

The better solution.



PRODUCT CATALOGUE



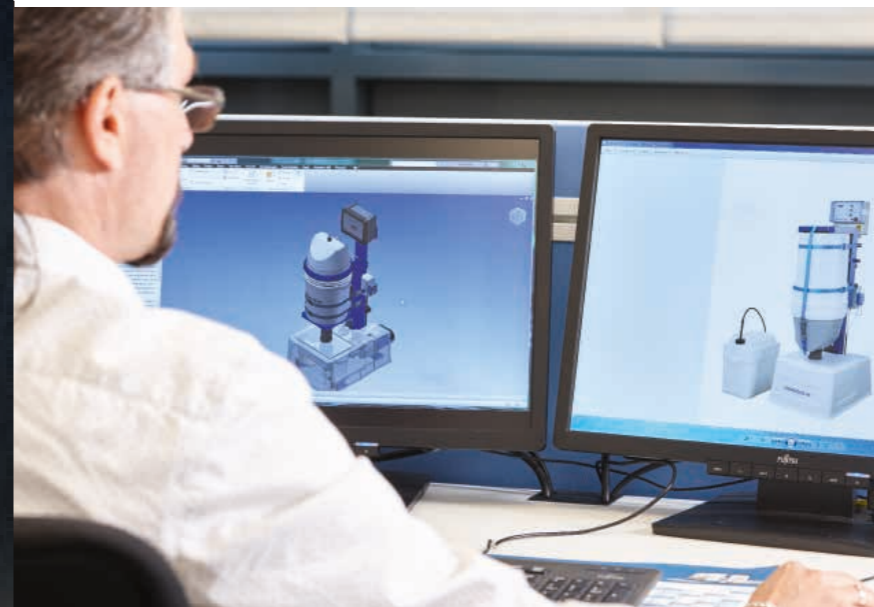
DRINKING AND WASTE WATER

2021/2022

WDT

Werner Dosiertchnik





MORE THAN 25 YEARS OF EXPERIENCE IN DRINKING AND WASTE WATER TREATMENT

WATER - A PRECIOUS RESOURCE

The challenge for the future of mankind is the economical and efficient handling of water. The careful treatment of this diminishing and valuable natural resource is becoming more and more important in the drinking and waste water industry. The effective disinfection and cleaning of the water plays an important role in this business.

Using our experience from dosing of granulate and powder for swimming pools, WDT developed and manufactured systems for the dosing of powdered carbon for the waste water treatment already in the mid-nineties.

Nowadays we are able to offer economical and sophisticated dosing techniques for nearly every size of drinking and waste water plant in the municipal or industrial sector.

WDT Werner Dosiertechnik stands for:

- » Comprehensive know-how
- » Highest material and product quality
- » Professional consulting
- » Extensive service network of our trained partners
- » Service- and solution-orientation
- » Exclusively educated and qualified employees
- » Service- and solution-orientation
- » Continuous development
- » More than 35 years of experience

BEST WATER QUALITY WITH CALCIUM HYPOCHLORITE

Chlorine granulate (calcium hypochlorite and sodium dichloroisocyanurate) are ideally suited for the disinfection of drinking and waster water. With our systems for the dosing of chlorine granulate a fresh chlorine solution is produced if required and fed into the water cycle. The limit values for the chlorite/chlorate according to the German drinking water regulations can therefore be observed without any problems.

For the ideal efficiency of the chlorine, a neutral pH-range is necessary. The needed acid dosage for neutralisation is safely integrated in the system.

- » Clean and residue-free chlorine solution, no deposits and blockages
- » Always fresh chlorine solution
- » Low maintenance efforts
- » Relatively low danger potential
- » Low input of chlorate / chlorite
- » Certified safety

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- 5 **GRANUDOS 45/100-TOUCH**
For the dosing of calcium hypochlorite granulate
- 6 **CHLORUN FB**
For the dosing of sodium dichloroisocyanurate

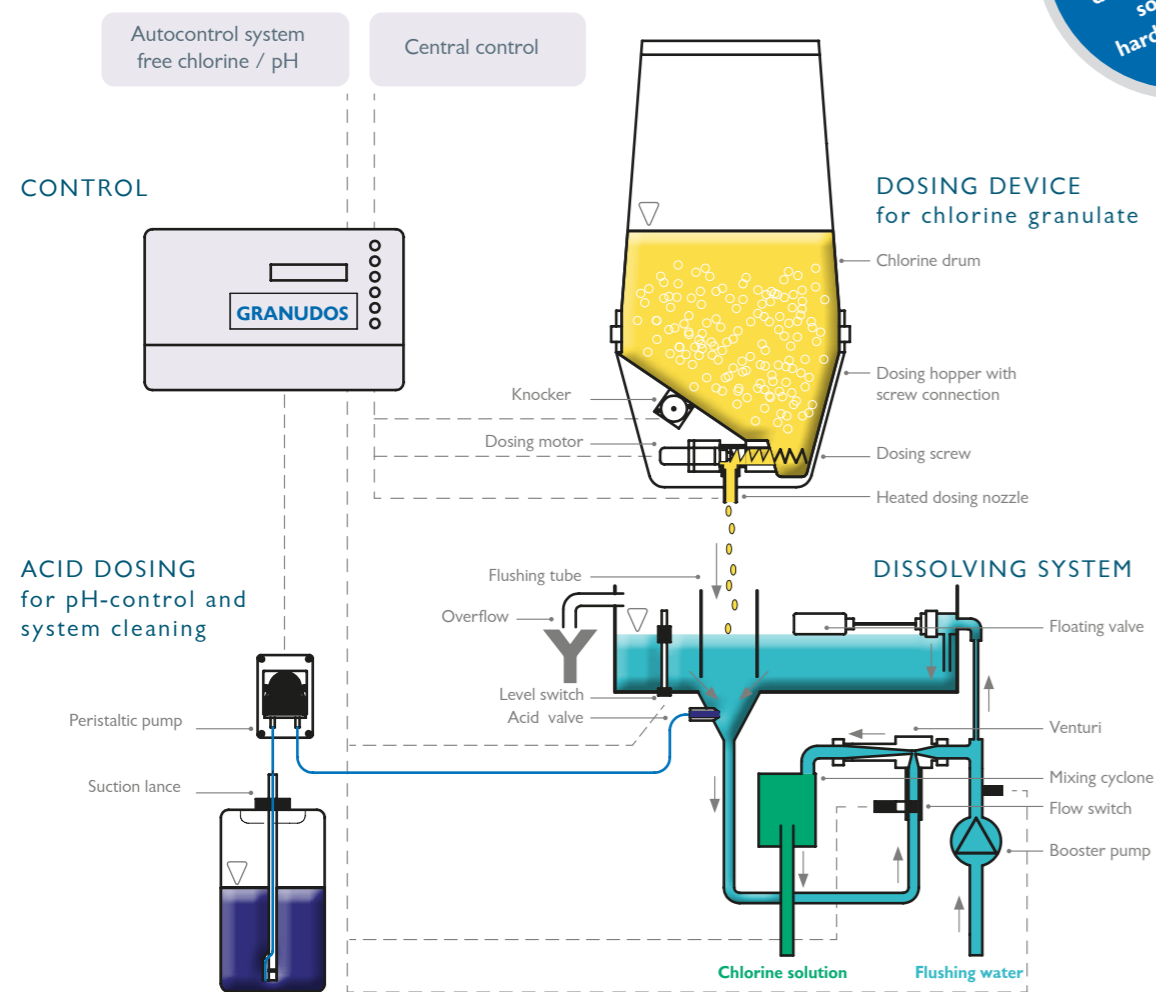
SAFE AND CLEAN – DOSING WITH GRANUDOS

The GRANUDOS system is characterised by the fact that the granulate is dissolved completely. Therefore there will be neither sludge or residue in the dissolving unit nor a blockage of the dosing pipe.

The GRANUDOS can be controlled by every autocontrol system. The system is generally available for nearly all chemical buckets and drums in trade and not bound to just one manufacturer.

The simultaneous dosing of chlorine and acid is impossible due to an integrated software and hardware interlock.

Functional principle of the dosing system GRANUDOS



Chlorine dosing directly from integrated hopper. Acid is dosed into the system from the canister to correct the pH and to avoid scaling. Chlorine and acid are dosed separately in intervals to the dissolving system and are dissolved completely. Then the chlorine solution is conveyed by a venturi nozzle to the pool water. All functions are permanently monitored by sensors for pressure, level and flow. If there are deviations from the normal state of operation, the dosing will be switched off and the according fault will be indicated.



GRANUDOS 45/100 TOUCH

Dosing system for calcium hypochlorite granulate and acid for the drinking water, cooling water, waste water and exhaust gas disinfection.

FUNCTION DESCRIPTION

The dosed chemical is completely dissolved, sucked off by an injector system and fed into the system as hypochlorous acid. Continuous dosing or dosing controlled by external controllers. Controlling and monitoring of all functions. To prevent deposits and for neutralisation of the produced chlorine solution an acid dosing is integrated in the system.

SCOPE OF DELIVERY

Vertical support: Rotating drum carrier, steel, zinc and blue powder coated, drum fixing device with clamp bands and safety belt.

Chlorine dosing: Dosing hopper to be screwed on the chemical drum. Dosing motor, dosing screw, knocker to support the dosing. Capacitive switch for empty monitoring of the drum.

Acid dosing: Peristaltic dosing pump, suction lance with empty report of the canister, dosing valve 3/8" in the dissolving system.

Dissolving system: Pre-filter d 75, flushing tank, booster pump, venturi, mixing cyclone. Monitoring of the pump app. 1000 l/h at 1,2 bar by pressure switch. Monitoring of the suction performance of the venturi. Level monitoring in the flushing tank.

Control techniques:

- Coloured 7" Touch-Graphic display to indicate the current status of the unit and the operation parameters
- Simple and clearly arranged user guidance of the screen
- Faults and alarms are illustrated by self-explaining icons
- With integrated meter for chlorine consumption
- Integrated test programmes for all functions
- Monitoring of all control components of the system
- Operation languages: German, English and French
- Event storage (data logging)

Interface: USB for data export

Remote indication via browser driven devices (e.g. tablet or smartphone)

- Indication of the current operational states, errors and alarms



The GRANUDOS is generally available for nearly all chemical buckets and drums in trade. Please mention the demanded drum if you will place an order for GRANUDOS 45 or GRANUDOS 100!

TECHNICAL DATA

Electrical supply	230 V/AC 50 Hz
Power supply	390 W
Water supply	DN20
Water outlet to injection point	DN20
Measures (W/H/D)	600 x 1500 x 800 mm
Weight	app. 50 kg
Dosing performance oxygene granulate	GR45: 0,1 - 2 kg/h GR100: 0,2 - 4 kg/h
Dosing performance algicide (optional)	3 l/h
Pre-pressure min.	0,2 bar
Back-pressure max.	1,2 bar (optional 1,8 bar)

TO BE PROVIDED BY THE BUILDER

- Power supply
- Supply tubing and tubing to the injection point
- Tubing of the overflow to the drain
- Autocontrol system to control the dosing of the chemicals

ACCESSORIES / OPTIONS

- Drum lifter for chlorine drums
- Container GR 150 for very high chlorine demand
- Autocontrol system
- Dust extraction for the dusty chlorine granulate material





CHLORUN FB

Dosing system for the production of a max. 5% chlorine solution from sodium dichloroisocyanurate directly from the dosing hopper or a container (100 l or 650 l).

FUNCTION DESCRIPTION

Chlorine dosing directly from integrated hopper or container system. The dosed chemical is dissolved completely and injected into the system by a suitable dosing pump. The dosing rate of the pump may be controlled continuously, optionally by an internal ORP controller or by an external flow meter. All functions are monitored.

SCOPE OF DELIVERY

Housing: Solid one part rotational sintered PE shape containing all functional parts or **container support:** rotating drum carrier steel, zinc and blue powder coated, drum fixing device with clamp bands and safety belt.

Chlorine dosing: Dosing hopper or container (100 l or 650 l) for chlorine granulate. Dosing motor, dosing screw, vibrator to support the dosing. Capacitive switch for empty monitoring of the drum.

Dissolving system: Pre-filter, pressure gauge, flushing tank, dissolving tank with dissolving pot for the production of a chlorine solution. Level monitoring in the flushing tank.

Control techniques:

- Coloured 3,5" Touch-Graphic display to indicate the current status of the unit and the operation parameters
- Simple and clearly arranged user guidance of the screen
- Faults and alarms are illustrated

TECHNICAL DATA

	15/40	Mega 100 l	Mega 650 l
Electrical supply	230 V/AC 50 Hz optional 24V/DC		
Power supply	25 kW		
Water supply	½"		
Water outlet to injection point	DN10		
Measures (W/H/D)	400 x 1250 x 400 mm	600 x 1500 x 800 mm	1300 x 1750 x 1300 mm
Weight FB	app. 25 kg	app. 60 kg	app. 170 kg
Dosing performance	max. 30 kg/h		
Pre-pressure	min. 1,5 bar		
Back-pressure	depending on dosing pump		



Picture CHLORUN FB Mega with a container 650 l.

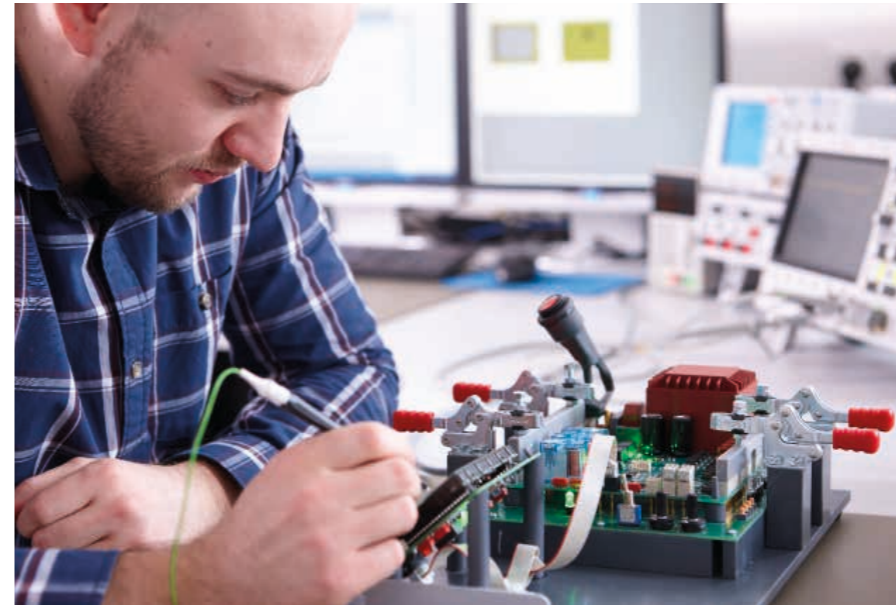
- Integrated test programmes for all functions
- Monitoring of all control components of the system
- Fault message with potential-free contact for ZLT
- Connection via Bluetooth with app
- Operation languages: German, English

TO BE PROVIDED BY THE BUILDER

- Power supply
- Supply tubing and tubing to the injection point
- Overflow/ drain in the plants room
- Autocontrol system to control the GRANUDOS
- Dosing pump

ACCESSORIES / OPTIONS

- Dosing pump for the chlorine solution
- ORP-control
- Flow meter for the dosing of the solution



PURIFICATION WITH ACTIVATED CARBON POWDER

In the present time, waste water is increasingly contaminated with trace substances. Powdered activated carbon with its adsorptive effect is excellent for the removal of these substances and other organic impurities from drinking and waste water.

WDT has already taken up this challenge in the nineties and developed and produced a system for dosing of powdered activated carbon. Equipment for dosing of powdered activated carbon could be used for other kind of powder e.g. lime and diatomite.

- » Dust-free dosing of the powder
- » Low maintenance efforts
- » Adsorption instead of oxidation, no formation of undesirable reaction by-products

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- 8 PAKDOS 60-TOUCH
Dosing of powdered activated carbon powder
- 9 CARBODOS
Industrial dosing of powdered activated carbon powder
- 10 KG 200-I
Dosing of diatomite



PAKDOS 60-TOUCH

Dosing system for the dust-free dosing of powdered activated carbon (PAC) to eliminate all organic impurities from drinking and waste water.

FUNCTION DESCRIPTION

Dosing directly from 60 l drum. Production of a weak suspension to be conveyed to the filters by a venturi nozzle. Water supply from behind the filter, dosing directly into a reaction tank or the suction side of the filter pump.

SCOPE OF DELIVERY

Vertical support: Rotating drum carrier steel, zinc and blue powder coated, drum fixing device with clamp bands and safety belt.

Activated carbon dosing: Dosing hopper to be connected to the chemical drum. Dosing motor, dosing screw, knocker to support the dosing. Capacitive switch for empty monitoring of the drum, heated dosing nozzle.

Suspension unit: Pre-filter d 75, booster pump 0,39 kW/ 1250 l/h or 0,58 kW/ 1500 l/h (alternatively net water with solenoid valve), suspensor with sprinkler nozzles, venturi. Monitoring of the pump by pressure switch. Monitoring of the suction performance of the venturi. Level monitoring in the flushing tank.

Control techniques:

- Coloured 7" Touch-Graphic display to indicate the current status of the unit and the operation parameters
- Simple and clearly arranged user guidance of the screen
- Faults and alarms are illustrated by self-explaining icons
- With integrated meter for chlorine consumption
- Integrated test programmes for all functions
- Monitoring of all control components of the system
- Operation languages: German, English
- Event storage (data logging)

Interface: USB for data export

Remote indication via browser driven devices (e.g. tablet or smartphone)

- Indication of the current operational states, errors and alarms



TECHNICAL DATA

Electrical supply	230 V/AC 50 Hz (interlocked with filter)
Power supply	400 W / 600 W
Water supply	DN20
Water outlet to injection point	DN20
Measures (W/H/D)	600 x 1500 x 700 mm
Weight	app. 50 kg
Dosing performance	10 - 1200 g/h (Option 2500 g/h)
Pre-pressure min.	0,2 bar
Back-pressure max.	app. 2 bar (depending on the pre-pressure)

TO BE PROVIDED BY THE BUILDER

- Power supply
- Supply tubing and tubing to the injection point
- Overflow / drain in the plants room

ACCESSORIES / OPTIONS

- Controller with clock timer and control valve installed on PAKDOS with pneumatic valve for inlet and outlet
- Buffer tank for the suspension and pumps by high backpressures at the injection point

CARBODOS

Dosing system for the dust-free, industrial dosing of powdered activated carbon (PAC) to eliminate all organic impurities from drinking and waste water.

FUNCTION DESCRIPTION

Dosing directly from Big-Bag or silo. CARBODOS produces a suspension that is either conveyed directly to the filter or bassin at a low back pressure or to a buffer tank from where the suspension is dosed. The level of the buffer tank is controlled automatically.

SCOPE OF DELIVERY

Vertical support: Rotating drum carrier steel, zinc, drum fixing device with clamp bands and safety belt.

Activated carbon dosing: Connecting system for the Big-Bag, dosing hopper DN 300, dosing motor 0,25 kW 3-Phases with rpm control, dosing screw d35-d80, vibrator to support powder flow, empty switch.

Suspension unit: Backflushing pre-filter with integrated pressure regulator, boost water connection 1¼" or 1½", suspension preparation tube d160 with nozzles to wet the powder, venturi nozzle 1¼" to convey the suspension, flow control for the suspension water, pressure, level, and flow control / monitoring

Control techniques:

- Coloured 7" Touch-Graphic display to indicate the current status of the unit and the operation parameters
- Simple and clearly arranged user guidance of the screen
- Faults and alarms are illustrated by self-explaining icons
- With integrated meter for chlorine consumption
- Integrated test programmes for all functions
- Monitoring of all control components of the system
- Operation languages: German, English
- Event storage (data logging)

Interface: USB for data export

Remote indication via browser driven devices (e.g. tablet or smartphone)

- Indication of the current operational states, errors and alarms

Lifting system for the Big-Bag

- Crane frame height 6,5 m (max. 7,5 m according to version), width 3,5 m
- Crane 1 to with electric up and down control and manual moving left-right
- Hang on cross for the Big-Bag



TECHNICAL DATA

Electrical supply	400 VAC 16 Amp
Water supply	according to performance/ version
Suspension outlet	according to performance/ version
Foot print	2 x 4 m
Weight	app. 800 kg
Dosing performance max.	app. 2 - 300 kg/h
Water consumption	app. 4,5 - 6 m³/h (according to performance)
Pre-pressure	2,5 - 5 bar (according to performance)
Back-pressure	0,5 - 1,5 bar

TO BE PROVIDED BY THE BUILDER

- Power supply
- Supply tubing and tubing to the injection point / buffer tank
- Overflow / drain in the plants room
- Necessary building measures to install the machine and the crane or silo

ACCESSORIES/ OPTIONS

- Control cabinet with touch controller and web visualisation
- Controller with balance technique
- Buffer tank

Also useful for the dosing of lime powder!





KG 200-I

Dosing system for the dosing of diatomite for the preparation of precoat filters for the cleaning of liquids in industrial processes.

FUNCTION DESCRIPTION

Dosing system for diatomite from a flexcontainer into an (existing) suspension container. The dosing unit for the diatomite is flanged dust-free to the slide exit valve of the flexcontainer and the dosing performance is adjusted at the controller. By starting the system, water respectively the liquid to be filtrated is flushed through the suspension unit. The dosed diatomite is suspended here and conveyed to the filter.

SCOPE OF DELIVERY

Diatomite dosing:

- Join pot d120 to the Flexcontainer with vibrator and slide valve
- Metering pipe PVC d63 with exhaust filter
- Dosing motor 60 W with dosing screw d50
- Adaption unit to suspension unit
- Empty switch for Flexcontainer

Controller:

- PLC control in steel plate control cabinet with main switch in the cabinet door
- Operation and visualisation via 7" Touch-Graphic display for setting the operating parameters and display of the unit status
- Function monitoring, fault identification via potential-free contact
- Modbus TCP interface
- Operating language: German, English

TECHNICAL DATA

Electrical supply	230 V/AC 50 Hz
Power supply	250 W
Dosing performance	10-300 kg/h
Container measures (W/H/D)	1200 x 2200 x 1200 mm
Foot print with container	1,5 m x 2 m



TO BE PROVIDED BY THE BUILDER

- Power supply
- Suspension unit

ACCESSORIES / OPTIONS

- Controller with balance technique



DOSING PUMPS

WDT's portfolio is not just limited to dosing techniques for granulate and powder. We also offer dosing pumps for liquid chemicals like flocculant, liquid chlorine and acid.

- » Low investment costs, easy to handle
- » Low maintenance expense

In combination with the accessories produced by WDT, such as suction lances and injection valves, our products can be optimised to meet your needs. This guarantees a high level of flexibility in your choice of the technical components.

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12 UNODOS+
Speed controlled peristaltic pump

13 LIFEDOS
Direct driven digital diaphragm dosing pump

UNODOS+

Speed controlled peristaltic pump for the continuous and reliable dosing of flocculant or other liquid chemicals.

- Self-priming peristaltic pump
- Insensitive against air bubbles in the liquid
- Low noise operation
- Consistent and pulse-free dosing of liquid chemicals
- Integrated speed control
- Low investment costs, easy to handle
- Low maintenance expense

FUNCTION DESCRIPTION

This type of pump will reliably meter a chemical solution to the injection point, particularly when low dosing rates are required. The advancing roller occludes the tube which, as it recovers, draws in fluid that then becomes trapped by the next roller and later expelled from the pump. The technique offers the following advantages: no contamination of the fluid or the pump as the fluid is contained in the tube, gentle pumping action with accurate flow rates, the pump is self priming and can run dry, the pump is quiet running and very simple to handle. Adjustment of the dosing performance by a rotary knob with direct indication of the dosing performance in l/h.

SCOPE OF DELIVERY

- Peristaltic pump SA
- Dosing hose 1,6x1,6 or 3,2x1,6 with hose holder
- Roller SA
- Power supply cable with Euro plug
- Controller DS-2 with rotary knob, installed in housing
- Leakage monitoring: if the hose gets leaky, the dosing switches-off and a fault is indicated
- Canister empty indication
- Fault remote indication by a non-volt contact
- External control by non-volt contact (on/off)



TECHNICAL DATA

Electrical supply	230 V/AC 50 Hz
Power supply	6 W
Back pressure max.	max. 2 bar
Measures (W/H/D)	80 x 140 x 180 mm
Weight	app. 0,8 kg
Dosing performance with hose 1,6 x 1,6	app. 0,2 - 0,9 l/h
Dosing performance with hose 3,2 x 1,6	app. 0,7 - 3,4 l/h

ACCESSORIES/ OPTIONS

- Suction lance NF 500 with empty switch and non return foot valve for 30 l canister
- Dosing tube PE 4x1
- Injection valve 1SK-4x1-S with removable injection tube and ball valve for ease cleaning of the valve nozzle
- Switch-over automatic for 2 canisters
- Retention tubs for 2 canisters

LIFEDOS

Direct driven digital diaphragm dosing pump for continuous and reliable dosing of liquid fertilisers and other chemicals.

FUNCTION DESCRIPTION

The valve construction, together with the motor, which regulates suction and delivery speed, ensures precise dosing ($\pm 1\%$) over the full conveying range. With a fixed suction speed the conveying speed ensures a constant dosing over the full range of performance. Setting of the dosing capacity with direct output in l/h. Through the use of special gears and a spring support, the energy consumption is reduced.

SCOPE OF DELIVERY

- Diaphragm pump XL
- Control unit
- Leakage monitoring and drainage for the recirculation of the fertiliser
- Excess pressure control
- Power cable with Schuko plug

TECHNICAL DATA

Electrical supply	230 V/AC 50 Hz
Power supply	62 W
Back-pressure max.	10 bar
Suction height max.	2 m
Measures (W/H/D)	375 x 325 x 193 mm
Weight	app. 10 kg
Dosing performance	0,08-60 l/h



Photo Bild Membranpumpe XL

ACCESSORIES / OPTIONS

- Suction lance NF 1200 with empty switch and non return foot valve
- Dosing tube PTFE 9 x 1,5
- Injection valve 1SKT-Si2-9x1,5 with removable injection tube and ball valve



Injection valve



Suction lance





Werner Dosiertechnik
The better solution.

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ASSOCIATIONS



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