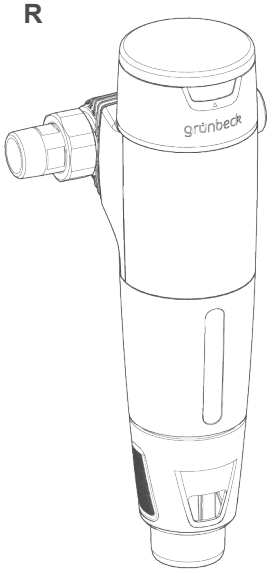
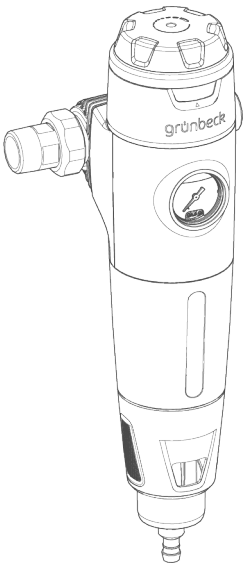
R



RD



Backwash filter pureliQ:R
Backwash filter pureliQ:RD

Intended use

The backwash filters pureliQ:R and pureliQ:RD are designed for the filtration of drinking water.

The backwash filter pureliQ:RD with pressure reducer in addition is suitable for the adjustment of the outlet pressure on the withdrawal side to maintain the maximum admissible operating pressure according to DIN EN 806-2.

The filters can be used for positive pressure and negative pressure applications. The backwash and the adjustment of the outlet pressure on the withdrawal side, however, only works when applied in the positive pressure range.

The filters are not suitable for circulation water that is treated with chemicals.

They are neither suitable for oils, greases, solvents, soaps and other lubricating media, nor for the separation of water-soluble substances.

The backwash filters pureliQ:R and pureliQ:RD are designed according to the stipulations of DIN EN 13443-1 and DIN 19628 and are intended for installation into drinking water pipes according to DIN EN 806-2 (installation directly 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.

Function

The unfiltered drinking water flows into the filter from the inlet side and then 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 means of the flow-optimised pressure reducer, designed according to DIN EN 1567, of the backwash filter pureliQ:RD, the outlet pressure on the withdrawal side can in addition be set to 1 - 6 bar (factory setting: 4 bar).

By turning the backwash mechanism 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.

The backwash process should be carried out for approx. 5 - 10 seconds. In case some particles still remain on the filter element, the backwash has to be repeated. Grünbeck recommends performing a backwash every 2 months.

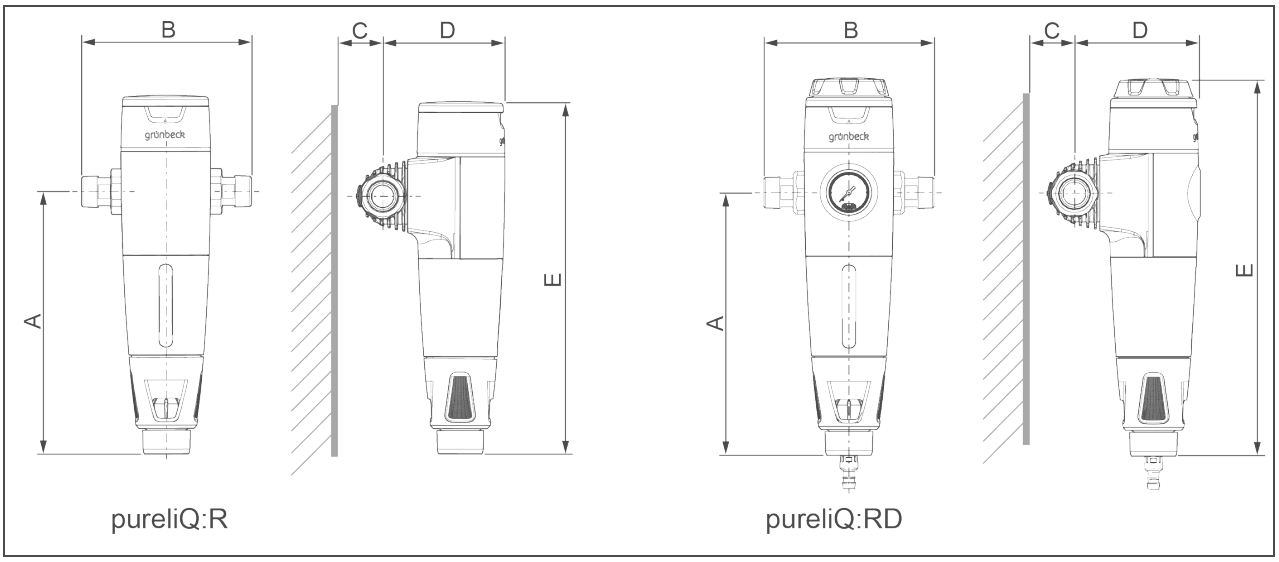
Design

- Closed, easy-to-clean system surface.
- Removable cover to protect the filter cylinder and filter element from UV light.
- Inspection window integrated in the cover to determine the degree of impurities in the filter element.
- Filter head made of pressure-resistant plastic with clearly legible interval indicator for backwash interval.
- Filter element made of stainless steel fabric.
- Rotatable click-type connection flange to easily set the flow direction
- Water meter screw connections made of dezincification-resistant brass
- Flexible drain connection with integrated free outlet
- Hose adapter for a clean backwash even without a drain connection on site
- In order to set and indicate the outlet pressure on the outlet side, a pressure reducer with pressure gauge is integrated in the filter head of the pureliQ:RD.
- All water contacting parts comply with the German Drinking Water Ordinance. Test regulations: KTW, DVGW W 270, DIN 50930-6.

Scope of supply

- Backwash filter pureliQ:R or pureliQ:RD, complete with filter element and pre-assembled click-type connection flange
- Water meter screw connection
- Seals
- Hose adapter
- Quick reference manual

Technical specifications I



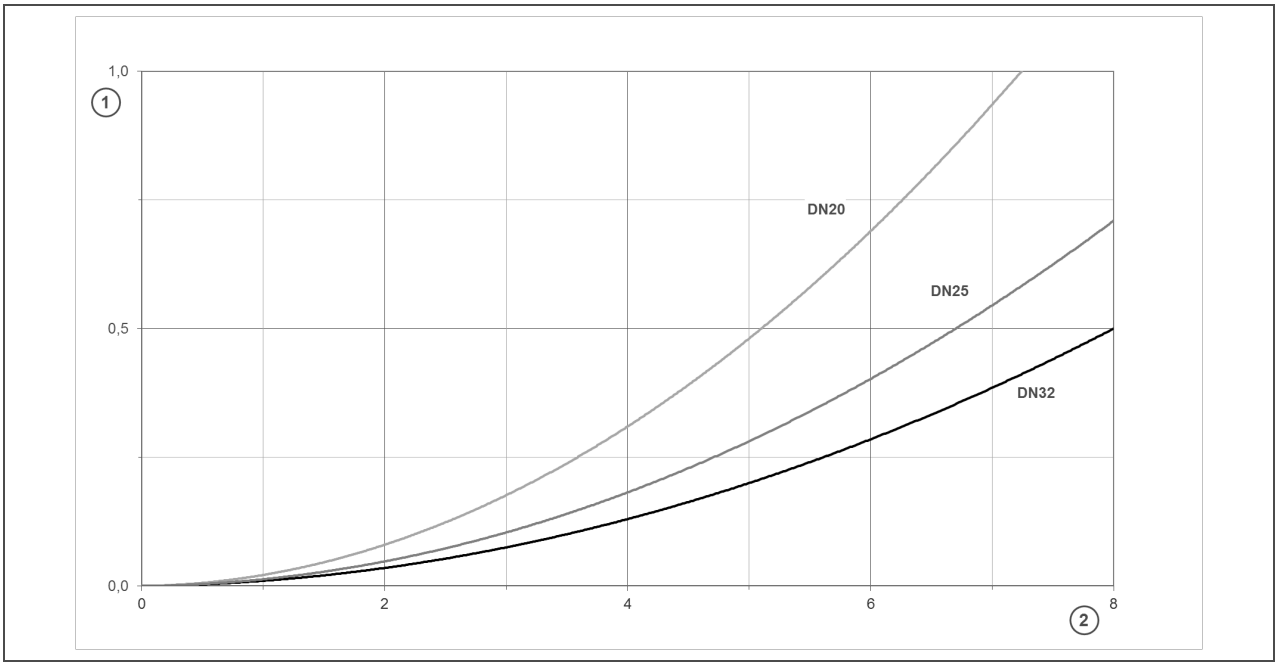
Dimensions and weights			pureliQ:R			pureliQ:RD		
			R20	R25	R32	RD20	RD25	RD32
Nominal connection diameter			DN 20	DN 25	DN 32	DN 20	DN 25	DN 32
Connection diameter			¾"	1"	1¼"	¾"	1"	1¼"
Drain connection			DN 50					
A	Height up to centre of connection	mm	285					
B	Installation length with/ without screw connection	mm	185/100	182/100	191/100	185/100	182/100	191/100
C	Distance to wall	mm	≥ 50					
D	Installation depth up to centre of connection	mm	135	135	145	135	135	145
E	Total height	mm	385			405		
Empty weight		kg	1.6	1.8	2.0	1.8	2.0	2.2
Operating weight		kg	~ 2.1	~ 2.3	~ 2.5	~ 2.3	~ 2.5	~ 2.7

Technical specifications II

Performance data		R20	R25	R32	RD20	RD25	RD32
Nominal flow at Δp 0.2 (0.5) bar	m³/h	3.2 (5.1)	4.2 (6.7)	5.0 (8.0)	-	-	-
Flow rate as per DIN EN 1567	m³/h	-	-	-	2.3	3.6	5.8
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					

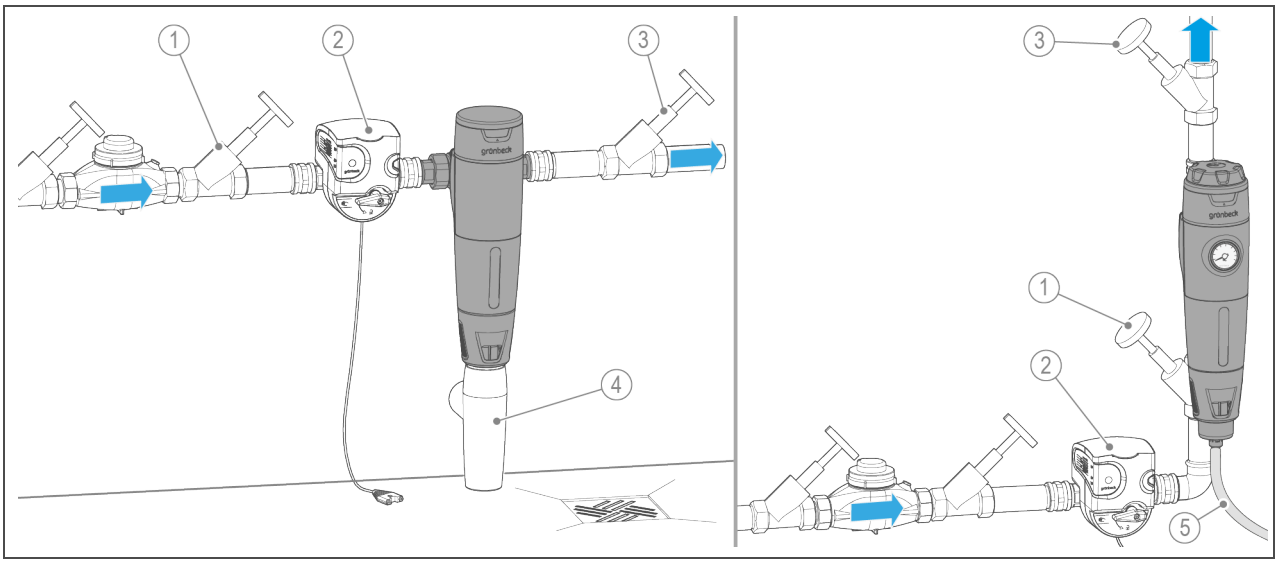
General data		R20	R25	R32	RD20	RD25	RD32
Backwash water volume at an inlet pressure of 4 bar		~ 4					
Water temperature	°C	5 – 30					
Ambient temperature	°C	5 - 40					
DVGW registration number		NW-9301CT0031			NW-9311CT0032		
SVGW certificate number		1803-6727			1803-6728		
ÜA registration number *The Office of the Vienna Provincial Government – City of Vienna*		R-15.2.3-21-17496 R-15.2.1-22-17624					
Order no.		**101 320**	**101 325**	**101 330**	**101 370**	**101 375**	**101 380**

Pressure loss curve of pureliQ:R



Item	Description	Item	Description
1	Differential pressure in bar	2	Flow rate in m³/h

Installation example



Item	Designation	Item	Designation
1	Inlet shut-off valve	2	Safety device protectliQ
3	Outlet shut-off valve	4	Drain connection DN 50 incl. siphon according to DIN EN 1717
5	Hose to be provided by client on site for hose adapter (optional)		

Installation requirements

Observe local installation directives, general guidelines and technical specifications.

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 well accessible for maintenance purposes.

A drain connection (DN 50) must be available to discharge the backwash water. If a waste water line with drain connection cannot be provided by the client on site, an optional hose adapter can be used.

The installation room must have a floor drain. If no floor drain is available, an appropriate safety device has to be installed in order to prevent water damage. We recommend using a protectliQ:A.

Accessories

Drain connection DN 50

Order no. 188 875

Drain connection according to DIN EN 1717 with integrated siphon to discharge the backwash water into the drain.

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