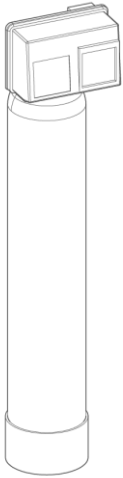


DN 25 (1")



DN 40 (1½")



Sales only  
after consultation  
with Grünbeck  
Water analysis  
required

## Gravel filter GENO-mat KF-Z

### Intended use

The filter systems GENO-mat KF-Z are used for dirt filtration when an unusually high dirt content makes filtration by means of cartridge filters or backwash filters unfeasible.

The quartz gravel used retains undissolved substances such as sand, etc.

Heavy metal compounds in dissolved form such as iron and manganese, however, cannot be removed.

### Function

#### Filtration

The raw water flows through the raw water inlet of the control valve into the filter cylinder. The filter material is flown through from top to bottom and foreign particles are retained in the process. The pure water is directed via the lower distributor nozzle and the riser pipe to the pure water outlet and into the pipe network.

#### Backwash

During the backwash process, the filter material is flushed from bottom to top. The filter material is loosened up and impurities are flushed out via the drain outlet.

For hygienic reasons, a backwash should take place every 6 days (factory-setting).

#### First filtrate

By an automatic switch-over of the control valve, the filter material is flushed from top to bottom. The first filtrate is discharged to the drain. Afterwards, the filter system is ready for operation.

#### Control unit

An electric timer controls the filter systems.

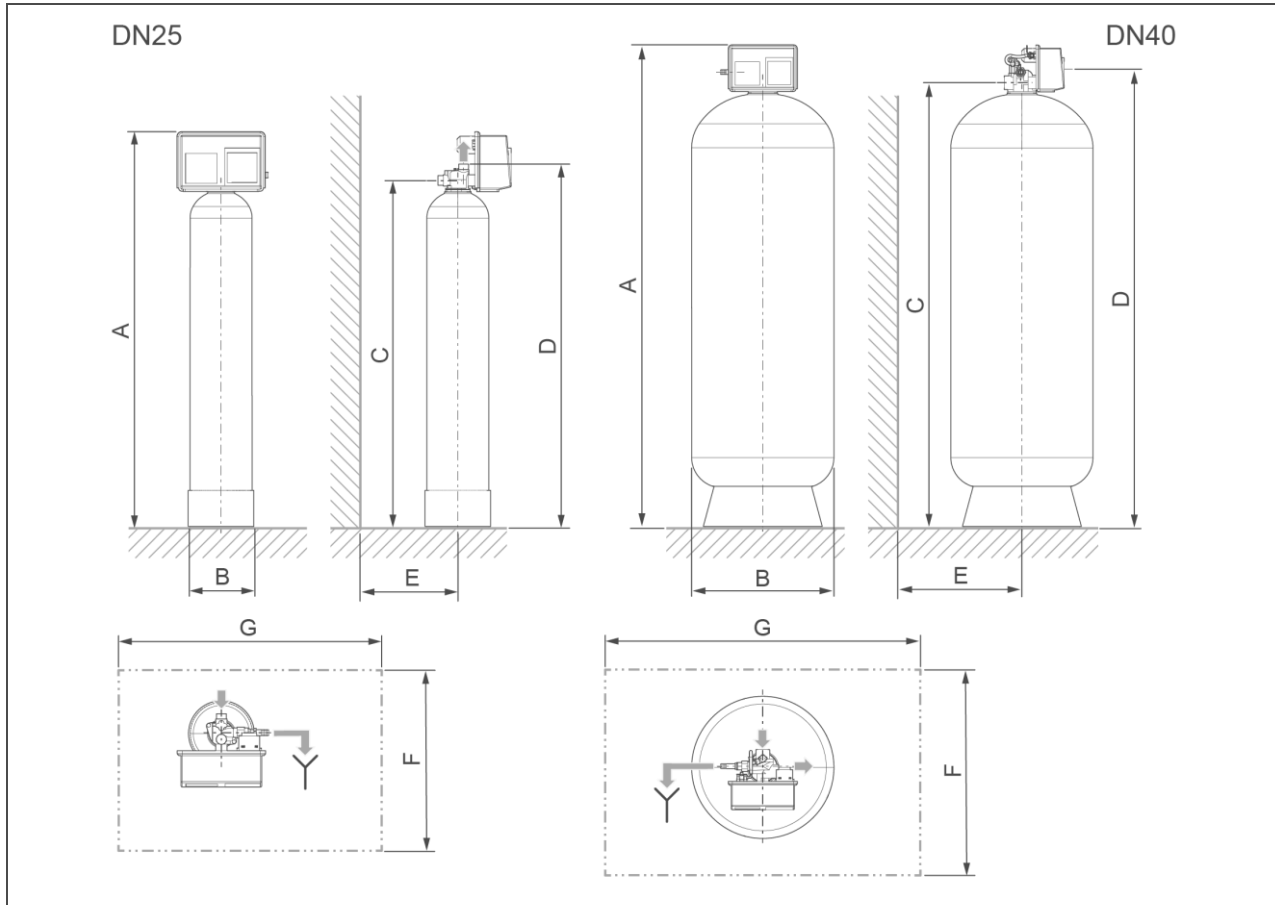
### Design

- Control valve made of red brass
- Time-dependent control via electric timer
- Power cable with Schuko plug for transformer
- Control valve with rotary discs to set the backwash interval
- Cover for protection against splash water and unauthorised interference
- Filter cylinder made of pressure resistant plastic with fixtures for water flow control and retention of filter material

### Scope of supply

- Filter cylinder including
  - Control valve
  - Riser pipe
- Filter material
- Drain hose
- Protective pipe cap
- Powder funnel
- Operation manual

## Technical specifications I



Dimensions and weights		25/13	30/14	40/18	50/19	60/20	
A	Total height	mm	1620	1620	1900	1870	2100
B	Bottle diameter	mm	260	340	420	550	620
C	Connection height Raw water	mm	1420	1420	1710	1680	1910
D	Connection height Pure water	mm	1470	1470	1735	1705	1935
E	Distance to wall	mm	230	280	300	365	405
F	Depth of foundation	mm	450	500	550	600	650
G	Length of foundation	mm	755	860	900	1030	1110
	Weight empty	kg	88	124	228	351	529
	Operating weight	kg	127	200	344	573	833

## Technical specifications II

Connection data		25/13	30/14	40/18	50/19	60/20
Nominal connection diameter		DN 25 (1" male thread)		DN 40 (1½" female thread)		
Drain connection		≥ DN 50			≥ DN 70	
Power supply	V~/Hz	230/50				
System operation with protective low voltage	V/Hz	24/50				
Protection/protection class		IP 22/□				
Connected load	VA	~ 10				

Performance data		25/13	30/14	40/18	50/19	60/20
Nominal pressure		PN 10				
Operating pressure	bar	2.5 – 6.0				
Nominal flow	m³/h	2.0	3.5	5.0	6.0	8.0
Backwash capacity	m³/h	2.3		3.4	5.7	
Backwash time	min	10				

Filling volumes and consumption data		25/13	30/14	40/18	50/19	60/20
Quartz gravel 3.15 – 5.6	kg	15	20	20	61	90
Quartz sand 1.0 – 2.2	kg	30	38	90	100	160
Filter sand 0.4 – 0.8	kg	30	50	90	150	230

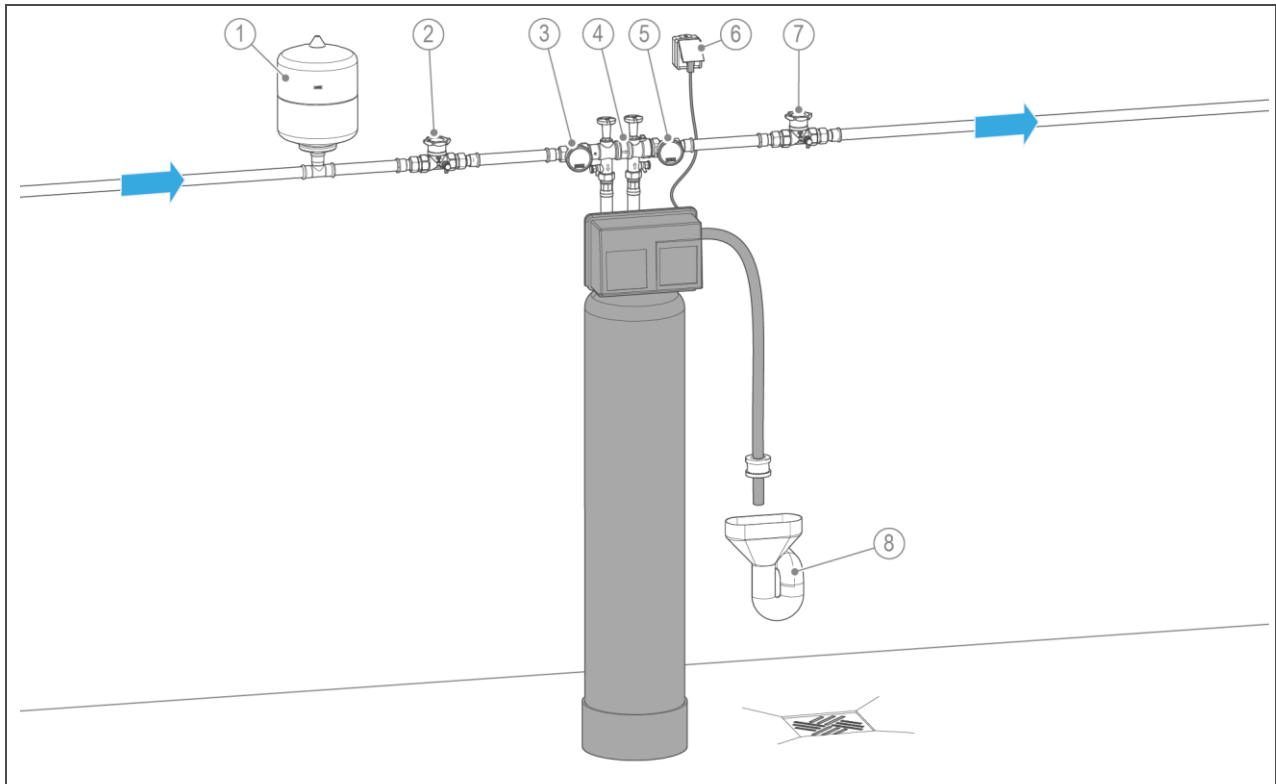
  

General data		25/13	30/14	40/18	50/19	60/20
Water temperature	°C	5 – 30				
Ambient temperature	°C	5 – 40				
Humidity (non-condensing)	%	≤ 90				

Order no.	25/13	30/14	40/18	50/19	60/20
	129 505	129 510	129 520	129 525	129 530

## Installation example



Item	Designation	Item	Designation
1	Diaphragm expansion tank	5	Pressure gauge Outlet pressure
2	Shut-off valve with sampling point	6	Power plug
3	Pressure gauge Inlet pressure	7	Shut-off valve with sampling point
4	Connection kit	8	Drain connection

## 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
  - ≤ 25 °C for applications in the drinking water sector
  - ≤ 40 °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 and ventilated
- Horizontal installation surface with sufficient load-bearing capacity to support the operating weight of the product
- Drain connection ≥ DN 70 from type 50/19
- Shut-off valves with sampling point upstream and downstream of the product
- Pressure gauge upstream and downstream of the product

### Water installation

- Floor drain or corresponding safety device with water stop function (e.g. safety device protectliQ)
- Salt water resistant lifting system in case the drain connection is located at a higher level
- Drain connection ≥ DN 50 up to type 40/18

### Electrical installation

- Schuko socket with permanent power supply (1.2 m max. from the control unit)

## Accessories

**Connection kit 1"-I  
(up to type 30/14)  
Order no. 185 505**

**Connection kit 1½"-I  
(from type 40/18)  
Order no. 185 540**

Connection kit for connection to the water pipe free of mechanical stress in the industrial sector

**Safety device  
protectliQ:A20  
Order no. 126 400**

Product to protect against water damage in one and two-family homes.

For other sizes, please inquire

## Consumables

**Filter filling GENO-mat KF-Z 25/13  
Order no. 129 506**

**Filter filling GENO-mat KF-Z 30/14  
Order no. 129 511**

**Filter filling GENO-mat KF-Z 40/18  
Order no. 129 521**

**Filter filling GENO-mat KF-Z 50/19  
Order no. 129 526**

**Filter filling GENO-mat KF-Z 60/20  
Order no. 129 531**

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## Contact

Grünbeck Wasseraufbereitung GmbH  
Josef-Grünbeck-Str. 1  
89420 Hoehstaedt  
GERMANY

 +49 9074 41-0

 +49 9074 41-100

info@gruenbeck.com  
www.gruenbeck.com

