

DN 25 (1")



DN 40 (1½")



Sales only
after consultation
with Grünbeck
Water analysis
required

Partial deacidification filter GENO-mat TE-Z

Intended use

The filter systems GENO-mat TE-Z are used for partial deacidification and calcium carbonate hardening in soft and acidic water. Binding free carbonic increases the pH value.

For the formation of a protective layer, we recommend installing an exaliQ dosing system downstream in order to dose exaliQ control.

Application limits

Iron content < 0.2 mg/l

Manganese content < 0.05 mg/l

Carbonate hardness ≤ 1.0 mol/m³ (3 °dH)

Carbonic acid content ≤ 35 mg/l

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 thoroughly flushed from top to bottom. This first filtrate is discharged to the drain. Afterwards, the filter system is ready for operation.

Control unit

An electric timer controls the filter systems.

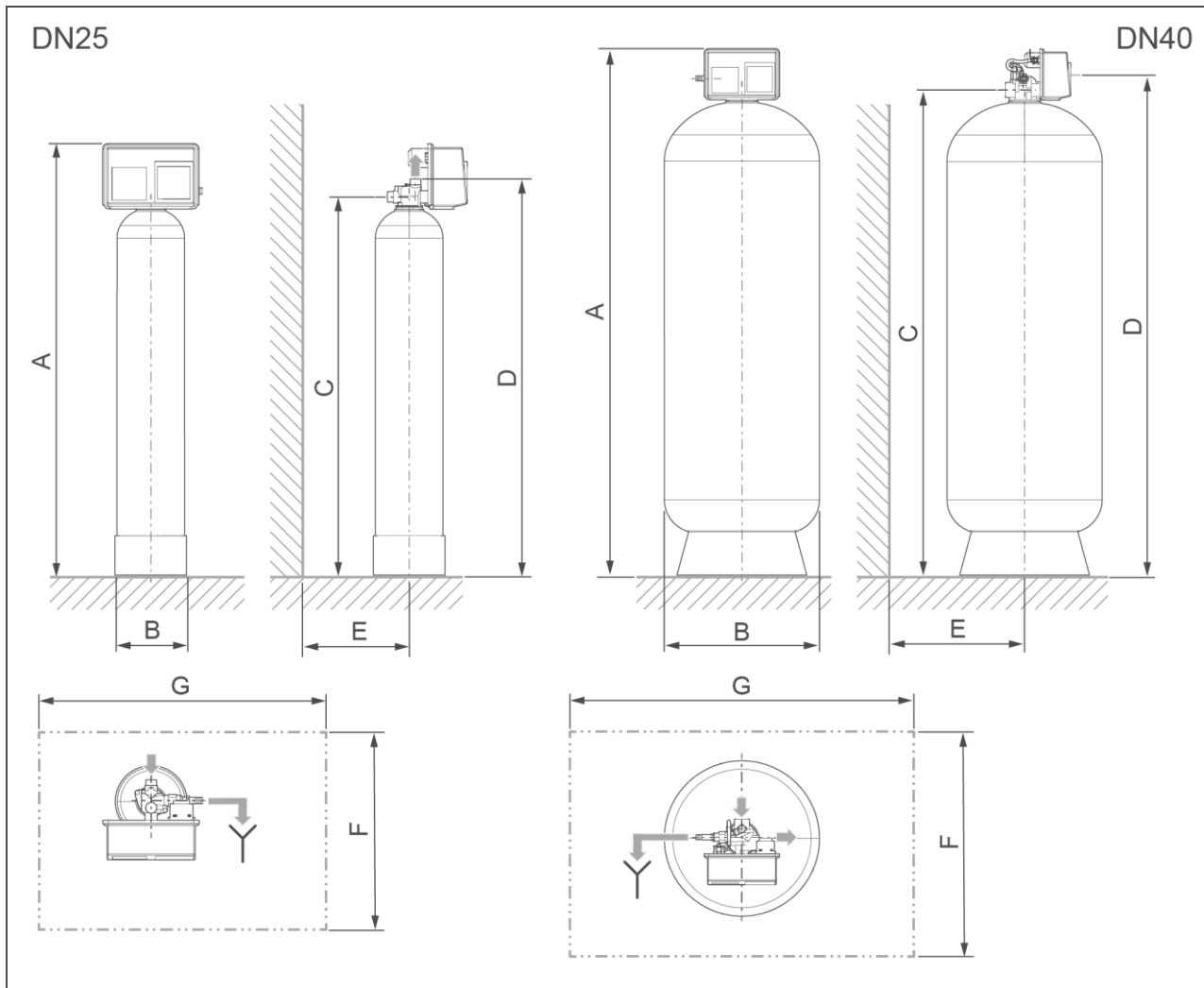
Design

- 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	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	53	106	168	290	399
	Operating weight	kg	93	163	257	456	633

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				

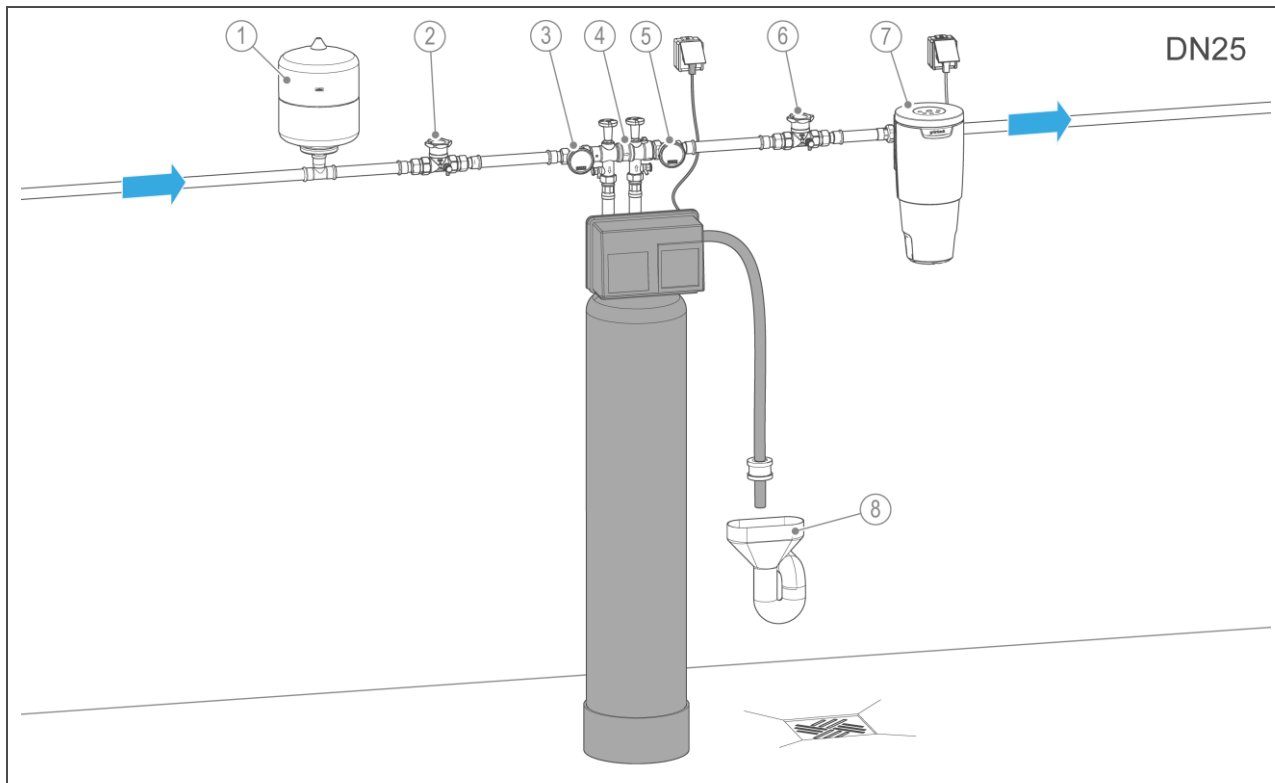
Performance data		25/13	30/14	40/18	50/19	60/20
Nominal pressure		PN 10				
Operating pressure	bar	2.5 – 6.0				
Nominal flow	m³/h	1.0	1.5	2.5	3.0	4.0
Backwash capacity	m³/h	2.3		3.4	5.7	
Backwash time	min	10				

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	30	30
Hydrolit-Ca 1.0 – 3.0	kg	25	70	120	220	320

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
	129 855	129 860	129 870	129 875	129 880

Installation example



Item	Designation	Item	Designation
1	Diaphragm expansion tank	5	Pressure gauge Outlet pressure
2	Shut-off valve with sampling point	6	Shut-off valve with sampling point
3	Pressure gauge Inlet pressure	7	exaliQ dosing system
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 TE-Z 25/13
Order no. 129 856**

**Filter filling GENO-mat TE-Z 30/14
Order no. 129 861**

**Filter filling GENO-mat TE-Z 40/18
Order no. 129 871**

**Filter filling GENO-mat TE-Z 50/19
Order no. 129 876**

**Filter filling GENO-mat TE-Z 60/20
Order no. 129 881**

**Water test kit for pH value
4.5 – 10**

Order no. 170 148

Water test kit to quickly check the pH value

Contact

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

 +49 9074 41-0

 +49 9074 41-100

info@gruenbeck.com
www.gruenbeck.com

