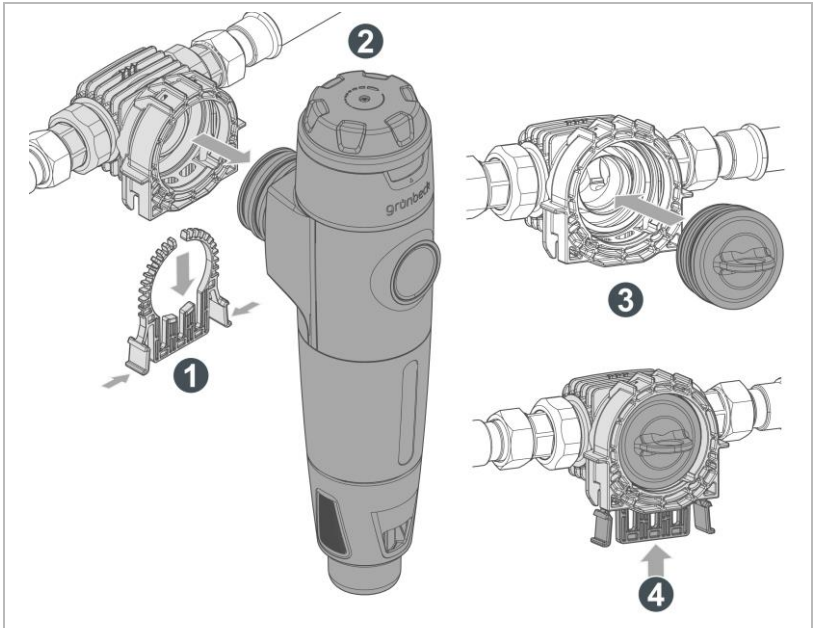
11.1 Dismantling



The work described herein represents an intervention into your drinking water system.

- ▶ Have this work performed by qualified specialists only.
1. Close the shut-off valves upstream from the filter.
 2. Open a water withdrawal point and wait for a few seconds.
 - » The pressure in the product and the pipe network is being relieved.
 3. Close the water withdrawal point.
 4. Close the shut-off valve downstream of the filter.
 5. Carry out a backwash.

► Remove the filter:



1. Pull out the cliQlock clamp.
 2. Pull the filter out of the cliQlock basic module.
 3. Insert the closing cap into the cliQlock basic module.
 4. Secure the closing cap with the cliQlock clamp.
- » The filter is removed.

11.2 Disposal

- ▶ Comply with the applicable national regulations.

Packaging

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

NOTE

Risk to the environment due to incorrect disposal

- Packaging materials are valuable raw materials and can be reused in many cases.
- Incorrect disposal can cause environmental hazards.
- ▶ Dispose of packaging material in an environmentally sound manner.
- ▶ Comply with locally applicable 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.

- ▶ Use the available collection points 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.com.


Publisher's information

Technical documentation

If you have any questions or suggestions regarding this operation manual, please contact the Technical Documentation Department at Grünbeck

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