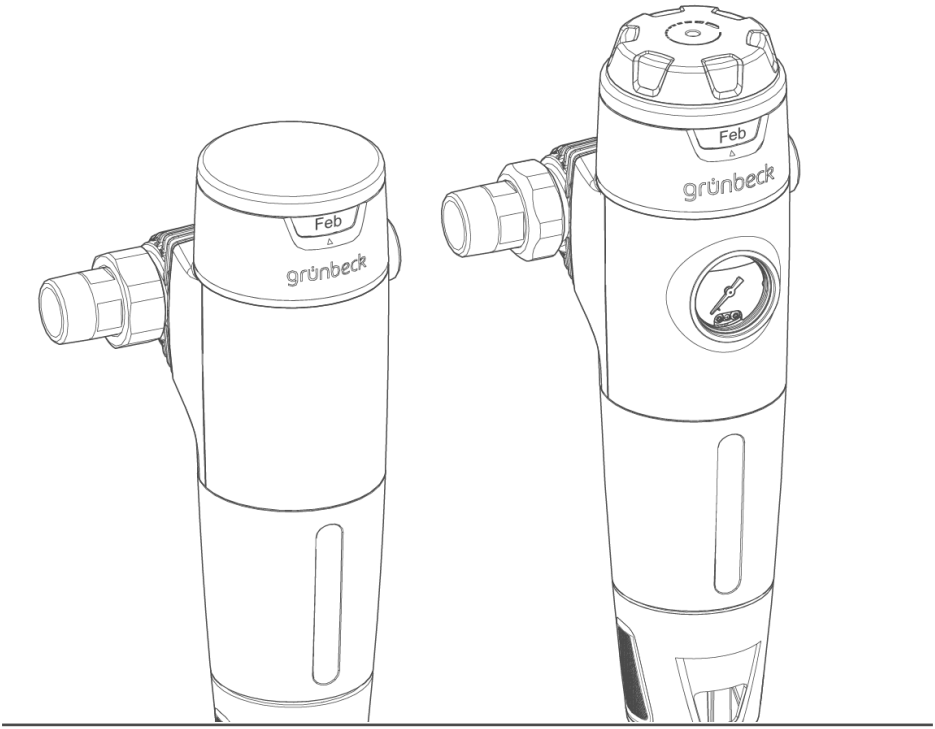
We understand water.




# Backwash filter | pureliQ:R, pureliQ:RD

Operation manual

grünbeck

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**Original operation manual**
Edition: June 2022
Order no.: TD3-AR000_en_075

# Table of contents

# 1 Introduction

This manual is intended for owners/operating companies, operators, 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 instructions contained within it on the components before you operate your product.
- Adhere to all safety instructions and instructions for action.
- Keep this instruction and all other applicable documents, so that they are available when needed.

Illustrations in this manual are for basic understanding and may differ from the actual version.

## 1.1 Validity of the manual

This manual applies to following products:

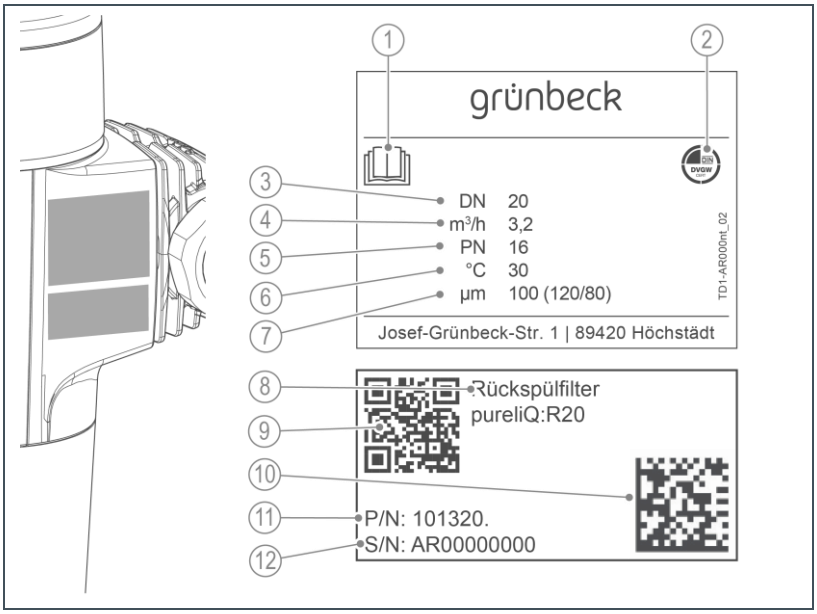
- Backwash filter pureliQ:R20/RD20 (¾", DN 20)
- Backwash filter pureliQ:R25/RD25 (1", DN 25)
- Backwash filter pureliQ:R32/RD32 (1¼", DN 32)

## 1.2 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 | | Designation |
|---|---|---|---|
| 1 | Obey the operation manual | 7 | Filter fineness |
| 2 | DVGW test mark | 8 | Product designation |
| 3 | Nominal connection diameter | 9 | QR code |
| 4 | Flow rate | 10 | Data matrix code |
| 5 | Nominal pressure | 11 | Order no. |
| 6 | Water temperature | 12 | Serial no. |

## 1.3 Symbols used

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

## 1.4 Depiction of warnings

This manual contains information that you must comply with for your personal safety. The information is marked with a warning sign and has the following structure:

**SIGNAL WORD** Type and source of danger

- Possible consequences

► Preventive measures

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

| Warning sign and signal word | | Consequences when disregarding the information/instructions | |
|---|---|---|---|
|  | **DANGER** | Personal injury | Death or serious injuries |
|  | **WARNING** | | 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 |

## 1.5 Requirements for personnel

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

### 1.5.1 Qualification of personnel

| Personnel | Prerequisites |
|---|---|
| Operator/user | • No special expertise<br>• Knowledge of the tasks assigned<br>• Knowledge of possible dangers in the case of inappropriate conduct<br>• Knowledge of the necessary protective equipment and protective measures<br>• Knowledge of residual risks |
| Owner/ operating company | • Product-specific expertise<br>• Knowledge of statutory regulations for safety and accident prevention |

| Personnel | Prerequisites |
|---|---|
| Qualified specialist<br>• Electrical engineering<br>• Sanitary engineering (HVAC and plumbing)<br>• Transport | • Professional training<br>• Knowledge of relevant standards and regulations<br>• Knowledge of detection and prevention of possible risks<br>• Knowledge of statutory regulations on accident prevention |
| Technical service (Grünbeck's technical service/authorised service company) | • Extended product-specific expertise<br>• Trained by Grünbeck |

## 1.5.2 Authorisations of personnel

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

| | | Operator/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 | semi-annually | | X | X | X |
| | Annually | | | X | X |
| Troubleshooting | | | X | X | X |
| Repair | | | | X | X |
| Shutdown and restart | | | | X | X |
| Dismantling and disposal | | | | X | X |

# 2 Safety

## 2.1 Safety measures

- Only operate your product if all components are installed properly.
- Adhere to the applicable local guidelines 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/non-instructed people from residual risks.
- Observe the maintenance intervals (refer to chapter 8.2). Failure to comply can result in microbiological contamination of your drinking water system.

### 2.1.1 Hazards relating to pressure

- 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

- Health risk due to contamination of the drinking water.

► Comply with the intervals and recommendations for inspection and maintenance of the filter.

## 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 of the filter.
2. Locate the leak.
3. Eliminate the cause of the water leak.

# 3 Product description

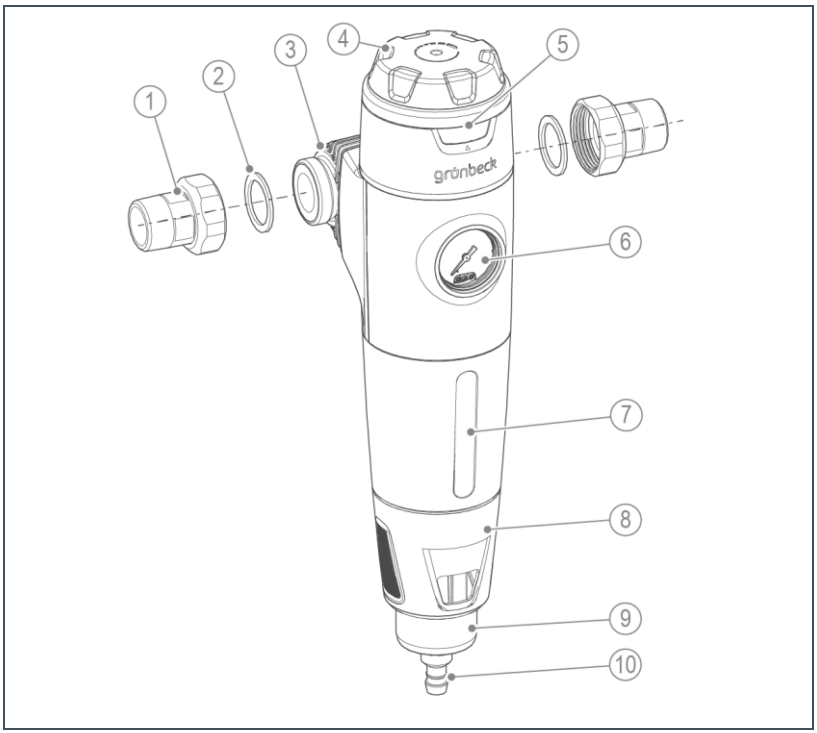
## 3.1 Intended use

- The backwash filters pureliQ:R and pureliQ:RD are designed for the filtration of drinking water.
- The backwash pureliQ:RD 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 backwash and the adjustment of the after-pressure on the withdrawal side, however, only works when applied in the positive pressure range.
- The filters can be used for positive pressure and negative pressure applications.
- 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.

### 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 | Water meter screw connection |
| 2 | Seal |
| 3 | Click connection flange |
| 4 | Pressure reducer handwheel |
| 5 | Maintenance ring with month indicator |

| | Designation |
|---|---|
| 6 | Pressure gauge |
| 7 | Inspection window |
| 8 | Backwash handwheel |
| 9 | Adapter for drain connection |
| 10 | Hose adapter |

## 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 µm are retained.

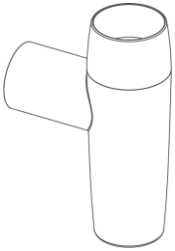
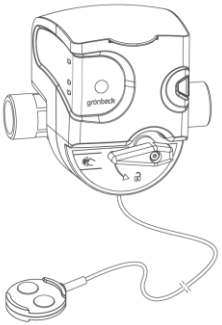
Depending on their size and weight, the foreign particles either stick to the filter element or they fall straight down into the filter cylinder.

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 reverse direction of standard filtration. Thanks to Grünbeck's innovative Vortex technology, particles sticking to the filter element are detached and washed out to the drain.

In the backwash filter pureliQ:RD, the flow-optimised pressure reducer, which is designed according to DIN EN 1567, additionally enables the outlet pressure on the withdrawal side to be set to 1 – 6 bar (factory setting: 4 bar).

## 3.4 Accessories

Your product can be retrofitted with accessories. Please contact your local Grünbeck representative or Grünbeck's headquarters in Hoechstaedt for details.

| Illustration | Product | Order no. |
|---|---|---|
|  | **Drain connection DN 50**<br>For professional assembly according to DIN EN 1717 with integrated siphon to discharge the backwash water to the drain. | **188 875** |
|  | **Safety device protectliQ:A20**<br>Product for protection against water damage in one- and two-family homes.<br>For other sizes, please inquire. | **126 400** |

# 4 Transport and storage

## 4.1 Transport

► Transport the product in its original packaging only.

## 4.2 Storage

► Protect the product from the following impacts when storing it:

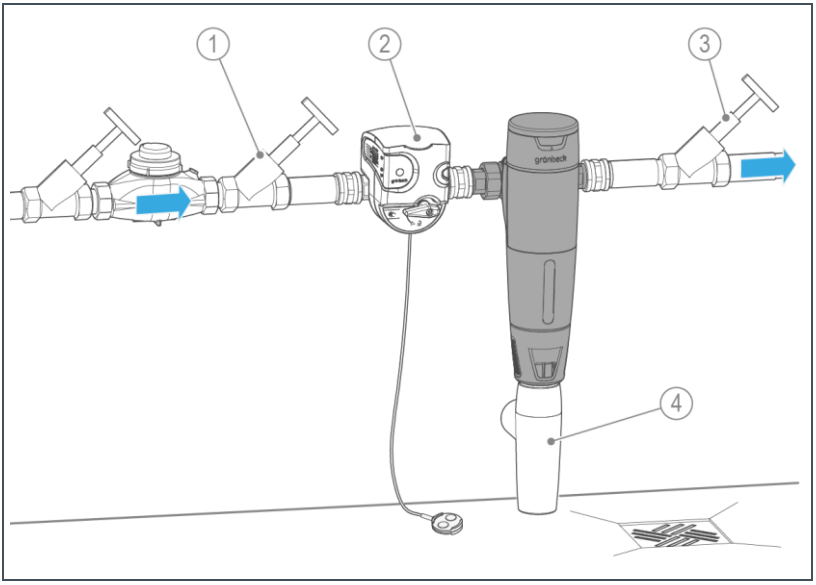
- Moisture, wetness
- Environmental impacts such as wind, rain, snow, etc.
- Frost, direct sunlight, severe heat exposure
- Chemicals, dyes, solvents and their vapours

# 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.

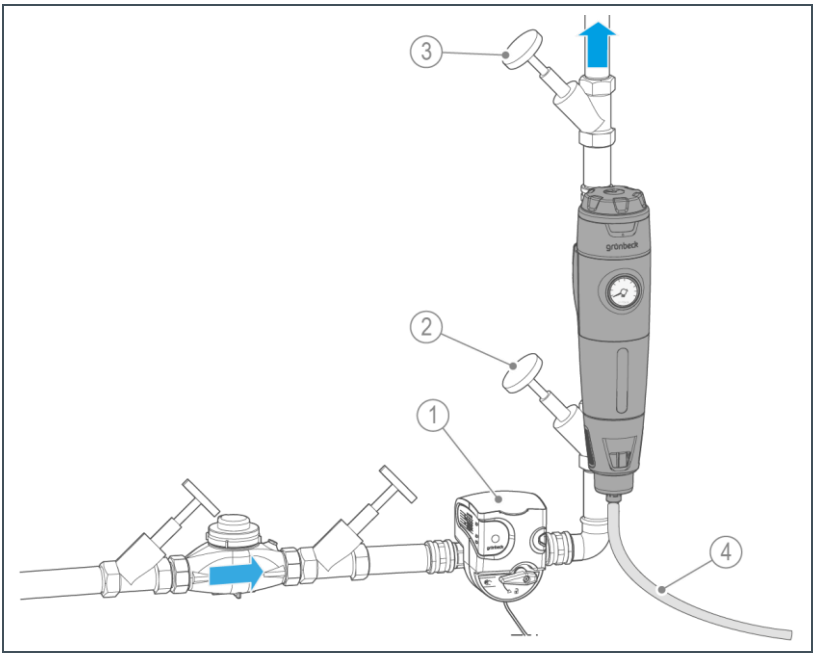
In accordance with DIN EN 806-2 and DIN EN 1717, the product is installed in the cold water pipe downstream of the water meter and upstream of distribution pipes and the appliances to be protected.

**Installation example in horizontal pipe**




| | Designation | | Designation |
|---|---|---|---|
| 1 | Inlet shut-off valve | 3 | Outlet shut-off valve |
| 2 | Safety device protectliQ | 4 | Drain connection DN 50 acc. to DIN EN 1717 (optional) |

## Installation example in vertical pipe

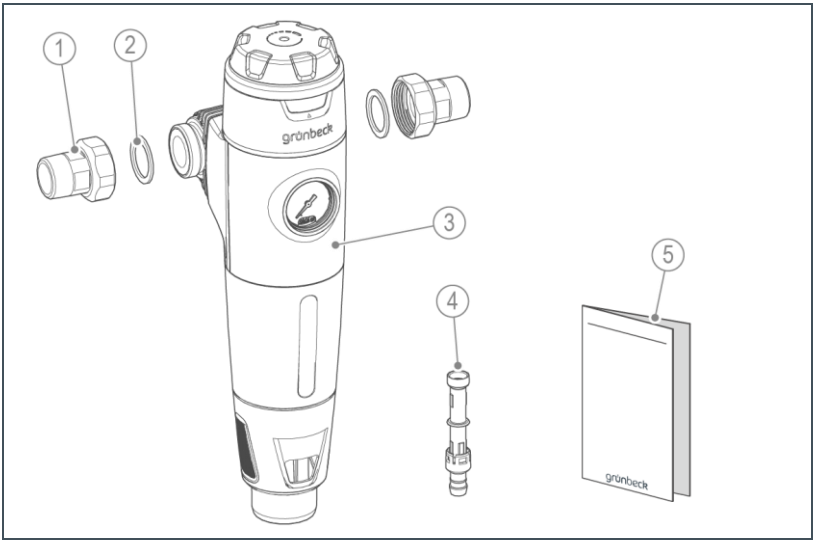



| | Designation | | Designation |
|---|---|---|---|
| 1 | Safety device protectliQ | 3 | Outlet shut-off valve |
| 2 | Inlet shut-off valve | 4 | On-site hose for hose adapter (optional) |

## 5.1 Requirements for the installation site

- The installation site must be frost-proof and ensure the filter's protection from chemicals, dyes, solvents and their vapours as well as from direct sunlight.
- The installation site must be away from heat sources (e.g. washing machines, boilers and hot water pipes).
- The installation room must provide a floor drain. If none is available, an appropriate safety device has to be installed to avoid water damage.
- The installation site must be adequately illuminated and ventilated.
- The installation site must be easily accessible for maintenance purposes.

## 5.2 Checking the scope of supply




| | Designation |
|---|---|
| 1 | Water meter screw connection |
| 2 | Seal |
| 3 | Backwash filter pureliQ:R or pureliQ:RD |

| | Designation |
|---|---|
| 4 | Hose adapter |
| 5 | Quick reference manual |

► Check the scope of supply for completeness and damage.

The transparent plastic film serves as transport and dirt protection.

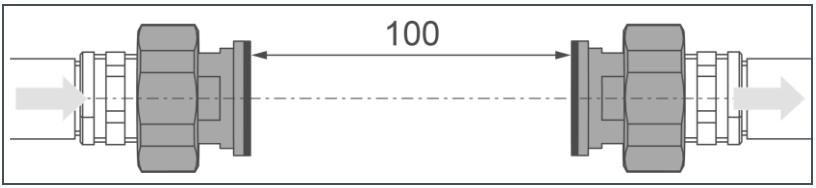
► Leave it on the product during assembly and the construction phase to prevent soiling of the white housing.

## 5.3 Water installation

The rotatable click-type connection flange allows the filter to be adapted to any flow direction given on site.

The filter can be mounted in a horizontal or vertical pipe.

### 5.3.1 Preparing the pipe

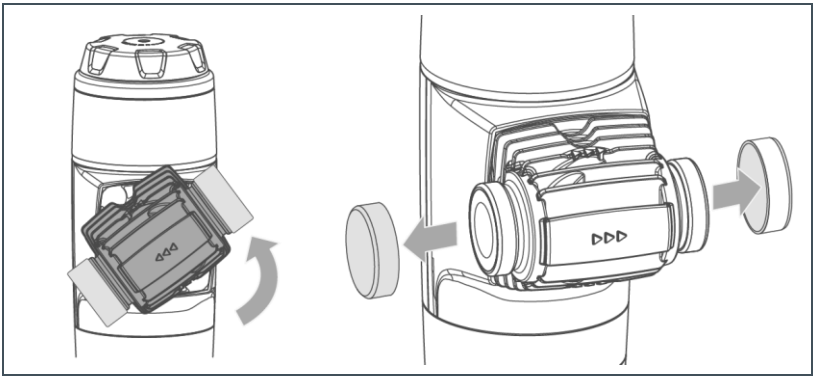



► Install the water meter screw connection in the pipe.

» The distance between the two seals must be 100 mm.

### 5.3.2 Installing the connection flange

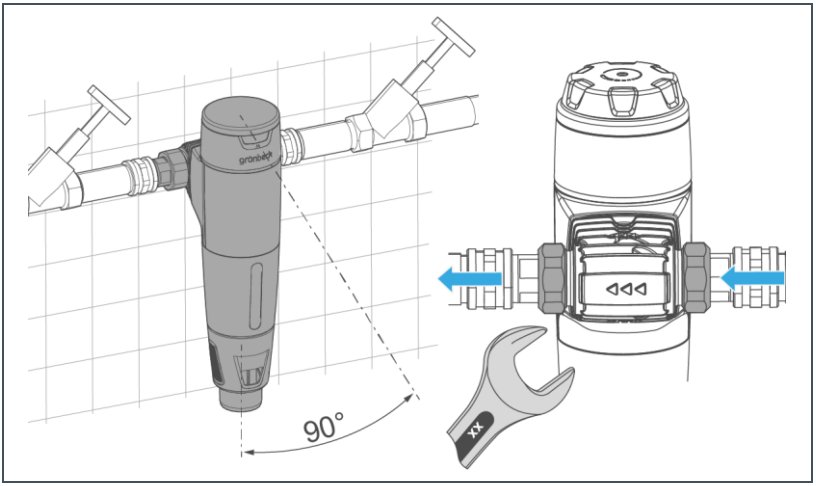
1. Check the flow direction given on site.
2. Leave the protective caps on the threads.



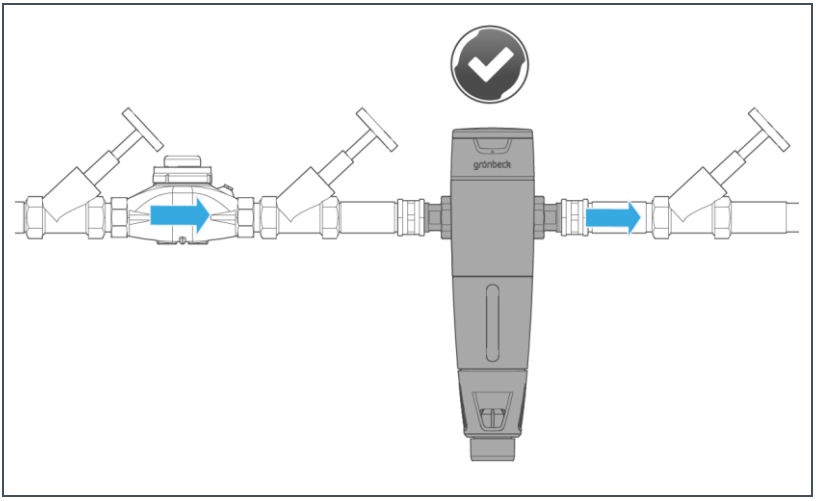
3. Rotate the click-type connection flange to the position suitable for your flow direction (refer to marking on the click-type connection flange).

» The arrow must match the water flow direction.

4. Remove the protective caps.




5. Tighten the click-type connection flange with the union nuts without applying tension.



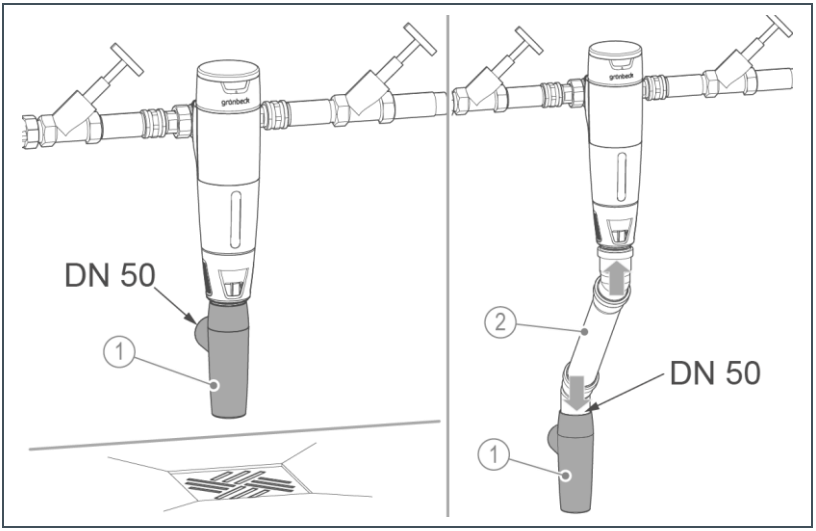

» The filter is mounted.

## 5.3.3 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.

### 5.3.3.1 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.



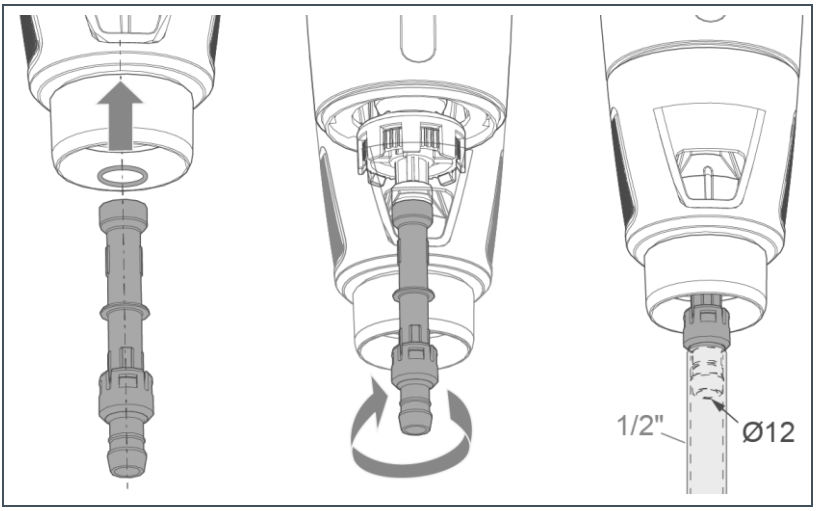

| | Designation | | Designation |
|---|---|---|---|
| 1 | Drain connection DN 50 acc. to DIN EN 1717 | 2 | Waste water pipe provided by client on site |

Refer to the installation instructions of the drain connection (order no. 100105420000).

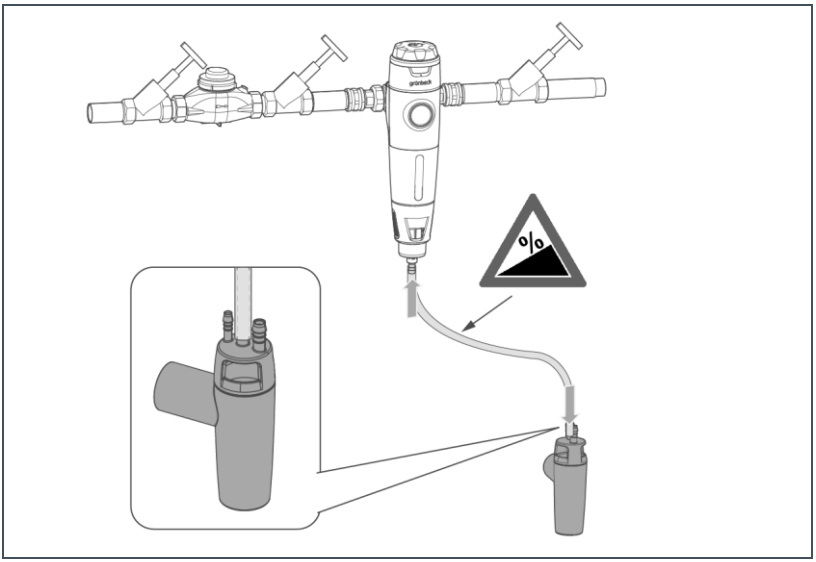
► Install the drain connection (not included in the scope of supply, refer to chapter 3.4).

► Install a waste water pipe towards the drain.

### 5.3.3.2 Backwash water discharge with hose connection




1. Mount the hose adapter on the filter.



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

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.

- Contamination of the filter by stagnated water.

► Lay the hose with a downward slope.

► After backwashing, check that the water drains completely.

► Should the water fail to drain completely: Connect the hose temporarily for backwashing.

► Dismantle the hose after backwashing.

**Alternative discharge of the backwash water**

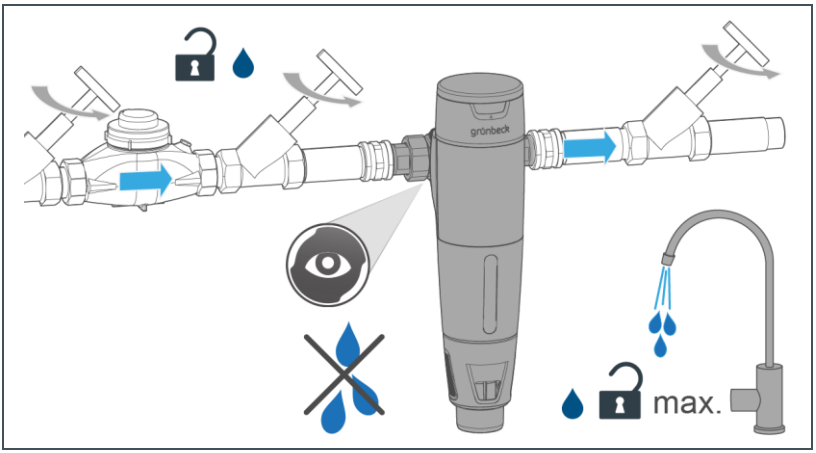
► Lay the hose to the discharge point (e.g. bucket, drain).

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

# 6 Start-up

The initial start-up of the product is only allowed to be carried out by the customer service.

## 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.

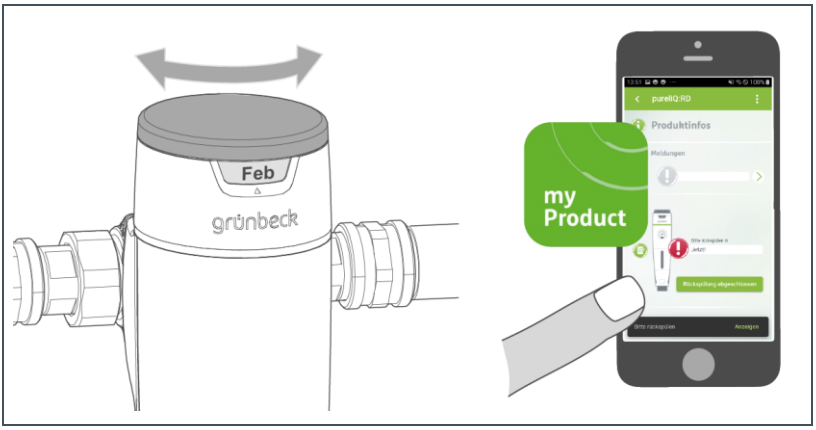
» The filter is vented.

3. Check the filter for leaks.
4. Enter the initial start-up/commissioning in the operation log (refer to chapter 13).

» The filter is in operation.

## 6.2 Setting the month indicator

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

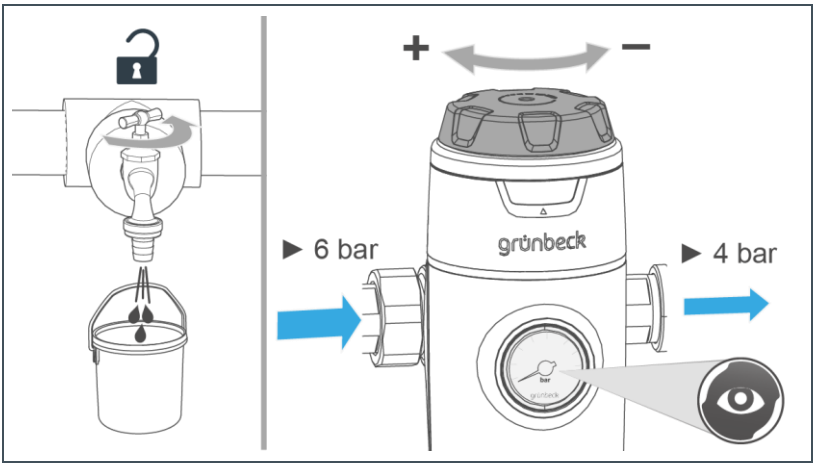



► Set the maintenance ring to the month of the next maintenance (alternatively, to the month of the next backwash – every six months at the latest).

## 6.3 Setting the pressure reducer (pureliQ:RD)

The factory setting for the pressure reducer is 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 holding pressure adjusts itself.

3. Read the actual holding pressure at 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).

# 7 Operation/Handling

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

- ► Inspect the filter at regular intervals (refer to chapter 8.3).
- ► Carry out a backwash regularly (refer to chapter 8.4.1).
- ► Flush the filter after a temporary shutdown (refer to chapter 10.1).

## 7.1 Installing Grünbeck's myProduct app

You can register your product using Grünbeck's myProduct app.

That way, you will receive a reminder to backwash the filter as well as additional information on your product.

- ► Download Grünbeck's myProduct app and install it on your mobile device.
- » Registering your product extends your warranty by 1 year.

# 8 Maintenance and repair

Maintenance and repair includes cleaning, inspection and maintenance 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.

► 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

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

► As owner/operating company, determine which components have to be inspected and maintained at which intervals (load-dependent). The intervals are subject to the actual conditions such as: water condition, degree of impurities, environmental impacts, consumption, etc.

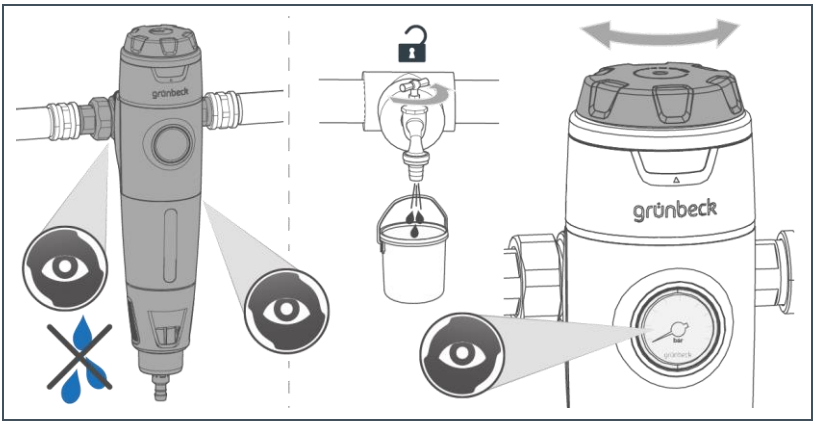
The interval table below shows the minimum intervals for the activities to be carried out.

| Task | Interval | Tasks |
|---|---|---|
| Inspection | 2 months | • Visual/functional check<br>• Read the pressure (for pureliQ:KD) |
| Maintenance | 6 months | • Backwash<br>• Condition and leak check<br>• Adjust the maintenance ring |
| | Annually as required | • Backwash<br>• Check O-rings/flat seals for wear and tear<br>• Check for tight fit |
| Repair | 5 years | • Recommendation: replace filter element, seals, backwash valve, spring assembly |
| | 10 years | • Recommendation: Replace the filter cylinder |

## 8.3 Inspection

You as owner/operating company may perform the regular inspections yourself.

► Conduct an inspection at least every 2 months as follows:




1. Check the installation for leaks and function.
2. For pureliQ:RD, read the static pressure (zero flow).
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

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.

**WARNING** Irregular backwash of the filter

- Health risk due to contamination of the drinking water.

► Comply with the intervals for inspection and backwash of the filter.

### 8.4.1 Semi-annual maintenance

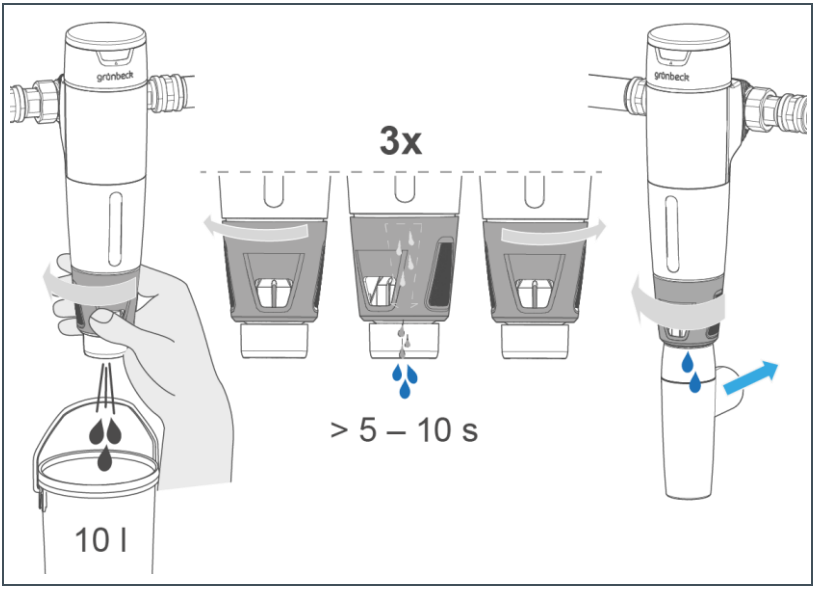
In order to carry out the semi-annual maintenance, proceed as follows:

#### 8.4.1.1 Filter backwash

During the backwash process, filtered pure water is still available.

We recommend repeating the backwash process 3 times.

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

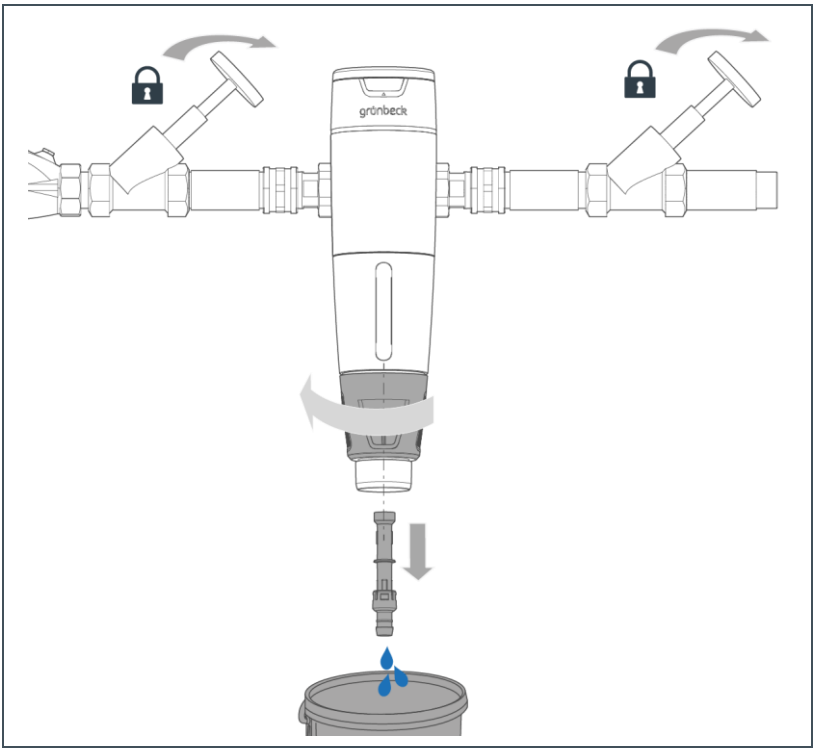



1. Turn the backwash handwheel to the left in the direction of the arrow as far as it will go.
2. Hold the backwash handwheel in this position for 5 – 10 seconds.
3. Turn the backwash handwheel to the right back to its initial position.
4. Set the date for the next maintenance (refer to chapter 6.2).

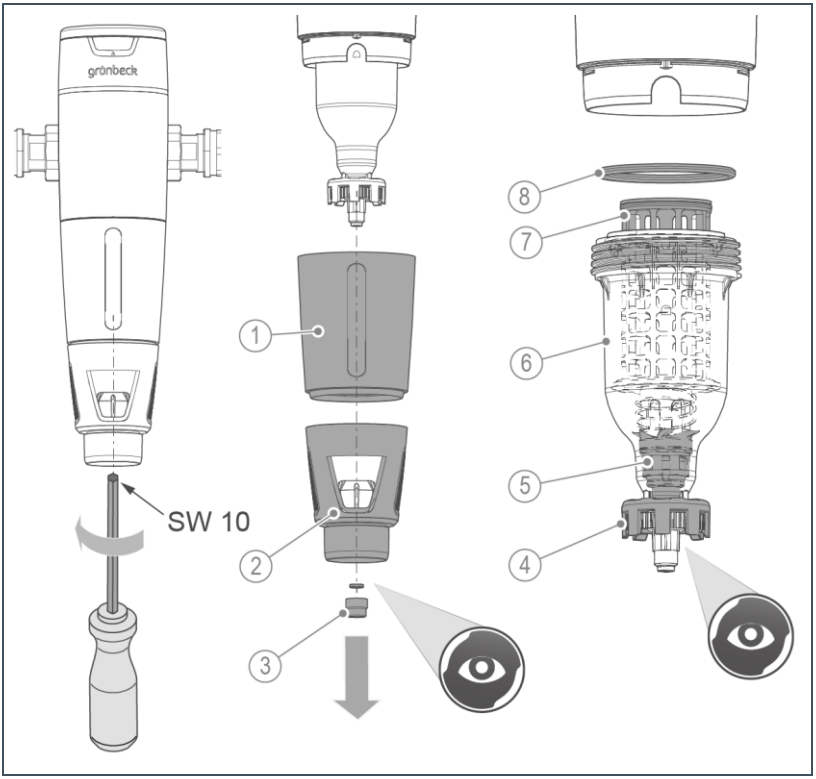
### 8.4.2 Annual maintenance as required

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

► Close the shut-off valves at the inlet and outlet.




1. Carry out a backwash to relieve the water pressure in the filter and in the water pipe.
2. Dismantle the drain connection or the hose adapter (if fitted).
3. Check the filter's tight fit in the pipe.




| | 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 |

4. Dismantle the backwash handwheel with the filter cylinder cover.
5. Unscrew the filter cylinder.

6. Check the O-rings and flat seals for wear and tear.
7. Check the spring assembly and backwash valve for smooth running and damage.
8. Check the filter element for damage and dirt deposits.
9. Replace worn components as necessary (refer to chapter 8.6).

► 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 must be replaced by qualified specialists only.

Wearing parts are listed below:

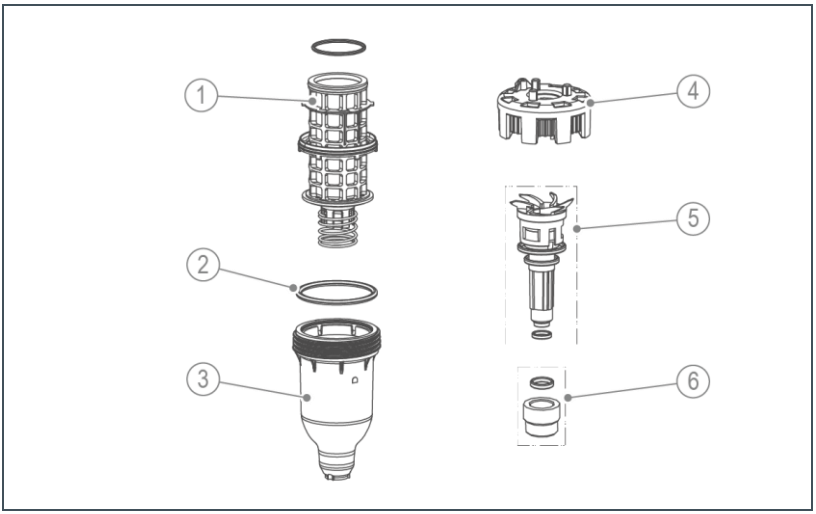
- Seals (O-rings), filter element, backwash valve

► Have the seals replaced in the event of leaks, damage or distortions.

► Have defective or worn components replaced (refer to chapter 8.7).

# 8.7 Service kits

## 8.7.1 Service kits for pureliQ:R

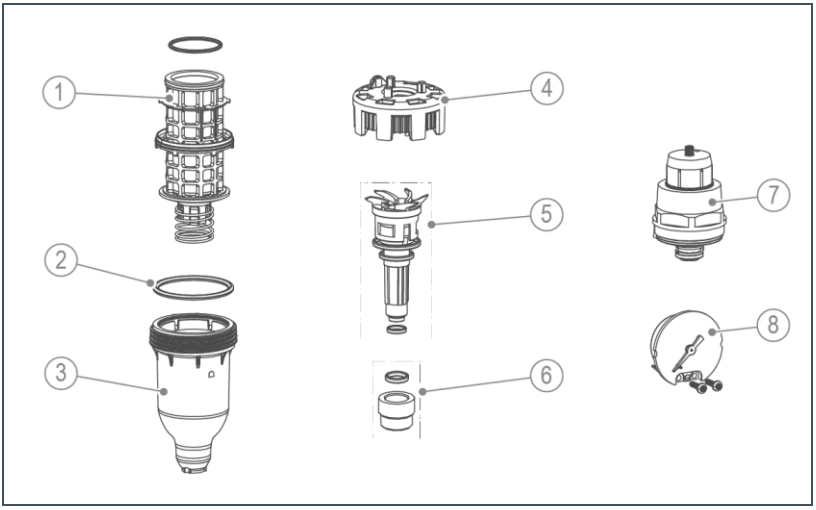



| | Designation |
|---|---|
| 1 | Filter element |
| 2 | O-ring filter cylinder |
| 3 | Filter cylinder |

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

| Designation | consisting of | Order no. | Recommended replacement interval |
|---|---|---|---|
| **Service kit I** | • Filter element 100 µm incl. seal<br>• O-ring filter cylinder<br>• Backwash valve incl. seals<br>• Spring assembly | **101 676e** | 5 years |
| **Service kit II** | • Service kit I<br>• Filter cylinder | **101 677e** | 10 years |

## 8.7.2 Service kits for pureliQ:RD




| | Designation |
|---|---|
| 1 | Filter element |
| 2 | O-ring filter cylinder |
| 3 | Filter cylinder |
| 4 | Spring assembly |

| | Designation |
|---|---|
| 5 | Backwash valve incl. seals |
| 6 | Fastening nut incl. seal |
| 7 | Pressure reducer |
| 8 | Pressure gauge |

| Designation | consisting of | Order no. | Recommended replacement interval |
|---|---|---|---|
| **Service kit III** | • Service kit I<br>• Pressure reducer<br>• Pressure gauge | **101 678e** | 5 years |
| **Service kit IV** | • Service kit III<br>• Filter cylinder | **101 679e** | 10 years |

| 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<br>(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 | Inappropriately long period of non-use (downtime) | ► Withdraw water for several minutes<br>► Carry out backwash |
| Solids contained in the filtered water | Inappropriately 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 |

| Observation | Explanation | Remedy |
|---|---|---|
| Water loss in the system (leakage) | Faulty joint | ► Check O-rings and seals for deformations or wear and tear<br>► Check filter head for damage<br>► Check connection flange for damage<br>► 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 Shut down

It is not necessary to put 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 ≤ 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).
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 and downstream of 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. Carry out a backwash.
5. Remove the filter from the pipe.
6. Close the gap in your drinking water pipes, e.g. by using an adjusting piece.

## 11.2 Disposal

► Comply with the applicable national regulations.

**Packaging**

**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 environment pollution.

► 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**

► Find out about local regulations on the separate collection of electrical and electronic products.

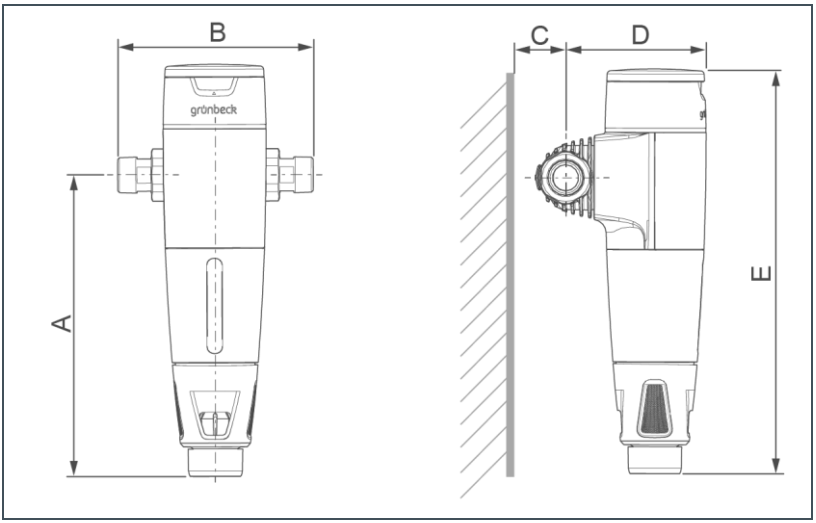
► Make use of the collection points available to you for the disposal of your product.

► 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.com.

# 12 Technical specifications

## 12.1 pureliQ:R

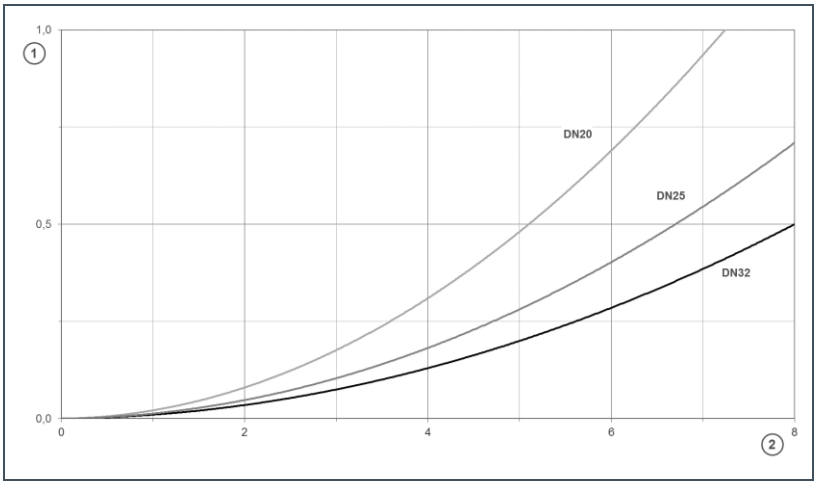



| Dimensions and weights | | | pureliQ R | | |
|---|---|---|---|---|---|
| | | | R20 | R25 | R32 |
| Nominal connection diameter | | | DN 20 | DN 25 | DN 32 |
| Connection diameter | | | ¾" | 1" | 1¼" |
| Drain connection | | | DN 50 | | |
| A | Installation height up to centre of connection | mm | 285 | | |
| B | Installation length with/without screw connection | mm | 185/100 | 182/100 | 191/100 |
| C | Distance to wall | mm | ≥ 50 | | |
| D | Installation depth up to centre of connection | mm | 135 | 135 | 145 |
| E | Total height | mm | 385 | | |
| | Empty weight | kg | 1.6 | 1.8 | 2.0 |
| | Operating weight | kg | ~ 2.1 | ~ 2.3 | ~ 2.5 |

| Performance data | | R20 | R25 | R32 |
|---|---|---|---|---|
| Nominal flow at ∆p 0.2 (0.5) bar | m³/h | 3.2 (5.1) | 4.2 (6.7) | 5.0 (8.0) |
| $K_V$ value | m³/h | 7.2 | 9.5 | 11.3 |
| Pore size | µm | 100 | | |
| Largest/smallest pore size | µm | 120/80 | | |
| Operating pressure | bar | 2 – 16 | | |
| Nominal pressure | | PN 16 | | |

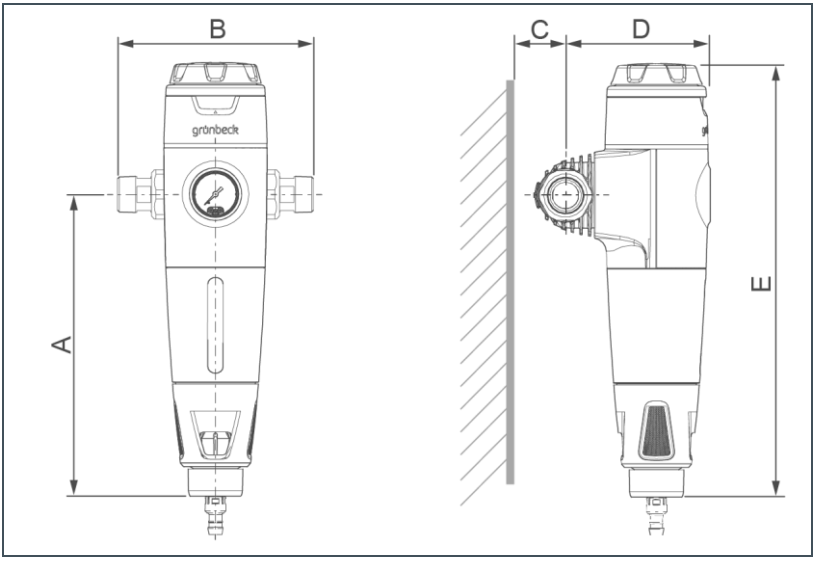
| General data | | R20 | R25 | R32 |
|---|---|---|---|---|
| Backwash water volume at an inlet pressure of 4 bar | l | ~ 4 | | |
| Water temperature | °C | 5 – 30 | | |
| Ambient temperature | °C | 5 – 40 | | |
| DVGW registration number | | NW-9301CT0031 | | |
| SVGW certificate number | | 1803-6727 | | |
| ÜA registration number<br>*The Office of the Vienna Provincial Government – City of Vienna* | | R-15.2.3-21-17496<br>R-15.2.1-22-17624 | | |
| **Order no.** | | **101 320** | **101 325** | **101 330** |

## 12.2 Pressure loss curves pureliQ:R




| | Designation | | Designation |
|---|---|---|---|
| 1 | Pressure loss in bar | 2 | Flow rate in $m^3/h$ |

## 12.3 pureliQ:RD




| Dimensions and weights | | | pureliQ:RD | | |
|---|---|---|---|---|---|
| | | | RD20 | RD25 | RD32 |
| Nominal connection diameter | | | DN 20 | DN 25 | DN 32 |
| Connection diameter | | | ¾" | 1" | 1¼" |
| Drain connection | | | DN 50 | | |
| A | Installation height up to centre of connection | mm | 285 | | |
| B | Installation length with/without screw connection | mm | 185/100 | 182/100 | 191/100 |
| C | Distance to wall | mm | ≥ 50 | | |
| D | Installation depth up to centre of connection | mm | 135 | 135 | 145 |
| E | Total height | mm | 405 | | |
| | Empty weight | kg | 1.8 | 2.0 | 2.2 |
| | Operating weight | kg | ~ 2.3 | ~ 2.3 | ~ 2.7 |

| Performance data | | RD20 | RD25 | RD32 |
|---|---|---|---|---|
| Flow rate as per DIN EN 1567 | m³/h | 2.3 | 3.6 | 5.8 |
| Pore size | µm | 100 | | |
| Largest/smallest pore size | µm | 120/80 | | |
| Operating pressure | bar | 2 – 16 | | |
| Nominal pressure | | PN 16 | | |

| General data | | RD20 | RD25 | RD32 |
|---|---|---|---|---|
| Backwash water volume at an inlet pressure of 4 bar | l | ~ 4 | | |
| Water temperature | °C | 5 – 30 | | |
| Ambient temperature | °C | 5 – 40 | | |
| DVGW registration number | | NW-9311CT0032 | | |
| SVGW certificate number | | 1803-6728 | | |
| ÜA registration number<br>*The Office of the Vienna Provincial Government – City of Vienna* | | R-15.2.3-21-17496<br>R-15.2.1-22-17624 | | |
| **Order no.** | | **101 370** | **101 375** | **101 380** |

# 13 Operation log

► Document the initial start-up and all maintenance activities.

**Backwash filter pureliQ: _____**

Serial no.: _____

## 13.1 Start-up log

| **Customer** | |
|---|---|
| Name | |
| Address | |

| **Installation/accessories** | | |
|---|---|---|
| Drain connection in accordance with DIN EN 1717 | ☐ Yes | ☐ No |
| Floor drain present | ☐ Yes | ☐ No |
| Safety device | ☐ Yes | ☐ No |

| **Operating values** | | |
|---|---|---|
| Water pressure raw water inlet | bar | |
| Water pressure raw water outlet | bar | |
| Residential water meter reading | m³ | |

| **Start-up** | |
|---|---|
| Company | |
| Service technician | |
| Work time certificate (no.) | |
| Date/signature | |

## 13.2 Maintenance

| Date | Work performed | Signature |
|---|---|---|
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