

Fig. 1: DME dosing system

Designated application

The GENODOS® dosing systems DME are designed for the dosing of mineral-based EXADOS®-agents into the drinking and process water of industrial as well as residential buildings. They protect the water pipes and the connected water carrying system components (fittings, devices, operating equipment, boilers, production systems, etc.) from malfunctions and damage due to scale deposits and/or corrosion.

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

Function

When water is withdrawn, a water meter measures the water volume flowing through and then - according to the pulse interval of the water meter - transmits the control pulses to the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 mineral-based agent, a constant drinking water quality can be ensured. By means of a suction lance with integrated empty signal, the EXADOS®-solution is sucked directly from the disposable canister.

By means of the dosing pump, the sucked in mineral-based 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.

Installation requirements

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 max. 30 °C. For the power supply, a separate socket (230V /50/ 60Hz) within a range of approx. 1.5 m from the system is required.

The DME dosing systems are DVGW-certified and can be installed without any additional safety devices (system separator, large pipe loop).

Start-up

Prior to the installation, check the system for tightness and make sure that it was installed properly. The dosing system comes pre-assembled.

Dosing pump

Fasten the pump on the slip-on pump foot at a max. height of 1.5 m (in case of mineral-based agents and a density of 1.0 g/ml) above the tank bottom (preferably as low as possible, however).

Empty signal (suction lance)

When using a suction lance with integrated empty signal, the connector of the empty signal at the suction lance has to be connected to the corresponding input at the pump.

External activation (e. g. contact water meter)

When using an external activation, the control cable (red plug) has to be connected to the corresponding input at the dosing pump. The frequency switch of the dosing pump must be set to "EXTERNAL".

Dosing agent

Install the dosing line to the dosing point safely and without any bends. The dosing valve must be placed in a way, that a shut-off feature is available upstream and downstream of the valve.

The dosing system must be supplied with a mains voltage of 230 V/50/60 Hz.

GENODOS® Dosing Systems DME 6, DME 10, DME 20, DME 30, DME 80, DME 100

The dosing pump is firmly set to and leaded at a dosing volume of 100 ml of EXADOS®-solution per m³ of water.

Note: Only use mineral-based EXADOS®-solutions by Grünbeck.

In case of an individual need for a suction lance and a dosing line, please refer to DM version; product data sheet D 28

Scope of supply

Dosing system consisting of: Self-priming and continuously adjustable membrane dosing pump, self-deaerating against pressure, synchronous motor 230 V / 50/60 Hz, with connection options for empty signal, external activation and voltage-free fault signal output.

Order no. - Please inquire -

Contact water meter with pulse cable for GENODOS®-pump.

Order no. - Please inquire -

Dosing valve 2/4 or 4/6 for DME 80/100

Order no. - Please inquire -

Suction lance for disposable canister 10/20 litres, made of PVC with integrated empty signal and pre-alarm, suction and return hose, 465 mm long.

Order no. 118 510

Hose connection set 2/4 or 4/6 for DME 80/100

Order no. - Please inquire -

Dosing hose made of PA id = 2; od = 4,

Order no. 857 72 002

or id = 4; od = 6 for DME 80/100

Order no. 857 70 015

Accessories

Also refer to technical information "Accessories for GENODOS®-pumps"

Order no. 118 950

Technical specifications/ Dimensions		GENODOS® dosing system					
System type		DME 6	DME 10	DME 20	DME 30	DME 80	DME 100
Connection data							
Nominal connection diameter of water meter		R 1" DN 25	R 1 ¼" DN 32	R 1 ½" DN 40	R 2" DN 50	DN 80	DN 100
Power supply		230 V / 50/60 Hz / 18/21 W					
Protection		IP 54					
Performance data							
Operating range	[m³/h]	0.04 up to 6	0.04 up to 10	0.05 up to 20	0.1 up to 30	0.1 up to 80	0.1 up to 100
Pressure loss at nominal capacity	[bar]	0.5	0.8			0.6	0.8
Dosing sequence (GP-pump)	[l]	1	2.5	4.7	6.7	11.4	
Pulse sequence (water meter)	[l/pulse]	0.33	0.5	0.93	1.33	3.8	
Nominal design pressure	[MPa]	1					
Max. working pressure	[MPa]	1		0.8		0.6	
Max. operating pressure	[bar]	10		8		6	
Dimensions and weights							
Installation length without screw connection	[mm]	190			240	-	-
Installation length with screw connection	[mm]	276	280	312	356	-	-
Installation length with flange connection	[mm]	-	-	-	-	310	
GENODOS®-pump							
GENODOS®-pump GP		1/40	2/40	6/40		10/40	
Position pulse division factor	[T]	1	2			1	
Max. suction height		1.5 mWC (based on water of 20°C)					
Test certificate/Certification mark							
DVGW registration number		NW-9101CM0334					
Ambient data							
Ambient temperature		5 - 30 °C					
Suitable mineral-based dosing solution		Mineral-based EXADOS®-agent					
Order no.		163 435	163 445	163 455	163 465	163 475	163 485

The dosing pumps are set to and leaded at 100 ml of mineral-based dosing solution per m³ of water at 5 bar counter-pressure.

Mounting example GENODOS® dosing system DME 6

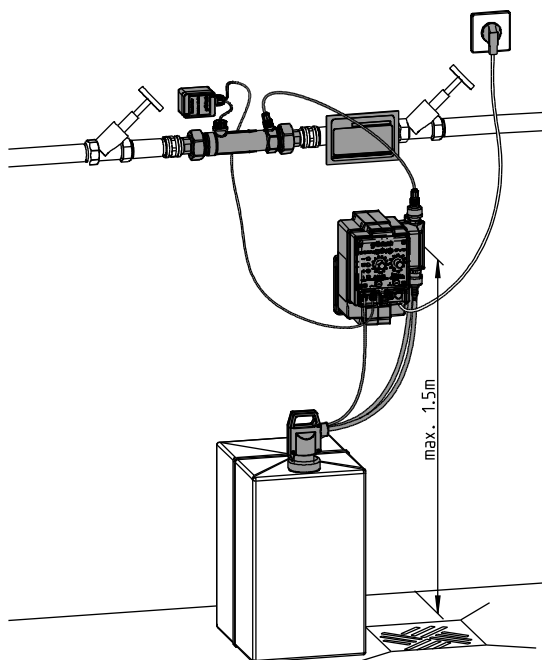


Fig. 2: GENODOS® dosing system DME 6