

Euro system separation device GENO-G5

Intended use

The Euro system separation device GENO-G5 is a safety device to protect the drinking water network from liquids up to and including hazard class 5 in accordance with DIN EN 1717.

The system offers the highest class of protection and reliably prevents backflow, back pressure and back siphonage of modified drinking water into the drinking water network.

The GENO-G5 system is particularly suited for use in the dental sector, supplying dental treatment units.

Mode of operation

Via a float valve with "free outlet", the water flows into the supply tank. The volume-proportional make-up water feed with flow restrictor to a large extent prevents the entry of air into the water. The supply tank is dirt-proof, as it does not feature any orifices at the top or on the side.

The pressure booster pump is frequency-controlled via a pressure sensor and keeps the set pressure stable. In addition, the diaphragm expansion tank moderates pressure fluctuations in case of major changes in the flow rate and reduces the switching frequency in case only small amounts are withdrawn. The float switch protects the pump from running dry. The flow restrictor on the outlet side prevents the withdrawal volume from exceeding the make-up water volume and thus

prevents supply interruptions due to the dry-run protection responding.

LEDs at the pump controller inform on voltage supply, operating mode and alarm status. A voltage-free fault signal output (NCC) is available.

When the power supply is switched on, the optional flushing device flushes the stagnating water to the drain. The duration of the flushing process can be set at the potentiometer (1 – 100 seconds).

In dental practices, this allows automatic flushing after periods of standstill, e.g. over night, after weekends or holidays, when mains is switched on (switching on the main switch of the dental practice).

In other fields of application, the flushing can, for example, be activated by means of a timer provided by others on site.

Design

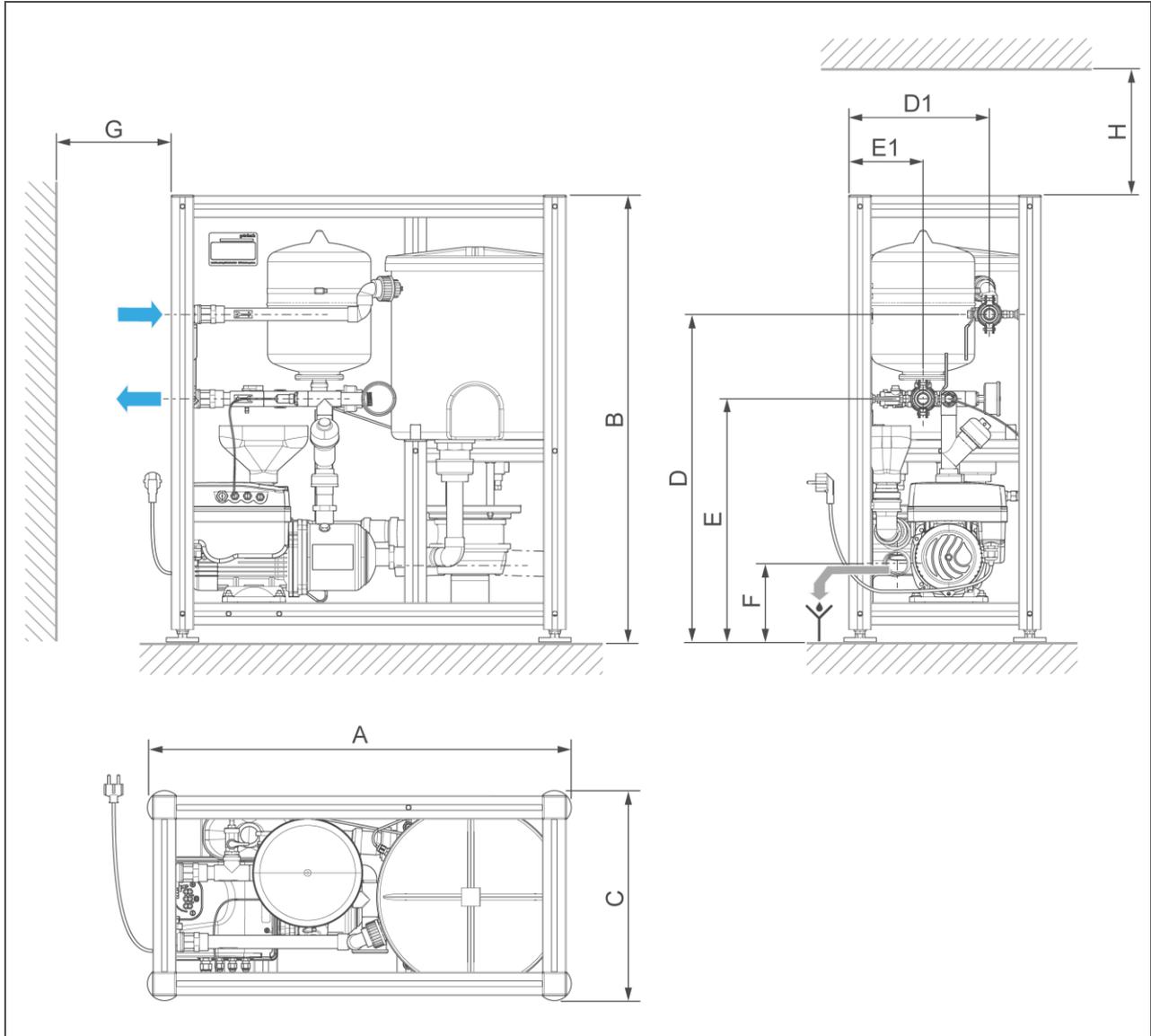
- Anodised aluminium system rack to house all system components, with levelling feet to compensate for uneven floors.
- Safety device with free outlet, DIN EN 13077, Family A, Type B, DN 20, consisting of:
 - Supply tank with make-up water feed
 - Overflow and drain valve with waste water discharge
- Pressure booster system consisting of:

- Pump with dry-run protection, fault signal output, non-return valve, pressure gauge, pressure sensor and flow restrictor
- Diaphragm expansion tank (8 litres)
- Sampling valve with waste water discharge
- Connections and waste water discharge for optional flushing device
- Water inlet and outlet with shut-off valves
- Waste water outlet as HT pipe connection with waterless odour and vermin barrier
- Connection cable with Schuko power plug (2 m)

Scope of supply

- Euro-system separation device GENO-G5 as compact system, ready for connection
- Operation manual

Technical specifications I



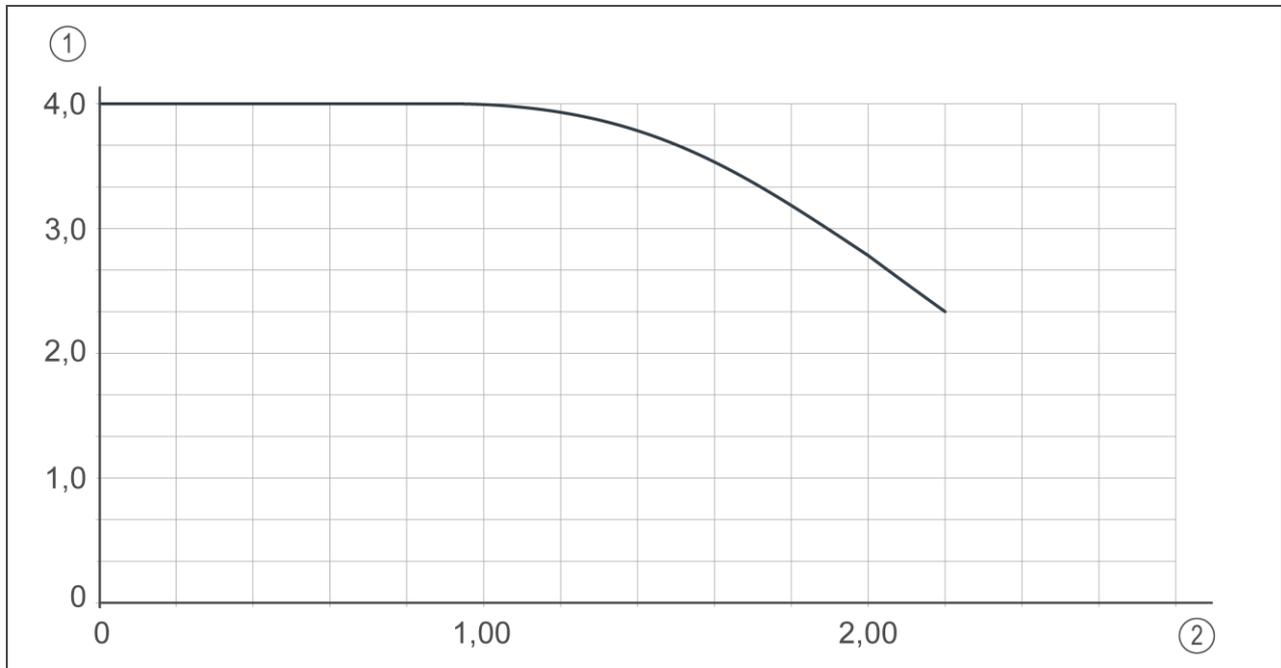
Dimensions and weights			GENO-G5
A	System width	mm	800
B	System height	mm	890 (885 – 900)
C	System depth	mm	390
D	Connection height Raw water inlet	mm	650
D1	Connection depth Raw water inlet	mm	280
E	Connection height Outlet to consumer	mm	480
E1	Connection depth Outlet to consumer	mm	150
F	Connection height Waste water to drain (rotatable connection direction)	mm	160
G	Clearance for motor fan and connections	mm	~ 200
H	Clearance above the system (for maintenance purposes)	mm	~ 500
Operating weight		kg	~ 78
Empty weight		kg	~ 46
Shipping weight		kg	~ 54

Technical specifications II

Connection data		GENO-G5
Nominal connection diameter Raw water inlet		DN 20 (R $\frac{3}{4}$ " female thread)
Nominal connection diameter Outlet to consumer		DN 20 (R $\frac{3}{4}$ " female thread)
Drain connection		DN 50
Rated voltage	V	210 – 240
Rated frequency	Hz	50 – 60
Rated input (operation)	kW	≤ 1.1
Power supply	V/Hz	230/50
Protection/protection class		IP 55/⊕
Performance data		GENO-G5
Nominal pressure	PN	10
Rated pressure	MPa/bar	1.0/10
Operating pressure (flow pressure)	bar	1.0 – 6.0
Setting pressure of pressure booster pump	bar	4.0
Nominal flow	m 3 /h	2.0
Consumables (optional flushing device)		GENO-G5
Flushing water volume	l/min	≤ 14
Adjustable flushing duration	s	1 – 100
General data		GENO-G5
Water temperature	°C	5 – 35
Ambient temperature	°C	5 – 40
Humidity (non-condensing)	%	≤ 70
DVGW registration number		AS-0398BS0294
Order no.		134 100

Technical specifications III

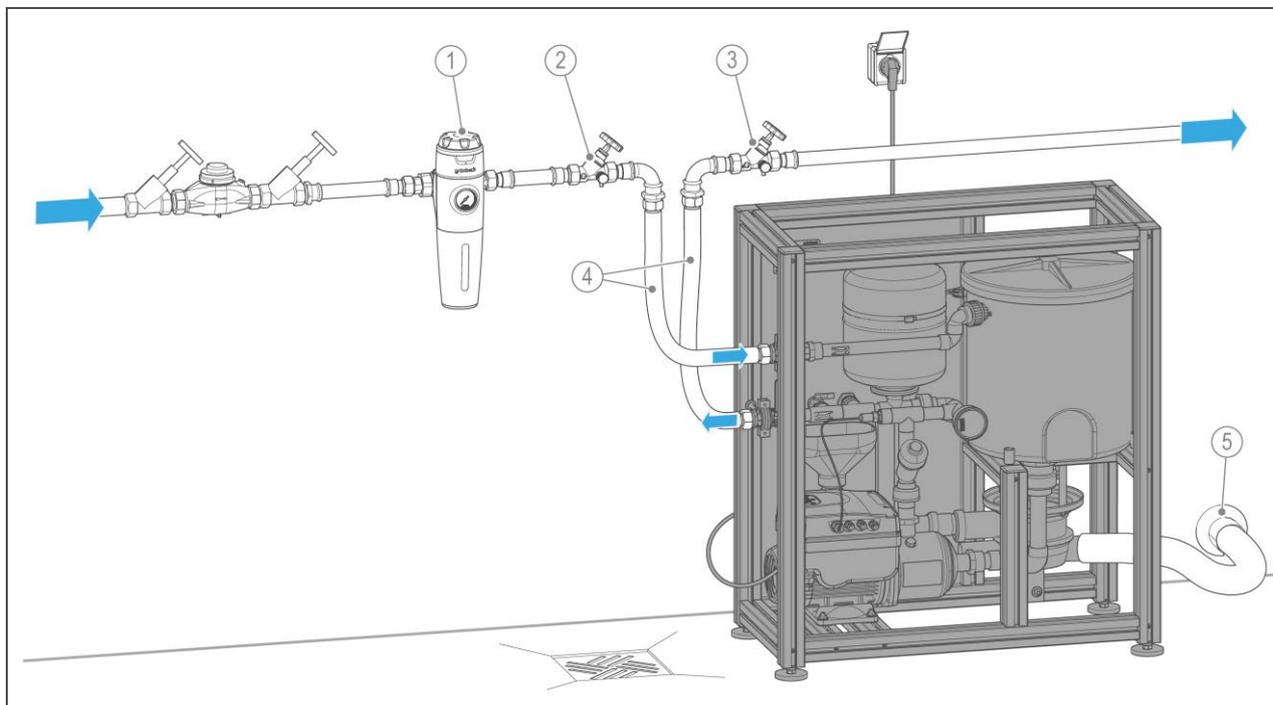
System characteristic GENO-G5



Item	Description	Item	Description
1	Pressure in bar	2	Flow in m³/h

Note: Valid with built-in flow restrictor in the water outlet (as delivered)

Installation example



Item	Designation	Item	Designation
1	Drinking water filter pureliQ:KD	2	Inlet shut-off valve
3	Outlet shut-off valve	4	Connection kit GENO-G5
5	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
- Protection from dust, acids, corrosive and explosive gases
- Ambient temperature and radiation temperature in the immediate vicinity $\leq 25\text{ °C}$
- 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

Water installation

- Drinking water filter installed upstream and pressure reducer, if necessary (e.g. fine filter pureliQ:KD)
- 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 $\geq \text{DN } 50$
- Shut-off valves and possibility of sampling upstream and downstream of the product
- Recommendation: Installation of a GENODOS DM-B dosing system downstream for automatic disinfection

Electrical installation

- Schuko socket with permanent power supply (approx. 1.2 m max. from the control unit)
- The optional flushing device requires a second socket (e.g. if the fault signal output of the pump is evaluated during a power failure)

Accessories

Flushing device for GENO-G5 Order no. 134 805

Solenoid valve with electronic timer pulser and 1.5 m connection cable with Schuko power plug as adapter plug

Connection kit GENO-G5 Order no. 134 810

2 Corrugated connection pipes (800 mm) made of stainless steel with seals and connection pipes R $\frac{3}{4}$ " male thread

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

