

Fig. 1: GENODOS dosing system DM-B 6

GENODOS dosing system

DM-B 6
DM-B 10
DM-B 20
DM-B 30

Designated application

The GENODOS dosing systems DM-B are designed for the dosing of GENO-Bakttox in drinking and industrial water sector.

GENO-Bakttox is used for the quick disinfection of drinking and process water as well as for the disinfection of pipes, water storage tanks, filter systems, well and spring tapings. GENO-Bakttox is mainly used where common disinfectants either fail (e. g. GENO-Chlor A in case of high pH values) or have an adverse effect due to undesired side effects (e. g. odours, formation of ammonium compounds, THMs or bromates).

After disinfection by means of GENO-Bakttox, the rate of renewed bacterial growth is considerably lower than if conventional disinfectants are used.

The volume of the GENO-Bakttox dosing is subject to the total volume and the composition of the water to be disinfected.

According to the German Drinking Water Ordinance (TrinkwV 2001), dosing volumes of 0.2 mg/l ClO₂ are admissible for disinfection dosing (standard dosing).

In general, GENO-Bakttox is still effective in the drinking water after a period of 48 hours. As a rule, a concentration of 0.1 mg/l of ClO₂ is still adequate for the effective deactivation of micro-organisms contained in the drinking water.

Please take the usual precautions when handling GENO-Bakttox. When working with GENO-Bakttox, wearing protective goggles and rubber gloves is mandatory.



Attention! The simultaneous use of other disinfectants is prohibited.

Function

When water is withdrawn, the water meter measures the water volume flowing through and then - according to the pulse interval of the water meter - transmits the control pulses to the electronics of the dosing pump. The electronics unit controls the dosing pump. Thanks to the volume-controlled dosing of the disinfecting solution, a constant drinking water quality can be ensured.

By means of a suction lance with integrated empty signal, the GENO-Bakttox solution is sucked directly from the disposable canister.

By means of the dosing pump, the sucked in dosing solution is delivered into the drinking water pipe via the dosing line and the dosing valve.

The electric level monitoring visually indicates the required replacement of the canister by means of the yellow LED on the control electronics and automatically stops the operation of the pump, if required. As a pre-warning signal, the yellow LED is flashing and the pump continues dosing. If the tank is empty, the LED is illuminated permanently and the dosing pump stops dosing.

Installation requirements

Warning! When using disinfection processes, the materials used on site must be checked for their resistance to chemicals and corrosion.

The installation site must be frost-proof and ensure the system's protection from chemicals, dyes, solvents and vapours. The ambient temperature should not exceed a maximum of 20 °C.

Prior to the installation of dosing systems and water softeners, dirt particles have to be removed from the water by means of a fine filter (DIN 1988, DIN 50930). In case water heaters (boilers, flow-through heaters, etc.) are installed downstream, a non-return valve must be installed. As the water meters of the dosing systems feature an integrated non-return valve, they must not be installed between hot water heaters and their relief pressure valves.

The electric connection must carry a constant voltage of 230 V 50/60 Hz and must not be connected to the light switch.

According to DIN EN 1717, dosing systems used in drinking water treatment need to be secured by means of a system separator if they are connected to the public water supply.

Scope of supply

Dosing system consisting of:
Self-priming, continuously adjustable membrane dosing pump with synchronous motor 230V / 50/60 Hz, self-deaerating against pressure. Connection options for empty signal, external activation and voltage-free fault signal output. Pump is pre-set and under seal. Pressure maintaining valve, water meter, incl. pulse cable for GENODOS-pump and injection valve. Gas-tight suction lance with integrated pre-alarm signal.

DM-B 6 dosing system, pre-assembled on mounting plate, dosing systems DM-B 10 – DM-B 30 consisting of individual components (pump, pressure maintaining valve, suction lance, water meter).

GENODOS DM-B 6 dosing system
Order no. 163 820

GENODOS DM-B 10 dosing system
Order no. 163 825

GENODOS DM-B 20 dosing system
Order no. 163 830

GENODOS DM-B 30 dosing system
Order no. 163 835

Accessories

Also refer to technical information "Accessories for GENODOS-pumps"
Order no. 118 950

Test kit for chlorine dioxide
0.02 – 0.55 ppm
Order no. 170 430

Consumables

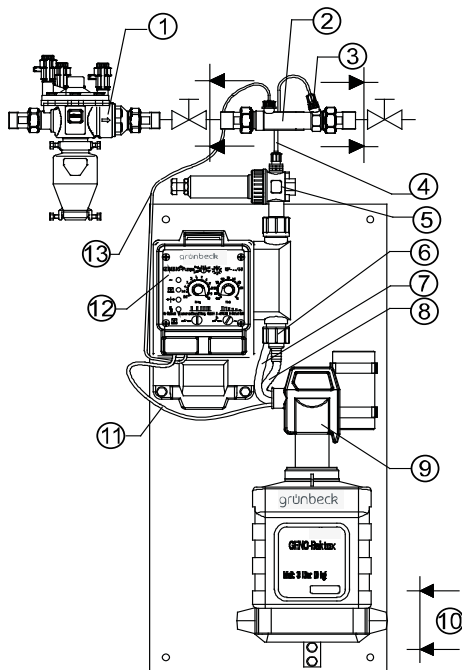
GENO-Bakttox 3 l canister (DM-B 6)
Order no. 170 450

GENO-Bakttox 10 kg container (DM-B 10/20/30)
Order no. 170 460

GENO-Bakttox 20 kg container (DM-B 10/20/30)
Order no. 170 470

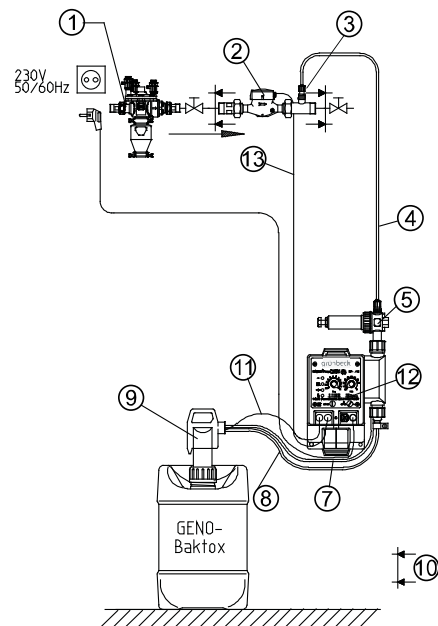
Technical specifications/Dimensions		GENODOS dosing system			
		DM-B 6	DM-B 10	DM-B 20	DM-B 30
System type					
Connection data					
Nominal connection diameter of water meter		R 1"/ DN 25	R 1 1/4"/ DN 32	R 1 1/2"/ DN 40	R 2"/ DN 50
Electrical data		230 V/50/60 Hz/18/21 W			
Protection/Protection class		IP 54/Ⓜ			
Performance data					
Nominal flow Q_N	m ³ /h	3	5	10	15
Maximum admissible flow Q_{max}	m ³ /h	6	10	20	30
Pressure loss at Q_{max}	bar	0.5	0.5	0.7	0.8
Pulse sequence of water meter	l/pulse	0.33	0.33	5	5
Nominal pressure		PN 8			
Dimensions and weights					
Installation length of water meter without screw connection	mm	190	190	300	270
Installation length of water meter with screw connection	mm	276	280	432	387
GENODOS-pump					
GENODOS-pump GP (GENO-Bakttox version)		6/40			
Max. suction height		1.0 mWC			
Ambient data					
Ambient temperature	°C	5-20*			
Water temperature	°C	5-30			
Order no.		163 820	163 825	163 830	163 835

* If the ambient temperature is >20 °C, the service life of the disinfectant is considerably shorter.



- ① System separator
- ② Contact water meter
- ③ Dosing valve
- ④ Pressure line
- ⑤ Pressure maintaining valve DHV
- ⑥ Connection set
- ⑦ Return hose

Fig. 2: Dosing system GENODOS DM-B 6



- ⑧ Suction hose
- ⑨ Suction lance
- ⑩ Limit of supply
- ⑪ Cable for empty signal suction lance
- ⑫ GENODOS pump
- ⑬ External cable for activation

Fig. 3: Dosing systems GENODOS DM-B 10 – DM-B 30