

Dosing system GENODOS DM-T 6 – 100

Intended use

The dosing system GENODOS DM-T is designed for volume-based dosing of disinfectant GENO-Chlor A into the drinking and industrial water pipes of commercial and industrial buildings.

The dosing system GENODOS DM T is designed for the disinfection of the treated water and is suitable for long-lasting as well as continuous flows.

The effect of GENO-Chlor A is based on its content of activated chlorine. It has an oxidising effect if combined with water. This kills germs and bacteria, micro-organisms and algae.

Mode of operation

By means of a contact water meter with pulse generator, the dosing system GENODOS DM-T registers the water volume flowing through and sends the control pulses to the electronics of the dosing pump GENODOS GP according to the pulse interval of the contact water meter.

The electronics controls the dosing pump and thereby determines the dosing volume of the disinfecting solution into the water pipe.

For drinking water treatment, a dosing volume of 1.0 mg of free chlorine per litre of water is taken as a basis for dimensioning. From experience we can assume that a concentration

of free chlorine of 0.1 up to 0.3 mg of chlorine per litre of water will establish in the drinking water to be disinfected (chlorine consumption).

The disinfecting solution is sucked out of the disposable container (DM-T 6 – 10) or out of the supply tank (DM-T 20 – 100) via a suction lance and is added to the drinking water pipe via the dosing line and the dosing point with non-return valve.

In case of counter-pressures of > 1 bar and fluctuating counter-pressures, a pressure maintaining valve ensures that the exact dosing rate is kept.

An electronic level control switches the pump off when the dosing tank is empty.

A yellow LED on the electronics of dosing pump GENODOS GP visually signals the need for a replacement of the tank.

Structure

- Contact water meter with pulse sensor and non-return valve
- Dosing group 2.70 made of PVC with non-return valve.
- Dosing hose and hose connection kit 4/6 in PTFE
- Pressure maintaining valve DHV4, 4/6 max. 10 bar, 4 bar preset

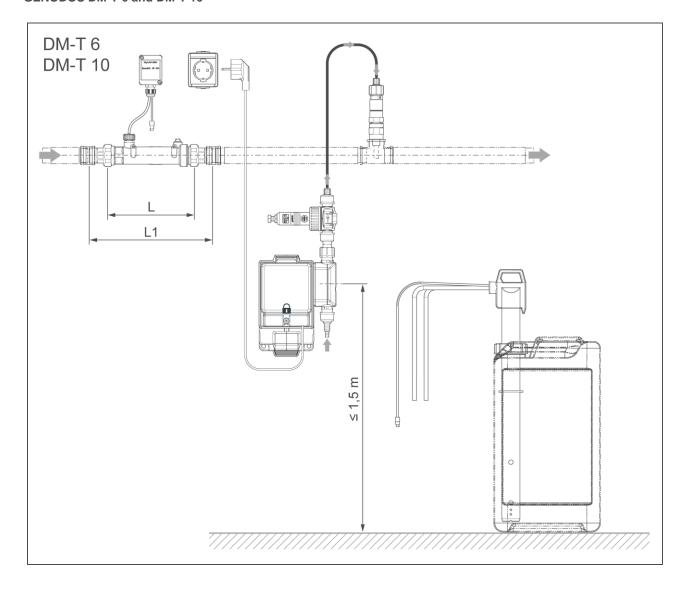
- Dosing pump GENODOS GP 1/40 with dosing volume preset to 100 ml/m³, under seal
- for DM-T 6, DM-T 10
 - Suction lance 465 mm for disposable canister in PVC with integrated empty signal, pre-alarm
- for DM-T 20, DM-T 30
 - Dosing tank 60 I (D420) in black incl. suction lance with empty signal and pre-alarm
- for DM-T 80, DM-T 100
 - Dosing tank 200 I (D600) in black incl. suction lance with empty signal and pre-alarm

Scope of supply

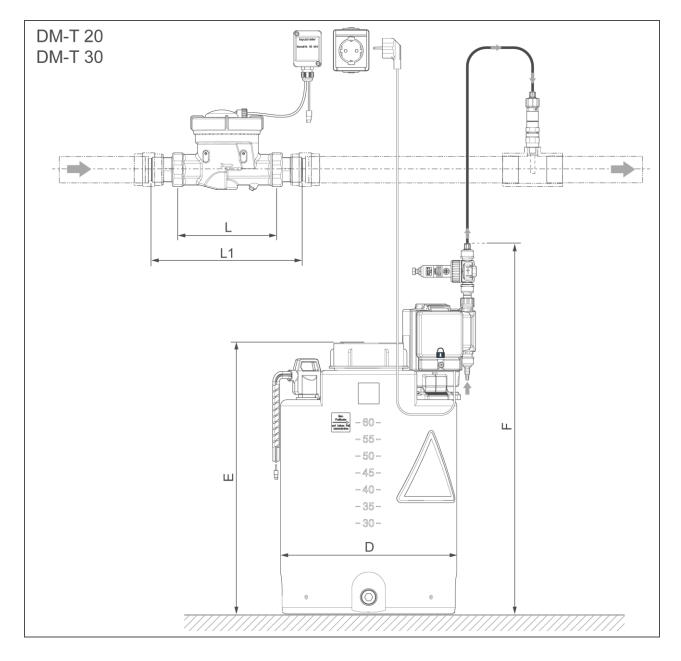
- Dosing pump GP -1/40
- Contact water meter
- Dosing hose with hose connection kit
- Dosing group 2.70
- Pressure maintaining valve DHV4
- Suction lance for DM-T 6-10
- Dosing tank 60 I for DM-T 20/DM-T 30
- Dosing tank. 200 I for DM-T 80/DM-T 100
- Operation manual

Technical specifications

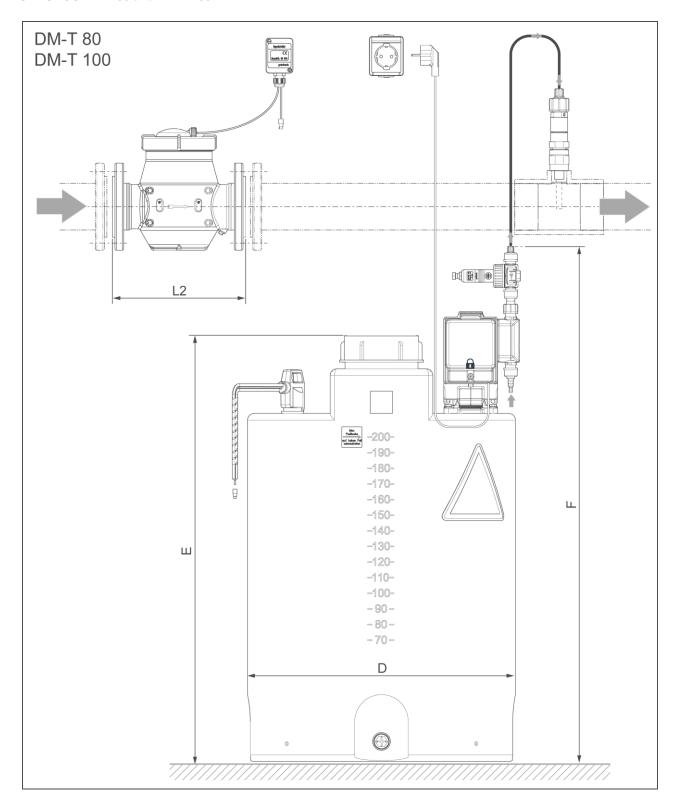
GENODOS DM-T 6 and DM-T 10



GENODOS DM-T 20 and DM-T 30



GENODOS DM-T 80 and DM-T 100



Dimensions and weights		DM-T 6	DM-T 10	DM-T 20	DM-T 30	DM-T 80	DM-T 100
Nominal connection diameter of water meter		DN 25 (1")	DN 32 (11/4")	DN 40 (1½")	DN 50 (2")	DN 80	DN 100
L Installation length without screw connection	mm	190	190	190	240	_	_
L1 Installation length with screw connection	mm	276	280	312	356	_	_
L2 Installation length with flange connection	mm	_		_		310	310
Space required width of tank	mm	_		450	450	630	630
Space required height of tank	mm	_		645	645	955	955
Space required height total	mm	_		880	880	1155	1155

GENODOS pump		DM-T 6	DM-T 10	DM-T 20	DM-T 30	DM-T 80	DM-T 100
GP (set and under seal)				1/40 (4gvp)	PVDF/Viton		
Position Pulse division factor	D	5	4	4	3	2	2
Suction head (at a water temperature of 20 °C)		≤ 1.5 m WC					
Power supply	V~/Hz	230/50					
Protection/protection class		IP54/⊕					

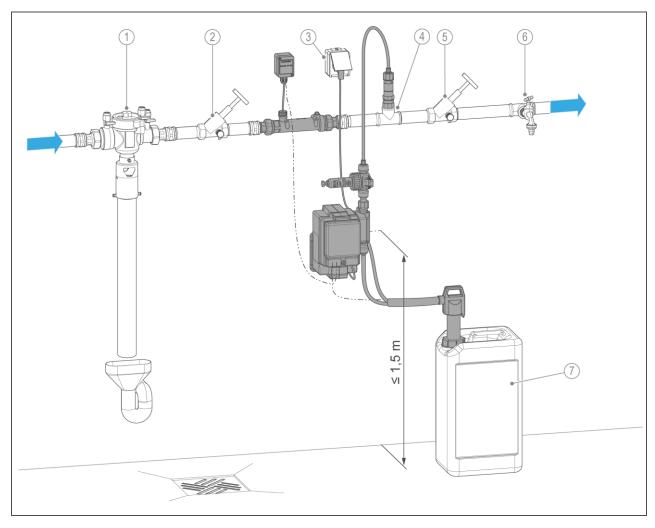
Performance data		DM-T 6	DM-T 10	DM-T 20	DM-T 30	DM-T 80	DM-T 100
Operating range	m³/h	0.04 - 6	0.04 – 10	0.05 - 20	0.1 - 30	0.1 – 80	0.1 – 100
Dosing sequence (GP pump)	1	1	2.5	4.7	6.7	11.4	11.4
Pulse sequence (water meter)	l/pulse	0.33	0.5	0.93	1.33	3.8	3.8
Nominal pressure	MPa/bar	1/10					
Operating pressure	MPa/bar	≤ 1/10	≤ 1/10	≤ 0.8/8	≤ 0.8/8	≤ 0.6/6	≤ 0.6/6
Pressure loss at nominal capacity	bar	0.5	0.5	0.8	0.8	0.6	0.8

Consumption data		DM-T 6	DM-T 10	DM-T 20	DM-T 30	DM-T 80	DM-T 100
GENO-Chlor A (at a counter-pressure of 4 bar)	ml/m³	100					
Volume of container	I	20	20	60	60	200	200

General data		DM-T 6	DM-T 10	DM-T 20	DM-T 30	DM-T 80	DM-T 100
Drinking water temperature	°C		≤ 25				
Water temperature	°C	5 – 40					
Ambient temperature	°C	5 – 30					
Max. humidity of air (non-condensing)	%	≤ 90					
Order no.		163 140	163 150	163000 120000	163000 130000	163000 140000	163000 150000

Installation example I

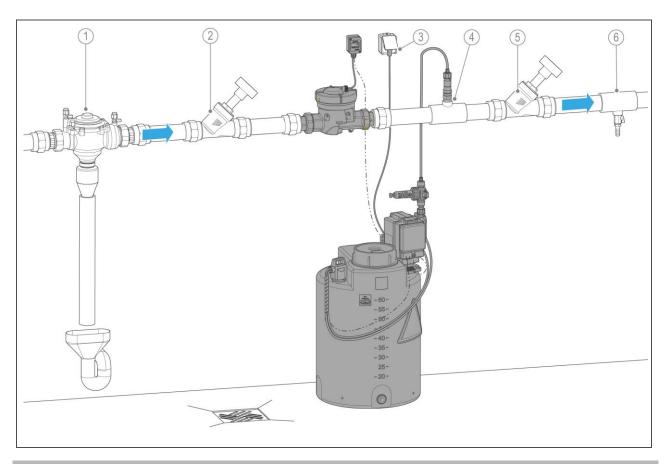
GENODOS DM-T 6/DM-T 10



Item	Designation	Item	Designation
1	System separator GENO-DK 2	2	Inlet shut-off valve
3	Schuko socket	4	Dosing point
5	Outlet shut-off valve	6	Water withdrawal point
7	Disposable canister 20 I (not included in the scope of supply)		

Installation example II

GENODOS DM-T 20/DM-T 30



Item	Designation	Item	Designation
1	System separator GENO-DK 2	2	Inlet shut-off valve
3	Schuko socket	4	Dosing point
5	Outlet shut-off valve	6	Water withdrawal point

Requirements for the installa- Requirement tion site

Obey the local installation directives, general guidelines and technical specifications.

- Protection from frost, severe heat exposure and direct sun-
- 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

Water installation

- Drinking water filter installed upstream and pressure reducer, if necessary (e.g. fine filter pureliQ or BOXER)
- System separator installed upstream according to DIN EN 1717 (e.g. GENO-DK 2) when connected to public drinking water network
- Floor drain or corresponding safety device with water stop function (e.g. safety device protectliQ)
- Shut-off valves and possibility of sampling withdrawal upstream and downstream of the product
- Pipe downstream of the dosing point made of material resistant against chlorine and with sufficient reaction section

Electrical installation

Schuko socket with continuous power supply (approx. 1,2 m from the control unit)

Water composition/Material resistance

Prior to using the dosing system, you need to know the composition of the water.

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

Mounting height of the dosing pump

The dosing pump must not be mounted more than max. 1.5 m (when using dosing agents with a density of 1.0 g/ml) above the tank bottom (preferably as low as possible).

For dosing systems DM-T 20 - 100 the dosing pump is mounted on the dosing

Low water withdrawals

If very low withdrawal volumes and longer periods of standstill are to be expected for the use of the dosing systems(e.g. in households with only 1 -2 persons, holiday homes, etc.), the chlorine concentrations in the water may vary as a result. In order to minimise this effect, the dosing pump should be installed as close to the dosing tank as possible. Ideally, the pump body is located on the same level as the upper edge of the suction lance.

In addition we recommend using the dosing system DM-B together with the dosing agent GENO-Baktox.

Accessories

Refer to Technical Information "Accessories for GENODOS pumps GP"

Order no. 118 950

Dosing group 2.72 order no. 163 220

PVC/PP with non-return valve and ball valve

Overflow valve Order no. 160 255

Made of PVC (di= 6, di= 10 mm)

Test device for chlorine and pH value Order no. 170 105

To determine the chlorine and pH value. Measuring range: Chlorine 0.1 - 1.5 mg/l; pH value 6.8 - 7.8

Dosing tank, 60 I Order no. 100196860000

In black (D=420 mm) with suction lance, empty signal, pre-alarm and mounted holding plate for GP pump

Dosing tank, 200 I Order no. 100189780000

In black (D=600 mm) with suction lance, empty signal, pre-alarm and mounted holding plate for GP pump

Consumables

GENO-Chlor A

20 I canister

210 012

Contact

Grünbeck Wasseraufbereitung GmbH Josef-Grünbeck-Str. 1 89420 Hoechstaedt **GERMANY**

(1)

+49 9074 41-0

+49 9074 41-100

info@gruenbeck.com www.gruenbeck.com

