



The better solution.

 **PRODUCT CATALOGUE**

SWIMMING POOL



Werner Dosiertechnik





The better solution.



OVER 35 YEARS OF EXPERIENCE IN SWIMMING POOL AND WELLNESS TECHNIQUES

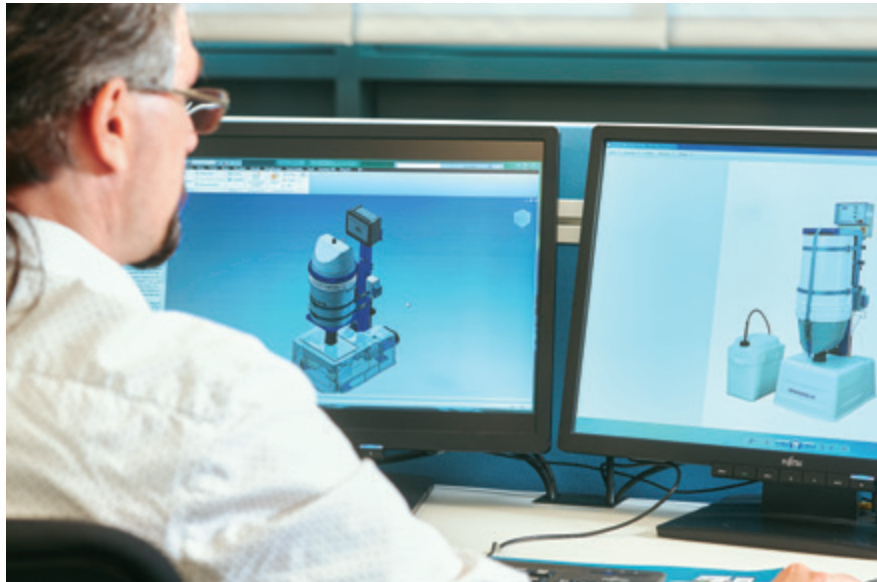
Mr. Dietmar Werner has founded our company over 35 years ago with the invention of the GRANUDOS system for the dosing of chlorine granulate. Today we develop, produce and distribute an extensive and comprehensive product range of measuring, control and dosing systems for the disinfection of public and private swimming pools, as well as control and attraction systems for wellness facilities and dosing systems for drinking and wastewater treatment.

From our point of view it is a necessary core competence to understand the application areas of our products and its associated technical systems as a total, to be able to transfer this know-how to our partners.

We export 75 % of all of our products. Our team is the foundation of our success. Due to on-going professional development programmes and trainings, our 60 employees are always up-to-date with the latest developments.

WDT Werner Dosiertechnik stands for:

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



DEVELOPMENT

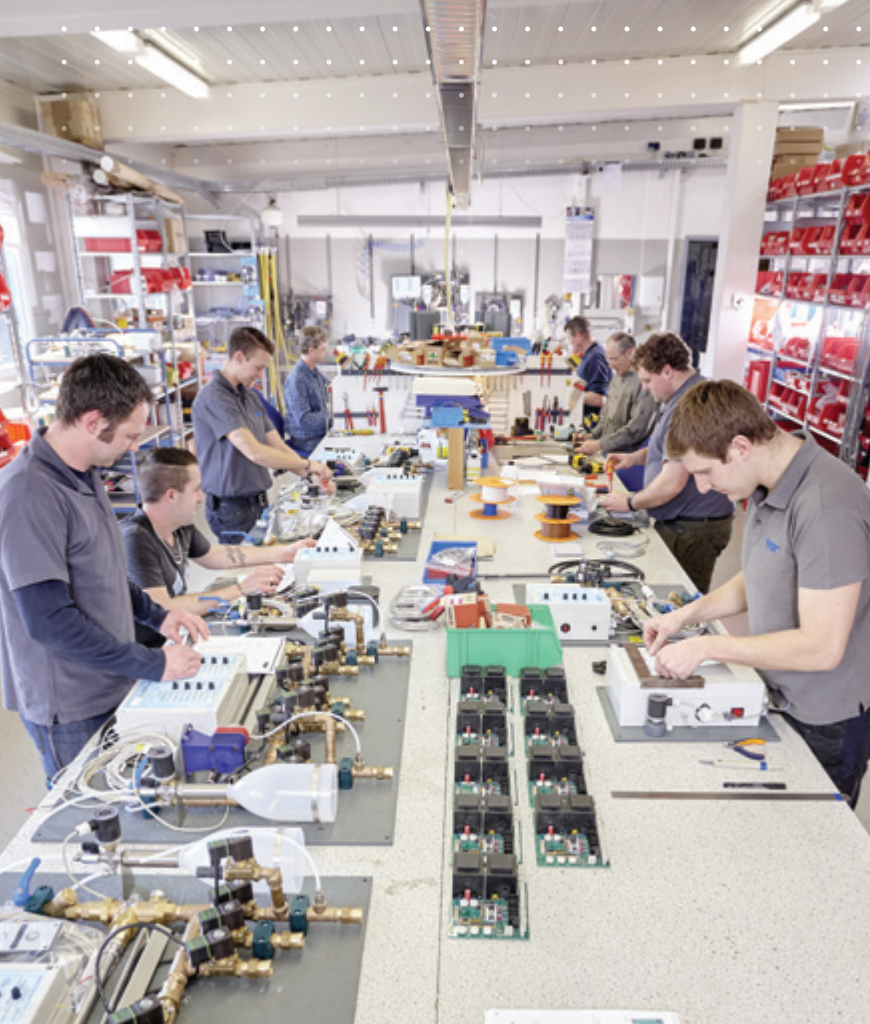
Our internal development includes:

- Conceptual development
- Constructive development
- Electronic hard- and software development

Our developments are:

- The prerequisite for a common, successful future
- Customised, market driven solutions through the combination of your demands and our know-how and experiences
- The fundament for the best water quality and the well-being of guests in swimming pools and wellness oases





PRODUCTION

Our high quality standard is the guarantee for the trust and satisfaction of our customers.

WDT products offer:

- Highest functionality and quality level
- Sophisticated technology
- Exclusively components from German and European manufacturers
- Individually tested reliability

We produce all our products at our factories in Wertingen (headquarters) and in Ruppolding.

SERVICE

Our whole team works with the fullest conviction, engagement and passion for you during all stages of our cooperation.

WDT service supports:

- During planning, installation and maintenance
- Quick and reliable
- Professional and comprehensive
- Our cooperative partnership



MADE IN GERMANY
since 1986



CERTIFICATION

We have been DIN ISO 9001 certified since 2008.

Our quality management system is:

- The foundation for our sustainable product and service quality
- The guideline for our daily work
- The basis of the continuous improvement of our processes
- A fundamental part of our corporate- and error culture



AWARDED

At the 24th of June 2022 we have been awarded with the TOP 100 seal for outstanding innovative power for the second time.

Our company:

- Is continuously and consistently focused on innovation
- Convinced in the category "Innovative processes and organisation"



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SWIMMING POOL BY WDT

The better solution.

QUALITY
SERVICE
KNOWLEDGE



WDT´s development of technical equipment for swimming pools goes back to its founding days. We have focused on autocontrol and dosing systems for the waterdisinfection in the context of the water treatment.

TY

OW-HOW



DOSING OF CALCIUM HYPOCHLORITE GRANUDOS

The dosing technology for chlorine granulate has been one of our first developments. The continuous further development and our know-how in this area enable us to be your reliable partner.

Calcium hypochlorite is one of four disinfection chemicals which are DIN 19643 certified. With the use of calcium hypochlorite you can easily comply with the threshold values of the chlorate and chlorite contents of swimming pool water.

- High chlorine concentration
- High stability during storage
- Relatively low danger potential
- Low input of chlorate/chlorite
- Chemically/physiologically impeccable

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SAFE &
CLEAN

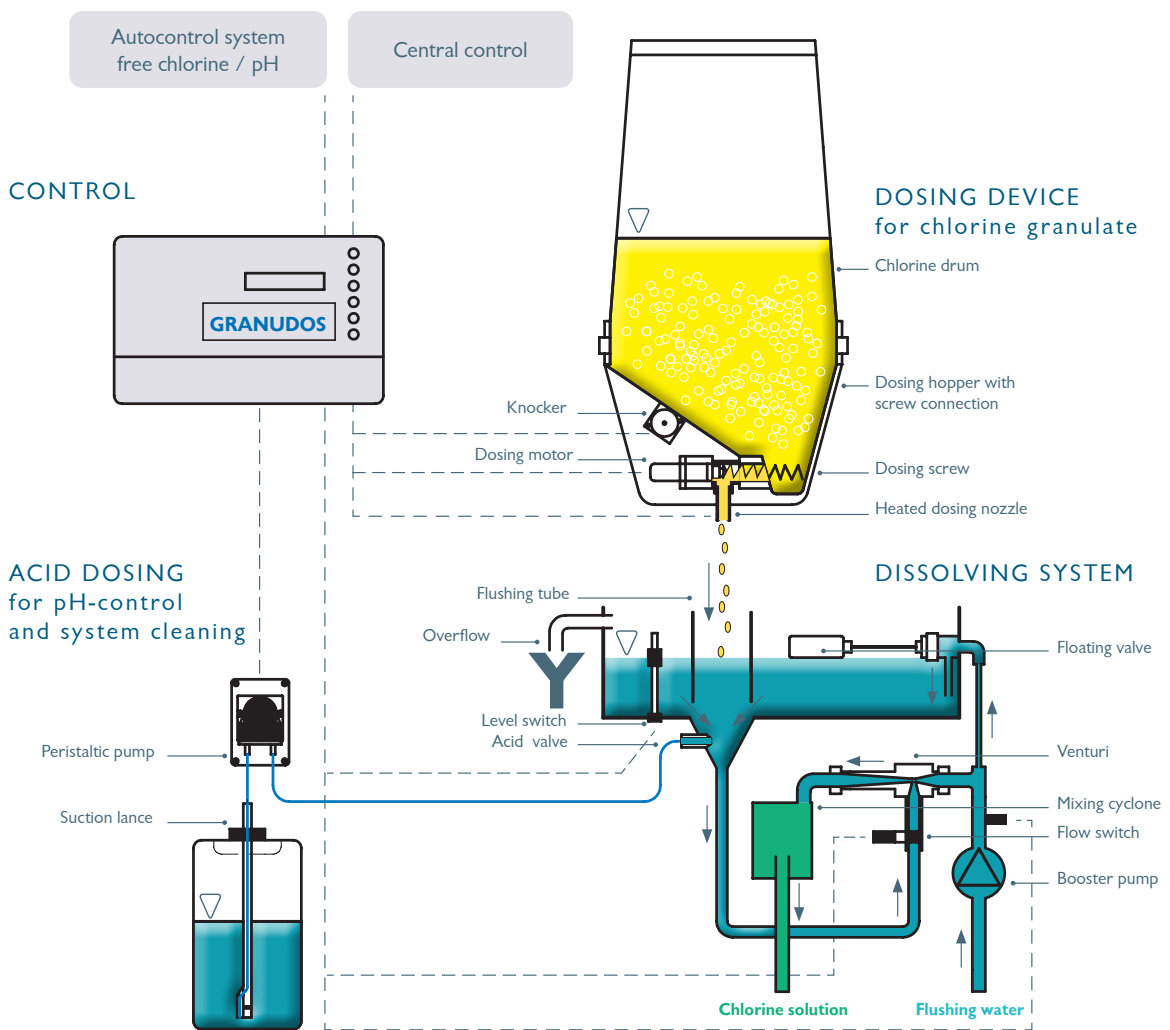


BEST WATER QUALITY

- » Clean and residue-free chlorine solution, no blockage of the dosing pipes
- » Easy integration into existing water circulations
- » Quick and easy installation
- » Low maintenance efforts
- » Adaption of nearly all chlorine drums in trade
- » If necessary with integrated autocontrol system, one-stop service
- » Tested safety
- » „Closed system” in case of proper operation according to DGUV (German association for accident insurance)

SAFE AND CLEAN DOSING SYSTEM GRANUDOS

Chlorine and acid are dosed separately in intervals into 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.



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





DOSING WITH GRANUDOS

The GRANUDOS system is suitable for all pool sizes and types: whirlpools, children's pools, training pools, olympic pools, water parks.

The procedure 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.



NEWS



MULTIHOPPER BY WDT –
UNIVERSAL, SIMPLE, DUST-FREE

MULT



GRANUDOS-FLEX BY WDT –
MODULAR, FLEXIBLE, EASY TO MAINTAIN

IFLEX



GRANUDOS FLEX DOSING SYSTEMS

All GRANUDOS 10 systems are completely replaced by GRANUDOS-FLEX systems. This is a modular system with which various available options can easily and flexibly be combined with each other. Therefore the customer has the possibility to configure his GRANUDOS system for his individual needs.

- Customised for every field of application
- Flexible equipment due to the simple, modular principle
- Proven quality in a new, modern design
- Universal adapter for all standard 10 kg buckets
- Easy and dust-free refill of the chlorine granulate due to innovative filling device
- Better accessibility of the components due to optimised arrangement and additional „maintenance opening“
- Integrated backwash filter

The system is designed for single pools and small multiple pool systems and can be equipped with all common control variants.

Fig.: GRANUDOS-FLEX-CPR TOUCH XL
with retention tub and filling device (optional)

GRANUDOS-FLEX OVERVIEW

The GRANUDOS-FLEX system consists generally of a basic system and an additional dosing unit with different dosing performances and hopper sizes. Both components have to be ordered separately.

SCOPE OF DELIVERY BASIC SYSTEM

- **Housing:** Solid one part rotational sintered PE
- **Acid dosing:** Peristaltic dosing pump, suction lance, dosing valve
- **Dissolving system:** backwash filter, flushing tank, booster pump, venturi and mixing cyclone
- **Control techniques:** depending on type, S5 or TOUCH without autocontrol system, CPR TOUCH XL complete with autocontrol system
- **Flocculant dosing:** depending on type

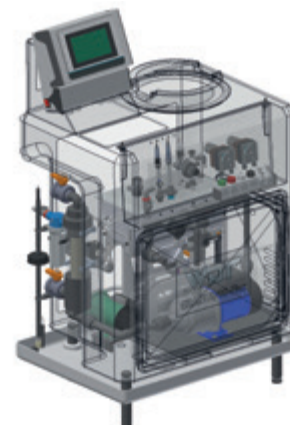


Fig.: Basic system GRANUDOS-FLEX-CPR TOUCH XL

Type	S5		TOUCH		CPR TOUCH XL	
Display	5-line LCD		Coloured 7" Touch			
Booster pump type	Lowara Part No. 29009	Calpeda Part No. 29010	Lowara Part No. 29007	Calpeda Part No. 29008	Lowara Part No. 29005	Calpeda Part No. 29006
Autocontrol system	-		-		free chlorine, pH-value, redox and temperature	

SCOPE OF DELIVERY DOSING UNIT

- Dosing hopper for chlorine granulate
- Dosing motor
- Dosing screw
- Knocker to support the dosing



Fig.: Dosing unit for GRANUDOS-FLEX

Type	5 kg volume		15 kg volume	
Dosing motor	12 rpm Part No. 29011	35 rpm Part No. 29012	12 rpm Part No. 29013	35 rpm Part No. 29014
Dosing performance	0,6 kg/h	2 kg/h	0,6 kg/h	2 kg/h

ACCESSORIES / OPTIONS

- Dust extraction - Part No. 29050
- Retention tub - Part No.29051
- Front cover - Part No. 29052
- Filling device with universal adapter - Part No. 29049
- Flocculation - Part No. 30364 (available for model TOUCH and CPR TOUCH)



GRANUDOS FOR SINGLE POOLS





GRANUDOS-FLEX-S5

FUNCTION DESCRIPTION

Dosing station for calcium hypochlorite granulate and acid for the disinfection and pH-regulation of swimming pool water.

Chlorine dosing directly from the dosing unit (with 5 kg or 15 kg dosing hopper). Acid is dosed into the system directly 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. Dosing manually or linked to an external control system. All functions are permanently monitored. The system is operated and controlled via a 5-line LC display.

The GRANUDOS-FLEX-S5 system consists of a basic unit with different booster pumps and additionally a dosing unit with different dosing performances and hopper sizes. Therefore an individual configuration of the systems according to the project requirements is possible.

Various accessory options are available, such as an innovative filling device with an universal adapter.

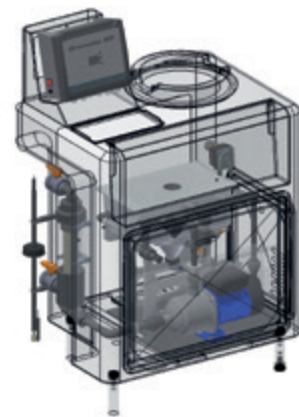


Fig.: GRANUDOS-FLEX-S5 with dosing unit 5 kg

A GRANUDOS-FLEX SYSTEM

consists of the following components:

BASIC SYSTEM



DOSING UNIT CHLORINE



SCOPE OF DELIVERY BASIC UNIT

Housing:

Solid one part rotational sintered PE grey in a modern design with two service openings with magnetic lockers for an easy and fast access to all single components during maintenance.

Acid dosing:

Peristaltic dosing pump, suction lance with empty report of the canister, dosing valve $\frac{3}{8}$ " in the dissolving system.

Dissolving system:

Pre-filter d 75 with additional ball valve for backflush function, flushing tank, booster pump (Lowara oder Calpeda) app. 1000 l/h at 1,2 bar, venturi, mixing cyclone. Monitoring of the pump by pressure switch. Monitoring of the suction performance of the venturi. Level monitoring in the flushing tank.

Control techniques S5:

Operation and visualisation via 5-line LC display and three buttons. Fault indications are displayed in plain text. Adjustment of dosing performances chlorine and acid stepless. External dosing control with autocontrollers for free chlorine and pHvalue with non-volt contact or 230 V/AC impulse length or frequency controlled. Relay system to assure dosing of only chlorine or acid or none. Switch-off of the dosing at malfunction.

SCOPE OF DELIVERY DOSING UNIT CHLORINE

- Dosing hopper for chlorine granulate (with 5 kg or 15 kg volume)
- Dosing motor (with 12 rpm or 35 rpm)
- Dosing screw
- Knocker to support the dosing

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)	800 x 1300 x 600 mm
Weight	app. 40 kg
Dosing performance chlorine	0,6 kg/h - 2 kg/h
Dosing performance acid	1 l/h
Pre-pressure min.	0,2 bar
Back-pressure max.	1,5 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

- Dust extraction for dusty chlorine granulate material
- Retention tub
- Front cover
- Filling device with universal adapter for 10 kg buckets common in trade. For an easy and dust-free refill of the chlorine granulate



Fig.: Filling device with universal adapter



GRANUDOS-FLEX-TOUCH

FUNCTION DESCRIPTION

Dosing station for calcium hypochlorite granulate and acid for the disinfection and the pH-regulation of swimming pool water.

Chlorine dosing directly from the dosing unit (with 5 kg or 15 kg dosing hopper). Acid is dosed into the system directly 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. Dosing manually or linked to an external control system. All functions are permanently monitored. The system is operated and controlled via a coloured 7" Touch-Graphic display.

The GRANUDOS-FLEX-TOUCH system consists of a basic unit with different booster pumps and additionally a dosing unit with different dosing performances and hopper sizes. Therefore an individual configuration of the systems according to the project requirements is possible.

Optional function:

In parallel to the chlorine supply of the main pool, a buffer tank can be filled with chlorine solution with an adjustable concentration to supply further pools with chlorine via dosing pumps.

Various accessory options are available, such as an innovative filling device with a universal adapter.

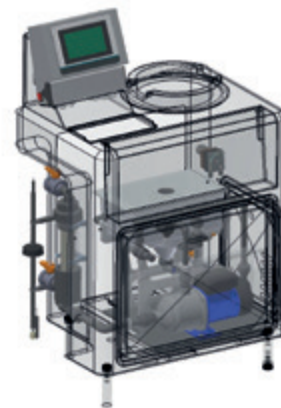


Fig.: GRANUDOS-FLEX-TOUCH with dosing unit 5 kg

A GRANUDOS-FLEX SYSTEM

consists of the following components:

BASIC SYSTEM



DOSING UNIT CHLORINE



SCOPE OF DELIVERY BASIC UNIT

Housing:

Solid one part rotational sintered PE grey in a modern design with two service openings with magnetic lockers for an easy and fast access to all single components during maintenance.

Acid dosing:

Peristaltic dosing pump, suction lance with empty report of the canister, dosing valve $\frac{3}{8}$ " in the dissolving system.

Dissolving system:

Pre-filter d 75 with additional ball valve for backflush function, flushing tank, booster pump (Lowara oder Calpeda) app. 1000 l/h at 1,2 bar, venturi, mixing cyclone. Monitoring of the pump by pressure switch. Monitoring of the suction performance of the venturi. Level monitoring in the flushing tank.

SCOPE OF DELIVERY DOSING UNIT CHLORINE

- Dosing hopper for chlorine granulate (with 5 kg or 15 kg volume)
- Dosing motor (with 12 rpm or 35 rpm)
- Dosing screw
- Knocker to support the dosing

Control techniques TOUCH:

Operation and visualisation via coloured 7" Touch-Graphic display. This enables simple and clearly arranged user guidance of the screen. Faults and alarms are illustrated by self-explaining icons. Stepless adjustment of dosing performances chlorine and acid. Relay system to assure dosing of only chlorine or acid or none. Switch-off of the dosing at malfunction. With integrated meter for chlorine consumption and event storage (data logging).

Interface:

Modbus TCP, USB for data export.

Remote indication via browser driven devices (e.g. tablet or smartphone, not incl.): Indication of the current operational states, errors and alarms.

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)	800 x 1300 x 600 mm
Weight	app. 40 kg
Dosing performance chlorine	0,6 kg/h - 2 kg/h
Dosing performance acid	1 l/h
Pre-pressure min.	0,2 bar
Back-pressure max.	1,5 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

- Flocculant dosing
- Dust extraction for dusty chlorine granulate material
- Retention tub
- Front cover
- Buffer tank for GRANUDOS-PB function
- Filling device with universal adapter for 10 kg buckets common in trade. For an easy and dust-free refill of the chlorine granulate



Fig.: Filling device with universal adapter

GRANUDOS 45/100-S5

FUNCTION DESCRIPTION

Dosing station for calcium hypochlorite granulate and acid for the disinfection and the pH-regulation of swimming pool water.

Chlorine dosing directly from the chlorine drum. Acid is dosed into the system directly 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. Dosing manually or linked to an external control system. All functions are permanently monitored.

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 app. 1000 l/h at 1,2 bar, venturi, mixing cyclone. Monitoring of the pump by pressure switch. Monitoring of the suction performance of the venturi. Level monitoring in the flushing tank.

Control techniques S5:

Operation and visualisation via 5-line LC display and three buttons. Fault indications are displayed in plain text. Adjustment of dosing performances chlorine and acid stepless. External dosing control with autocontrollers for free chlorine and pH-value with non-volt contact or 230 V/AC impulse length or frequency controlled. Relay system to assure dosing of only chlorine or acid or none. Switch-off of the dosing at malfunction.



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 1400 x 800 mm
Weight	app. 50 kg
Dosing performance chlorine	GR 45: 0,1 - 2 kg/h GR 100: 0,2 - 4 kg/h
Dosing performance acid	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

- Multihopper
- Dust extraction for dusty chlorine granulate material
- Drum lifter for chlorine drums
- Container GR 150 for very high chlorine demand
- Dosing nozzle closure
- Autocontrol system

GRANUDOS 45/100-TOUCH

FUNCTION DESCRIPTION

Dosing station for calcium hypochlorite granulate and acid for the disinfection and the pH-regulation of swimming pool water.

Chlorine dosing directly from the chlorine drum. Acid is dosed into the system directly 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. Dosing manually or linked to an external control system. All functions are permanently monitored.

Optional function:

In parallel to the chlorine supply of the main pool, a buffer tank can be filled with chlorine solution with an adjustable concentration to supply further pools with chlorine via dosing pumps (details see multiple pool complexes).

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 $\frac{3}{8}$ " in the dissolving system.

Dissolving system:

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

Control techniques TOUCH:

Operation and visualisation via coloured 7" Touch-Graphic display. This enables simple and clearly arranged user guidance of the screen. Faults and alarms are illustrated by self-explaining icons. Stepless adjustment of dosing performances chlorine and acid. Relay system to assure dosing of only chlorine or acid or none. Switch-off of the dosing at malfunction. With integrated meter for chlorine consumption and event storage (data logging).

Interface: Modbus TCP, USB for data export.

Remote indication via browser driven devices (e.g. tablet or smartphone, not incl.): Indication of the current operational states, errors and alarms.



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 chlorine	GR 45: 0,1 - 2 kg/h GR 100: 0,2 - 4 kg/h
Dosing performance acid	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

- Multihopper
- Dust extraction for dusty chlorine granulate material
- Drum lifter for chlorine drums
- Container GR 150 for very high chlorine demand
- Buffer tank for GRANUDOS-PB function
- Dosing nozzle closure
- Autocontrol system



HYPODOS 200/300

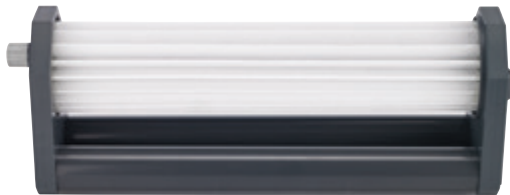
FUNCTION DESCRIPTION

Dissolving system for calcium hypochlorite granulate or other granulated chemicals.

The dissolving water that is coming from the filter is flowing through the Turbodissolver in which the chemical is filled-in. Nozzles at the Turbodissolver are creating a high turbulence at the floor of the unit and the chemical is dissolved without any further handling or a stirrer. The partly slurry solution is flowing over into the dosing tank. After the lapse of the filling procedure the solution has a constant concentration. The swimming filter on the surface is separating particles and creates a clean dosing solution for a reliable operation.

SCOPE OF DELIVERY

- Dosing tank PE 200 or 300 l
- Turbodissolver
- Empty switch with 3 m cable
- Suction tube PVC 4 x 1 with non-return valve
- Swimming filter



TECHNICAL DATA

Water supply	DN15
Diameter 200 / 300	560 mm / 650 mm
Height 200 / 300	1050 mm / 1150 mm
Empty weight 200 / 300	15 kg / 20 kg

TO BE PROVIDED BY THE BUILDER

- Supply tubing from the filter cycle

ACCESSORIES / OPTIONS

- Dosing pump
- Injection valve
- Autocontrol system





GRANUDOS WITH INTEGRATED AUTOCONTROL SYSTEMS





GRANUDOS-FLEX-CPR TOUCH XL

FUNCTION DESCRIPTION

Dosing station for calcium hypochlorite granulate and acid completely with autocontrol system CPR TOUCH for free chlorine, pH-value, redox and temperature. For the disinfection and the pH-regulation of swimming pool water.

Chlorine dosing directly from the dosing unit (with 5 kg or 15 kg dosing hopper). Acid is dosed into the system directly 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. The dosing of the chemicals is controlled directly by the integrated autocontrol system. The autocontrol system and the peristaltic pump(s) are mounted well accessible at the unit. All functions are permanently monitored. The system is operated and controlled via a coloured 7" Touch-Graphic display.

The GRANUDOS-FLEX-CPR TOUCH system consists of a basic unit with different booster pumps and additionally a dosing unit with different dosing performances and hopper sizes. Therefore an individual configuration of the systems according to the project requirements is possible.

Various accessory options are available, such as an innovative filling device with a universal adapter.

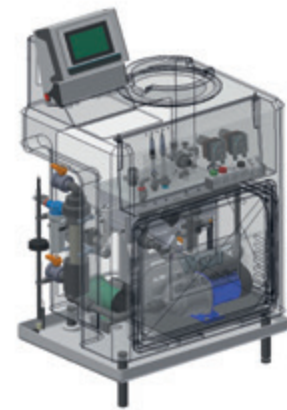


Fig.: GRANUDOS-FLEX-CPR TOUCH XL with dosing unit 5 kg

A GRANUDOS-FLEX SYSTEM

consists of the following components:

BASIC SYSTEM



DOSING UNIT CHLORINE



SCOPE OF DELIVERY BASIC UNIT

Housing:

Solid one part rotational sintered PE grey in a modern design with two service openings with magnetic lockers for an easy and fast access to all single components during maintenance.

Acid dosing:

Peristaltic dosing pump, suction lance with empty report of the canister, dosing valve $\frac{3}{8}$ " in the dissolving system.

Dissolving system:

Pre-filter d 75 with additional ball valve for backflush function, flushing tank, booster pump (Lowara oder Calpeda) app. 1000 l/h at 1,2 bar, venturi, mixing cyclone. 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 data and status of the unit
- Faults and alarms are illustrated by self-explaining icons
- All control parameters are adjustable to ensure optimal pool conditions
- Integrated test programmes for all functions
- Proportional control characteristic to ensure compliance with the selected set points
- Start-up automatic with pH preference dosing
- Input for external release, shock chlorination and ECO mode
- Alarm relay with non-volt changeover contact
- Measuring value- and event storage (data logging)
- **Interface:** Modbus TCP, USB for data export
- **Remote indication & access via browser driven devices** (e.g. tablet or smartphone, not incl.): Indication of the measuring values, current operational states, errors and alarms. Adjustment of the control and operation parameters

Measuring cell:

- Compact acrylic glass block to take the electrodes incl. flow regulator. Pressure resistant design for measuring water recirculation
- pH-electrode with high reliability reference system
- Redox electrode with large and self-cleaning platinum round plate
- Free chlorine electrode consisting of: large and self-cleaning surface round gold plate and counter electrode with reference system Ag/AgCl
- Temperature sensor for temperature measurement
- Sample water valve

SCOPE OF DELIVERY DOSING UNIT CHLORINE

- Dosing hopper for chlorine granulate (with 5 kg or 15 kg volume)
- Dosing motor (with 12 rpm or 35 rpm)
- Dosing screw
- Knocker to support the dosing

TECHNICAL DATA

Electrical supply	230 V/AC 50 Hz
Power supply	390 W
Water supply	DN25
Water outlet to injection point	DN 20
Measures (W/H/D)	800 x 1300 x 600 mm
Weight	app. 40 kg
Dosing performance chlorine	0,6 kg/h - 2 kg/h
Dosing performance acid	1 l/h
Pre-pressure min.	0,2 bar
Back-pressure max.	1,5 bar

TO BE PROVIDED BY THE BUILDER

- Power supply
- Supply tubing and tubing to the injection point
- Tubing of the overflow to the drain

ACCESSORIES / OPTIONS

- Flocculant dosing
- Dust extraction for dusty chlorine granulate material
- Retention tub
- Front cover
- Buffer tank for GRANUDOS-PB function
- Filling device with universal adapter for 10 kg buckets common in trade. For an easy and dust-free refill of the chlorine granulate



Fig.: Filling device with universal adapter



GRANUDOS 45/100-CPR TOUCH XL

FUNCTION DESCRIPTION

Dosing station for calcium hypochlorite and acid completely with autocontrol system for free chlorine, pH-value, redox and temperature. For the disinfection and the pH-regulation of swimming pool water.

Chlorine dosing directly from the chlorine drum. Acid is dosed into the system directly from the canister to correct the pH and to avoid scaling. Chlorine and acid are dosed separately in intervals to the dissolving system from where the chlorine solution is conveyed by a venturi nozzle to the pool water. The dosing of the chemicals is controlled directly by the integrated autocontrol system. The auto-control system is mounted well accessible at the unit.

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 app. 1000 l/h at 1,2 bar, venturi, mixing cyclone. 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 data and status of the unit
- Faults and alarms are illustrated by self-explaining icons
- All control parameters are adjustable to ensure optimal pool conditions
- Integrated test programmes for all functions
- Proportional control characteristic to ensure compliance with the selected set points
- Start-up automatic with pH preference dosing
- Input for external release, shock chlorination and ECO mode
- Alarm relay with non-volt changeover contact
- Measuring value- and event storage (data logging)
- **Interface:** Modbus TCP, USB for data export
- **Remote indication & access via browser driven devices** (e.g. tablet or smartphone, not incl.): Indication of the measuring values, current operational states, errors and alarms. Adjustment of the control and operation parameters

Measuring cell:

- Compact acrylic glass block to take the electrodes incl. flow regulator. Pressure resistant design for measuring water recirculation
- pH-electrode with high reliability reference system
- Redox electrode with large and self-cleaning platinum round plate
- Free chlorine electrode consisting of: large and self-cleaning surface round gold plate and counter electrode with reference system Ag/AgCl
- Temperature sensor for temperature measurement
- Sample water valve

TECHNICAL DATA

Electrical supply	230 V/AC 50 Hz
Power supply	390 W
Water supply	DN25
Water outlet to injection point	DN20
Measures (W/H/D)	600 x 1800 x 800 mm
Weight	app. 55 kg
Dosing performance chlorine	GR 45: 0,1 - 2 kg/h GR 100: 0,4 - 4 kg/h
Dosing performance acid	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

ACCESSORIES / OPTIONS

- Multihopper
- Dust extraction for dusty chlorine granulate material
- Drum lifter for chlorine drums
- Container GR 150 for very high chlorine demand
- Buffer tank for GRANUDOS-PB function
- Dosing nozzle closure



An aerial, high-angle photograph of a rectangular swimming pool. The water is a deep, clear blue-green. A person is swimming in the center of the pool, their arms extended. The pool is surrounded by a dark, possibly stone or concrete, deck. In the background, there is a wooden deck area with some plants and a building with a white door. The overall scene is bright and clear, suggesting a sunny day.

GRANUDOS
FOR MULTIPLE POOL COMPLEXES





GRANUDOS 45/100-TOUCH-PB

FUNCTION DESCRIPTION

Dosing station for calcium hypochlorite granulate and acid for the disinfection and the pH-regulation of swimming pool water.

Chlorine dosing directly from the chlorine drum. Acid is dosed into the system directly 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. Dosing manually or linked to an external control system. All functions are permanently monitored. In parallel to this chlorine supply of the main pool a buffer tank is filled with chlorine solution with an adjustable concentration.

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 $\frac{3}{8}$ " in the dissolving system.

Dissolving system:

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

Control techniques TOUCH:

Operation and visualisation via coloured 7" Touch-Graphic display. This enables simple and clearly arranged user guidance of the screen. Faults and alarms are illustrated by self-explaining icons. Stepless adjustment of dosing performances chlorine and acid. Relay system to assure dosing of only chlorine or acid or none. Switch-off of the dosing at malfunction. With integrated meter for chlorine consumption and event storage (data logging).

Interface: Modbus TCP, USB for data export.

Remote indication via browser driven devices (e.g. tablet or smartphone, not incl.): Indication of the current operational states, errors and alarms.



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 chlorine	GR 45: 0,1 - 2 kg/h GR 100: 0,2 - 4 kg/h
Dosing performance acid	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, tubing to the injection point / tubing to the buffer tank
- Tubing of the overflow to the drain
- Autocontrol systems to control the dosing of the chemicals

ACCESSORIES / OPTIONS

- Multihopper
- Dust extraction for dusty chlorine granulate material
- Drum lifter for chlorine drums
- Container GR 150 for very high chlorine demand
- Buffer tank for GRANUDOS-PB function
- Dosing nozzle closure
- Autocontrol systems

BUFFER TANK GRANUDOS-PB

FUNCTION DESCRIPTION

Buffer tank for the storage of the chlorine solution that is produced by the GRANUDOS-TOUCH-PB to supply additional small pools. The dosing of the chlorine solution is controlled by external controllers.

The filling of the buffer tank by the GRANUDOS-TOUCH-PB is activated, when the empty switch of the tank sends a signal to the GRANUDOS. The pH-neutral chlorine solution from the buffer tank is conveyed to the injection point via dosing pumps. The pH of the pools that are supplied additionally with chlorine has to be regulated separately.



SCOPE OF DELIVERY

Buffer tank GRANUDOS-PB 300 I

- PE-tank D 650 x H 1110 mm - 300 l with screw lid
- 3 x level switch min/max for the control of the filling
- 2 x level switch min/max for alarm function
- Activated carbon filter for dechlorination of vent air during the filling

Switch over unit:

- 2 control valves DN20 (electrical or pneumatical)

TO BE PROVIDED BY THE BUILDER

- Supply tubing from GRANUDOS
- Dosing pump

ACCESSORIES / OPTIONS

- Safety tub round, 320 l
- Dosing pump(s)
- Injection valve



GRANUDOS 45/100-PLUS V80-TOUCH

FUNCTION DESCRIPTION

Dosing system for the production of a chlorine solution from calcium hypochlorite to disinfect multiple pool complexes.

The unit doses chlorine granulate directly from the chlorine drum to produce a pH-neutral chlorine solution (max. 3,5 g Cl/l) that is conveyed into a buffer tank of the feed system. Chlorine and acid, which is necessary for the neutralisation, are dosed separately in intervals to the dissolving system from where the chlorine solution is conveyed by a venturi nozzle to the buffer tank.

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 reserve- and 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, isolation valve, flushing tank, booster pump app. 1000 l/h, venturi, mixing cyclone. Monitoring of the pump by pressure switch. Monitoring of the suction performance of the venturi. Level monitoring in the flushing tank.

Control techniques TOUCH:

Operation and visualisation via coloured 7" Touch-Graphic display. This enables simple and clearly arranged user guidance of the screen. Faults and alarms are illustrated by self-explaining icons. Stepless adjustment of dosing performances chlorine and acid. Relay system to assure dosing of only chlorine or acid or none. Switch-off of the dosing at malfunction. With integrated meter for chlorine consumption and event storage (data logging).

Interface: Modbus TCP, USB for data export.

Remote indication via browser driven devices (e.g. tablet or smartphone, not incl.): Indication of the current operational states, errors and alarms.



Fig.: GRANUDOS 45/100-PLUS V80-TOUCH with options dust extraction and dosing nozzle closure

TECHNICAL DATA

Electrical supply	230 V/AC 50 Hz
Power supply	390 W
Water supply	DN20
Water outlet to the feed system	DN20
Measures (W/H/D)	600 x 1500 x 800 mm
Weight	app. 50 kg
Dosing performance chlorine	GR 45-Plus : 0,1 - 2 kg/h GR 100-Plus: 0,2 - 4 kg/h
Dosing performance acid	3 l/h
Pre-pressure min.	0,2 bar
Back-pressure max. to the feed system	1,2 bar (optional 1,8 bar)

TO BE PROVIDED BY THE BUILDER

- Power supply
- Supply tubing and tubing to the feed system
- Tubing of the overflow to the drain

ACCESSORIES / OPTIONS

- Multihopper
- Dust extraction for dusty chlorine granulate material
- Drum lifter for chlorine drums
- Container GR 150 for very high chlorine demand
- Feed system GRANUDOS-Plus
- Dosing nozzle closure
- Autocontrol systems

FEED SYSTEM GRANUDOS-PLUS

FUNCTION DESCRIPTION

Feed system for the distribution of the pH-neutral chlorine solution that is produced by the GRANUDOS-Plus to the different pool cycles by dosing lines. The dosing of the chlorine solution to the pools is controlled by external controllers.

A solenoid centrifugal pump with PVDF head is generating a constant pre-pressure for the dosing lines for the single pools through a pressure retention valve. If a control valve of a dosing line is opened the same flow rate is always realised, no matter how many dosing lines are actuated.



SCOPE OF DELIVERY

Buffer tank:

- Buffer tank PE d 650 x h 1110 mm - 300 l with screw lid
- 2 level switches min/max to control the filling
- 2 level switches min/max for alarm
- Activated carbon filter for the dechlorination of the vent air during the filling

Safety tub:

- PP-tub 680 x 1150 x 430 mm with carrier plate for booster pump
- 1 level switch for overflow monitoring
- 2 handles to carry the system

Feed system:

- Solenoid centrifugal pump 230 VAC - 0,55 kW - 1000 l/h at 1,2 bar (optional 230 Volt - 1,1 kW with frequency converter - 2000 l/h at 1,6 bar) fitted on carrier plate of the safety tub with suction pipe d32 to the buffer tank
- Recirculation pipe d 25 with pressure retention valve PVC/PTFE. Non return valve PVC/FPM d 25. Pressure gauge 0 - 4 bar with gauge guard PVC/PTFE. Aeration/emptying connection d 20. Pressure connection to the distributor of the dosing lines
- Connector box for level switches and pump with safety relay system to close all chlorine control valves in the event of malfunction
- Mounting plate 500 x 1300 mm for up to 8 dosing lines GR (more on demand)

Dosing lines (quantity complies with the number of pools):

- Flow meters 5-25 l/h to 100 - 1000 l/h (as demanded)
- Solenoid control valves Bürkert, resistant against chlorine solution up to 5 g/l
- Separation valve PVC d 20
- Membrane valve PVC d 20 to adjust the flow of every dosing line

TECHNICAL DATA

Electrical supply MPN130-Fa	230 V AC
Power supply MPN130/150	550 W / 1100 W
Supply from GRANUDOS-Plus	DN20
Outlet to the injection points	DN15
Measures (W/H/D)	1200 x 1800 x 800 mm
Weight	app. 70 kg
Back-pressure max. MPN130/150	1,0 bar / 1,6 bar

TO BE PROVIDED BY THE BUILDER

- Power supply
- Supply tubing from GRANUDOS-Plus and tubing to the injection points
- Autocontrol systems to control the dosing lines

ACCESSORIES / OPTIONS

pH-control: Monitoring of the pH-value of the chlorine solution, switches-off the GRANUDOS if the demanded pH-range in the buffer tank is not hold

- Probe holder in suction tubing of booster pump
- pH-electrode
- pH-measuring converter
- Set point and alarm hysteresis programmable
- Installed in the control GRANUDOS-Plus



ACCESSORIES FOR GRANUDOS

MULTIHOPPER

FUNCTION DESCRIPTION

Universal drum holder and rotation drum carrier for GRANUDOS 45/100 systems.

The Multihopper allows the use of nearly all calcium hypochlorite granulate drums (from 25 - 50 kg) common in trade. If the drum type will be changed it will be no longer necessary to convert the dosing hopper. Furthermore the system eases the handling of the drum change from an empty to a full one. This provides an essential work facilitate for the operator. The system is available for the retrofit of existing GRANUDOS systems (Part No. 29730) as well as for new systems (Part No. 30300).

The drum is inserted into the drum carrier and pressed against the drum holder by two clamp levers. This ensures a secure, firm and tight connection between the drum and the drum holder. Afterwards the complete unit is turned around and set into the dosing position. If the drum type has to be changed, only a few adjustments need to be made in order to adapt the Multihopper system to the new drum type.

SCOPE OF DELIVERY

- Supporting structure with drum holder and clamping levers
- Dosing hopper with add-on parts if necessary



TECHNICAL DATA

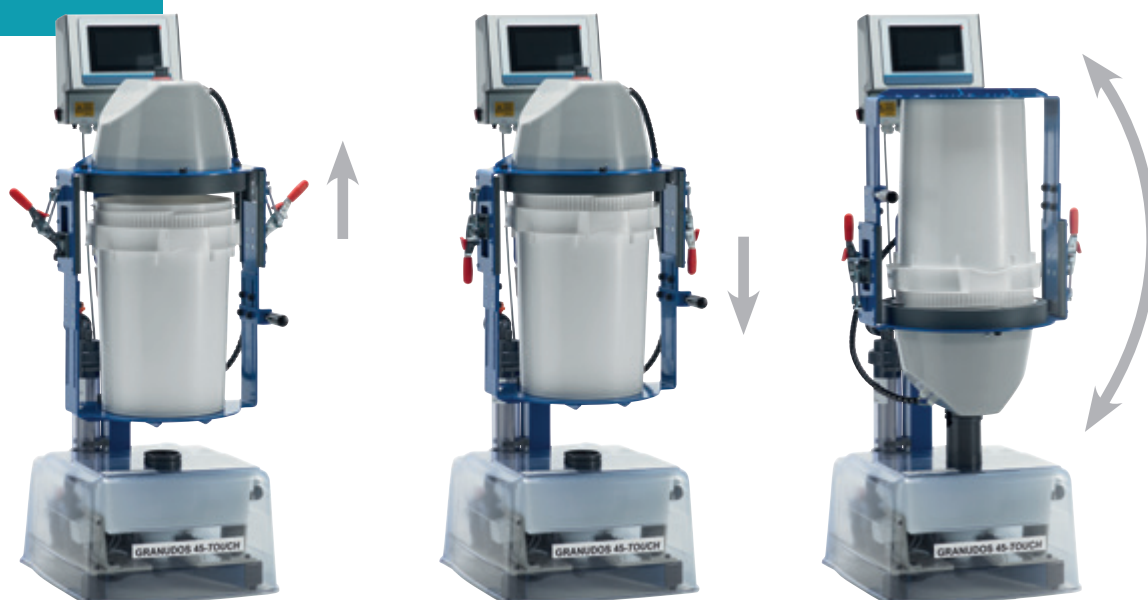
Suitable drums	25 - 50 kg
Measures (W/H/D)	max. 640 x 860 x 540 mm
Weight	app. 40 kg

ACCESSORIES / OPTIONS

- Drum gripper for lifting and inserting the drums (Part No. 29758)



NEW!





DUST EXTRACTION STA-45

FUNCTION DESCRIPTION

The dust extraction has especially been developed for the dosing of chlorine granulates with a high dust content. The system is available for new machines (Part No. 27746) as well as a retrofit kit (Part No. 27537) for installed machines.

Chlorine granulate with a high dust content can lead to a disturbing discharge of chlorine dust at GRANUDOS in case of a high dosing performance. The dust is extracted directly at the flushing tube by an additional venturi, conveyed to the flushing tank and dissolved completely. The operation water for the venturi is taken from and returned to the flushing tank. To clean the venturi and the walling of the flushing tube a rinsing programme is started automatically in certain intervals.

SCOPE OF DELIVERY

- Solenoid centrifugal pump
- Venturi for the dust extraction
- Flushing system for cleaning
- Solenoid valve
- Connection hoses
- Modified flushing tube
- Modified dust cover

TECHNICAL DATA

Electrical supply	230 V/AC 50 Hz via GRANUDOS control system
Weight	app. 5 kg



DOSING NOZZLE CLOSURE

FUNCTION DESCRIPTION

The dosing nozzle closure prevents that residues of the granulate may fall out of the dosing nozzle when the drum is turned. The system is available for new machines as well as a retrofit kit for installed machines.

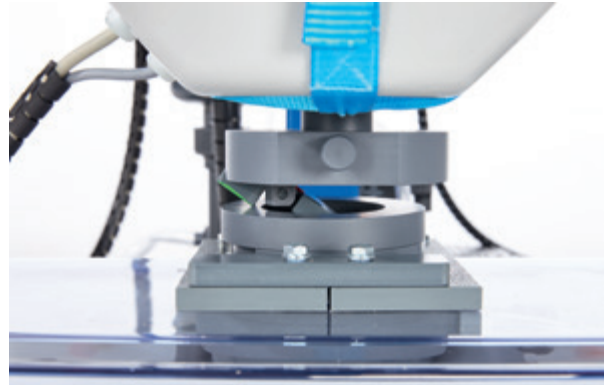
The dosing nozzle closure is installed on the dosing nozzle and fastened with a screw. The dosing nozzle closure is opened and closed by a tilt mechanism that is triggered by the rotary movement of the drum.

SCOPE OF DELIVERY

- Dosing nozzle closure
- Retaining plate
- Modified heating tube, if necessary
- Fixing material

TECHNICAL DATA

Measures	d 110 mm / H 45 mm
Weight	app. 0,6 kg



DRUM LIFTING TROLLEY



FUNCTION DESCRIPTION

Drum lifting trolley for the transport of the chlorine drums from the storage area to the GRANUDOS. Now the drum is brought to the height of the drum carrier and pushed onto the drum carrier of the GRANUDOS.

TECHNICAL DATA

Measures (W/H/D)	500 x 1400 x 1100 mm
Weight	38 kg
Lifting force	max. 120 kg
Vertical lift	1 m

DRUM LIFTER



FUNCTION DESCRIPTION

Drum lifting device for the lifting of the chlorine drums onto the GRANUDOS by a manual lifting appliance. The drum lifter is fixed to the vertical support of the GRANUDOS. The system can easily be retro-fitted at existing machines and enables the operator to handle the chlorine drums effortlessly.

SCOPE OF DELIVERY

- Installation support for the fixation to the GRANUDOS
- Guide rail
- Trolley
- Manual lifting appliance with drum gear
- Fixation material

TECHNICAL DATA

Measures (without GRANUDOS)	H 1450 mm x W 1150 mm
Weight	24 kg



CONTAINER GR 150

FUNCTION DESCRIPTION

The Container GR 150 has especially been developed for applications with a high chlorine consumption. The 90 kg storage system can be used in combination with all GRANUDOS 45/100 models.

SCOPE OF DELIVERY

Storage container:

Closed dust-tight container made of PE with welded support with adjustable legs and connecting flange for the assembling to the trunnion of the GRANUDOS 45/100. The transparent container allows to control the filling level visually in addition to the empty switch. For maintenance reasons a gate valve is installed at the lower container cone. If a GRANUDOS should be upgraded to this system, the existing dosing unit can be used.

Drum support:

Turnable drum support for the use with nearly all drums common in trade. The filling hopper has to be screwed onto the drum that will be fastened at the drum support at the floor, then lifted with the lifting device and rotated. Above the container the drum will be lowered. The filling hose will be inserted into the opening of the container. After opening the filling hopper by a slide valve, the granulated chemical will flow dust-free down into the storage container.

Electric crane with trolley:

Lifting power 200 kg. The lifting device will be used for lifting the drum support. The electric crane will be operated by a button.

TO BE PROVIDED BY THE BUILDER

- Necessary room height: min. 3 m
- Necessary floor space required incl. working area crane: min. 1 m x 2 m







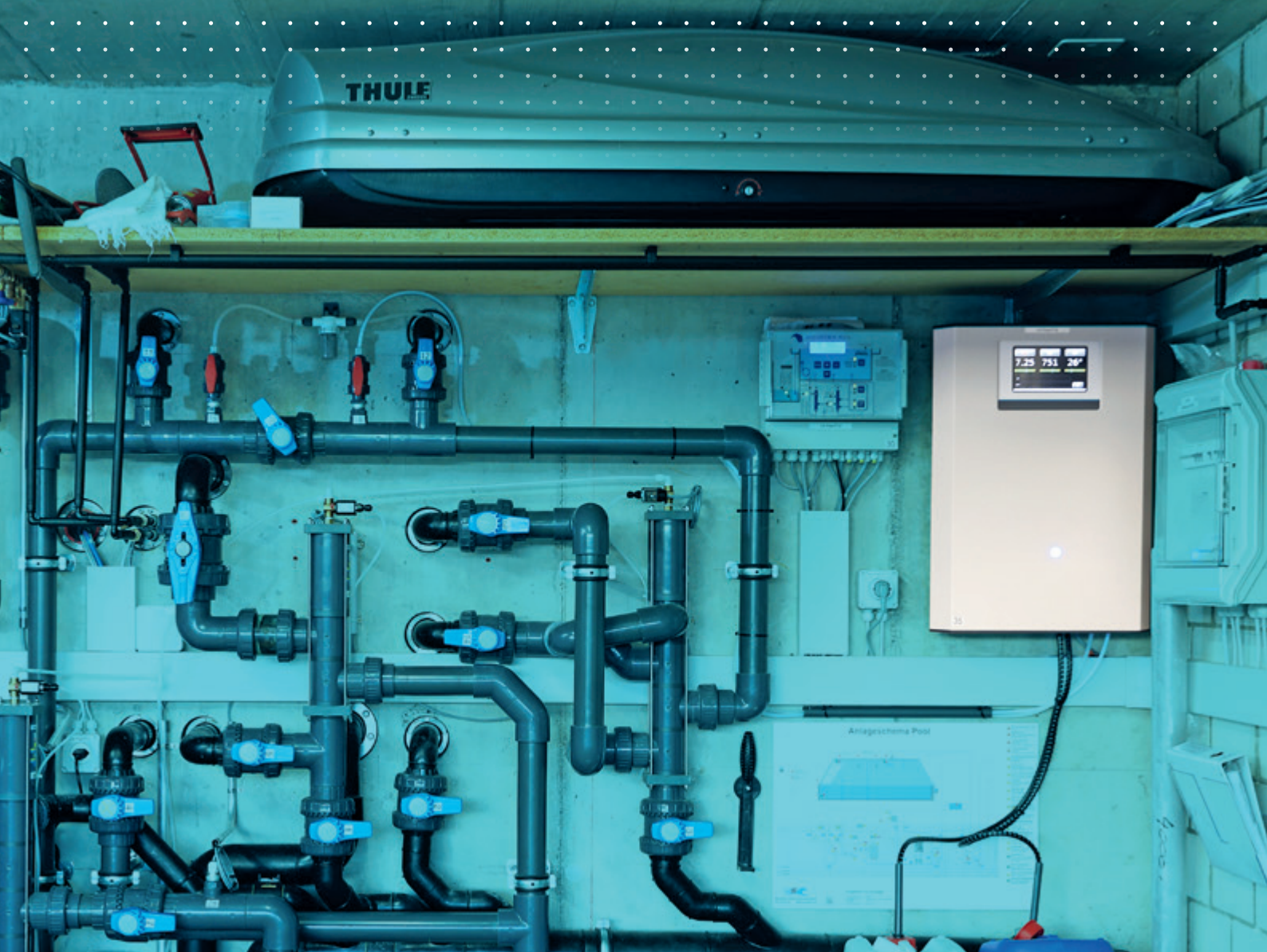
AUTOCONTROL SYSTEMS POOLKLAR / CPR TOUCH

The prerequisite for a perfect and impeccable water quality in private and public swimming pools is an accurately functioning autocontrol system.

- For every application the right, customised solution
- Reliable and safe measurement of the parameters free chlorine, pH, redox and temperature
- With integrated dosing system if required
- Easy, intuitive menu guidance
- Fast and easy installation due to pre-assembled components

- 48 For private pools (pH/Redox)
- 54 For public pools (Cl/pH/Redox)
- 59 Single channel controller (pH or Redox)
- 60 Accessories

PRECISE & STABLE



FOR EVERY PUBLIC AND PRIVATE POOL THE SUITABLE SOLUTION

- » Free Chlorine/PH/Redox/Temperature control with integrated dosing system depending on the application
- » Safe and reliable measurement and control
- » Intuitive operation and menu guidance
- » Very stable, low-wear, self-cleaning chlorine and redox electrodes
- » Quick and easy installation due to pre-installed components
- » Easy maintenance



AUTOCONTROL SYSTEMS FOR PRIVATE POOLS

OUR AUTOCONTROL SYSTEMS FOR PRIVATE POOLS

PREMIUM



BASIC



DISTINCTIVE FEATURES

	POOLKLAR Touch XL	POOLKLAR Touch Basic
Display	Coloured 7" Touch	Coloured 3,2" Touch
Disinfection process	<ul style="list-style-type: none"> » Liquid chlorine » Salt-electrolysis » Bromine tabs » Active oxygen 	<ul style="list-style-type: none"> » Liquid chlorine
Redox electrode	<ul style="list-style-type: none"> » Stable measurement » Ultra durable » Large scale » Self-cleaning 	<ul style="list-style-type: none"> » Single-rod glass electrode
Design cover	✓	-
Pre-filter	✓	optional
Measures (W/H/D)	480 x 670 x 170 mm	425 x 335 x 150 mm
Remote access	<ul style="list-style-type: none"> » LAN-interface - Remote indication via browser driven devices or - Modbus TCP IP 	-





POOLKLAR TOUCH XL-V3

FUNCTION DESCRIPTION

The system POOLKLAR Touch XL has been developed especially for ambitious private pools for customers who do not want to compromise on quality and reliability.

Measurement of the parameters pH-value, redox/ORP and temperature. Operation and visualisation via clear, intuitive 7" Touch-Graphic display that ensures an easy operation. Each system is delivered individually tested and completely pre-mounted on a board. This ensures an easy and quick installation.

Useful for disinfection with liquid chlorine, bromine, electrolysis, active oxygen

SCOPE OF DELIVERY

Control techniques:

- Coloured 7" Touch-Graphic display to indicate the current data and status of the unit
- Faults and alarms are illustrated by self-explaining icons
- All control parameters are adjustable to ensure optimal pool conditions
- Integrated test programmes for all functions
- Proportional control characteristic to ensure compliance with the selected set points
- Start-up automatic with pH preference dosing
- Level control of the canisters
- Input for external release
- Alarm relay with non-volt changeover contact
- Relay for the control of the pool heating with non-volt changeover contact
- Operation languages: German, English, French and Swedish
- **Interface:** Modbus TCP, USB for data export
- **Remote indication & access via browser driven devices** (e.g. tablet or smartphone, not incl.): Indication of the measuring values, current operational states, errors and alarms. Adjustment of the control and operation parameters



Measuring cell:

- Compact acrylic glass block to take the electrodes, dosing valves, control of the flow. Pressure resistant design for measuring water recirculation
- pH-electrode with high reliability reference system
- Redox electrode with large and self-cleaning platinum round plate for direct reaction to each variation of the water quality. The selected disinfection force will be ensured
- Temperature sensor for temperature measurement
- Flow monitoring with switch-off in case of water shortage
- Illumination of the measuring cell for the indication of the system status

Dosing techniques:

- Dosing with self-priming peristaltic dosing pumps
- Dosing of disinfection and pH-control chemicals directly into the measuring water
- Suction lances with level switches

Accessories (incl.):

- 10 m measuring water tube PE 6 x 1
- 7 m dosing tube PTFE 6 x 1
- Buffer solution pH7, pH4, Redox 468 mV
- Electrode cleaner, distilled water
- Cleaning pearls and a sealing kit
- 2 PVC-ball valves 1/2" with submerge tube
- Pre-filter for wall mounting

Design-cover

TECHNICAL DATA

Type POOLKLAR Touch XL	2S	O ₂	1S
Peristaltic pump disinfection	1,2 l/h Liquid chlorine	3 l/h H ₂ O ₂	-
Peristaltic pump pH Dosing performance 0,7 l/h*	✓	✓	✓
Control output external dosing systems	-	-	1 x 230 V for inline electrolyse
Electrical supply	230 V/AC 50 Hz		
Power supply	8 W		
Charging rate max.	100 mA		
Measures (W/H/D)	480 x 670 x 170 mm		
Weight	app. 11 kg		

*with standard tube SR10 – other dosing performances on demand

TO BE PROVIDED BY THE BUILDER

- Power supply
- Supply water tubing
- Tubing to the injection point

ACCESSORIES / OPTIONS

- Dosing pumps Sa dosing performance up to 2,5 l/h disinfection and 1,2 l/h pH correction
- Service Boxx for POOLKLAR Touch XL





POOLKLAR TOUCH BASIC

FUNCTION DESCRIPTION

The system POOLKLAR Touch Basic has been developed especially for ambitious private pools for price-conscious customers who do not want to compromise on quality and reliability.

Measurement of the parameters pH-value, redox/ORP and temperature. Operation and visualisation via clear, intuitive 3,2" Touch-Graphic display. Each system is delivered individually tested and completely pre-mounted on a board. This ensures an easy and quick installation.

Useful for disinfection with liquid chlorine.

SCOPE OF DELIVERY

Control techniques:

- Coloured 3,2" Touch-Graphic display to indicate the current data and status of the unit
- Faults and alarms are illustrated by self-explaining icons
- All control parameters are adjustable to ensure optimal pool conditions
- Integrated test programmes for all functions
- Proportional control characteristic to ensure compliance with the selected set points
- Start-up automatic with pH preference dosing
- Level control of the canisters
- Input for external release
- Alarm relay with non-volt changeover contact
- Operation languages: German and English

Measuring cell:

- Compact acrylic glass block to take the electrodes, dosing valves, control of the flow. Pressure resistant design for measuring water recirculation
- Professional-quality pH and Redox-electrodes ensure that the desired water values are maintained
- Flow control and switch-off in case of water shortage

Dosing techniques:

- Dosing with self-priming peristaltic dosing pumps
- Dosing of disinfection and pH-control chemicals directly into the measuring water
- Suction lances with level switches



Accessories (incl.):

- 10 m measuring water tube PE 6 x 1
- 5 m dosing tube PTFE 6 x 1
- Buffer solution pH7, pH4, Redox 468 mV
- Electrode cleaner, distilled water
- 2 PVC-ball valves ½" with submerge tube

TECHNICAL DATA

Electrical supply	230 V/AC 50 Hz
Power supply	8 W
Measures (W/H/D)	425 x 335 x 150 mm
Weight	app. 4,5 kg
Dosing performance disinfection	app. 1,2 l/h
Dosing performance pH-correction	app. 0,7 l/h

TO BE PROVIDED BY THE BUILDER

- Power supply
- Supply tubing
- Tubing to the injection point

ACCESSORIES / OPTIONS

- Pre-filter for wall mounting
(recommended for outdoor pools)
- Temperature sensor
- Service Boxx for POOLKLAR Touch Basic



A modern, multi-story building with a white facade and dark accents, featuring balconies with glass railings. The building is situated in a mountainous landscape with a swimming pool in the foreground. The pool's surface reflects the sky and the building. The background shows rugged mountains under a blue sky with scattered clouds. The overall scene is bright and clear, suggesting a sunny day.

AUTOCONTROL SYSTEMS FOR PUBLIC POOLS

OUR AUTOCONTROL SYSTEMS FOR PUBLIC POOLS

INDIVIDUAL



UNIVERSAL



DISTINCTIVE FEATURES

	CPR Touch XL	CPR 3000
Display	Coloured 7" Touch	4-line LCD
Control types	<ul style="list-style-type: none"> » Impulse length » 2-point 	<ul style="list-style-type: none"> » Impulse length » 2-point » Frequency » 0/4...20 mA
Redox electrode	<ul style="list-style-type: none"> » Stable measurement » Ultra durable » Large scale » Self-cleaning 	<ul style="list-style-type: none"> » Stable measurement » Ultra durable » Large scale » Self-cleaning
Dosing pump(s)	✓ optional	-
Design cover	✓	-
Measures (W/H/D)	480 x 670 x 170 mm	430 x 650 x 160 mm
Remote access	<ul style="list-style-type: none"> » LAN-interface <ul style="list-style-type: none"> - Remote indication via browser driven devices or - Modbus TCP IP 	<ul style="list-style-type: none"> » RS 485



The systems **CPR Touch XL & CPR 3000** are in accordance with swimming pool norms like DIN, ÖNORM and SIA.



CPR TOUCH XL

FUNCTION DESCRIPTION

The system CPR Touch XL has been developed especially for ambitious private pools and public pools (ideal for e.g. hotel and therapy pools), where a reliable compliance of the water quality is required.

Measurement of the parameters free chlorine, pH-value, redox/ORP and temperature. The system CPR Touch XL is in accordance with the common swimming pool norms like DIN, ÖNORM and SIA. Stable and reliable measurement due to large and self-cleaning chlorine and redox electrodes. Operation and visualisation via user-friendly 7" Touch-Graphic display that ensures an easy operation. Each system is delivered individually tested and completely pre-mounted on a board. This ensures an easy and quick installation.

SCOPE OF DELIVERY

Control techniques:

- Coloured 7" Touch-Graphic display to indicate the current data and status of the unit
- Faults and alarms are illustrated by self-explaining icons
- All control parameters are adjustable to ensure optimal pool conditions
- Integrated test programmes for all functions
- Proportional control characteristic to ensure compliance with the selected set points
- Start-up automatic with pH preference dosing
- Level control of the canisters
- Input for external release, shock chlorination and ECO mode
- Alarm relay with non-volt changeover contact
- Relay 230 V for the control of the pool heating
- Operation languages: German and English
- Measuring value- and event storage (data logging)
- **Interface:** Modbus TCP, USB for data export
- **Remote indication & access via browser driven devices** (e.g. tablet or smartphone, not incl.): Indication of the measuring values, current operational states, errors and alarms. Adjustment of the control and operation parameters



Measuring cell:

- Compact acrylic glass block to take the electrodes, dosing valves, flow regulator and sample water valve. Pressure resistant design for measuring water recirculation
- Free chlorine electrode consisting of: large and self-cleaning surface round gold plate and counter electrode with reference system Ag/AgCl
- Redox electrode with large and self-cleaning platinum round plate
- Temperature sensor for temperature measurement
- Flow monitoring with switch-off in case of water shortage

Dosing techniques (Details see technical data):

- Dosing with self-priming peristaltic dosing pumps
- Dosing of disinfection and pH-control chemicals directly into the measuring water
- Suction lances with level switches

Accessories (incl.):

- 10 m measuring water tube PE 6 x 1
- 7m dosing tube PTFE 6 x 1
- Buffer solution pH7, pH4, Redox 468 mV
- Electrode cleaner, distilled water
- Cleaning pearls and a sealing kit
- 2 PVC-ball valves 1/2" with submerge tube
- Pre-filter for wall mounting

Design-cover

TECHNICAL DATA

Type CPR Touch XL	2S	1S oCl mPH	1S mCl oPH	OS
Dosing technique	Two integrated dosing pumps	One integrated dosing pump	One integrated dosing pump	Without integrated dosing pump
Peristaltic pump chlorine dosing performance 2,5 l/h*	✓	-	✓	-
Peristaltic pump pH dosing performance 1,2 l/h*	✓	✓	-	-
Control output external dosing systems	-	1 x 230 V for Inline electrolysis or dosing line GR Plus	1 x 230 V for external pH dosing systems	2 x 230 V
Electrical supply	230 V/AC 50 Hz			
Power supply	8 W			
Charging rate max.	2 A			
Measures (W/H/D)	480 x 670 x 170 mm			
Weight	app. 12 kg			

* with standard tube 3,2 x 1,6 – lower dosing performances on demand

TO BE PROVIDED BY THE BUILDER

- Power supply
- Supply water tubing
- Tubing to the injection point

ACCESSORIES / OPTIONS

- Tele indication 10" Touch
- Service Boxx for CPR Touch





CPR-COMPACT 3000

FUNCTION DESCRIPTION

Autocontrol system for public swimming pools. For the control of the parameters free chlorine, pH-value, redox/ORP and temperature according to DIN 19634 to control all dosing units common in trade with frequency, impulse length, 2-point or 0/4...20 mA. Operation and visualisation via a 4-line, illuminated display and 4 buttons.

SCOPE OF DELIVERY

Control techniques:

- 4-line LCD display
- Operation via 4 buttons
- SD card for data- and event logging
- Fault indications in clear text
- LED's to indicate active outputs
- P, PI, PD, PID- control characteristics
- pH preference dosing
- Output pH - pulse, on/off, frequency
- Output chlorine - pulse, on/off, frequency, motor valve with feedback
- 3 free programmable analogue outputs 0/4...20 mA
- Level control of the canisters
- Input for external release
- Alarm relay with non-volt changeover contact
- Simple filter control
- Optional temperature measurement and control
- Optional total chlorine measurement with relay output
- Optional interface RS485 for remote indication and access
- Operation languages: German and English

Measuring cell:

- Acrylic glass block to take the electrodes in pressure-resistant execution with control of the flow and switch-off in case of water shortage
- Pre-filter, sampling valve
- Free chlorine electrode consisting of: large and self-cleaning round gold blank and counter electrode with reference system Ag/AgCl
- pH-electrode with high reliability reference system Ag/AgCl
- Redox electrode with large and self-cleaning platinum round blank for direct reaction to each variation of the water quality. The selected disinfection force will be ensured



Accessories (incl.):

- 10 m measuring water tube PE 6 x 1
- Buffer solution pH7, pH4, Redox 468 mV
- Electrode cleaner, distilled water
- Cleaning pearls and a sealing kit
- 2 PVC-ball valves 1/2" with submerge tube

TECHNICAL DATA

Electrical supply	230 V/AC 50 Hz
Power supply	5 W
Measures (W/H/D)	430 x 650 x 160 mm
Weight	app. 8 kg

TO BE PROVIDED BY THE BUILDER

- Power supply
- Supply tubing

ACCESSORIES / OPTIONS

- Temperature measurement and control
- Total chlorine measurement
- Interface RS485
- Software for remote access
- 7 segment LED remote indication

PH/REDOX-COMPACT

FUNCTION DESCRIPTION

Autocontrol and dosing system for the pH or redox regulation of for example swimming pools or swimming ponds.

Operation and visualisation via red 7 segment LED display and 3 buttons.

SCOPE OF DELIVERY

Control techniques:

- 7 segment LED display
- Operation via 3 buttons
- Proportional control characteristic
- Direct control of the dosing pump
- Level control of the canister
- Alarm relays with non-volt changeover contact

Measuring technique:

- Electrode with high reliability reference system Ag/AgCl for the installation into the pool tubing and 3 m electrode cable

Dosing techniques:

- Dosing with self-priming peristaltic dosing pump
- Suction lance with level switch
- Dosing of the chemical into the pool circuit

Accessories (incl.):

- Buffer solution pH7, pH4 respectively 468 mV
- Electrode cleaner
- 2 saddle clamps d50 x 1/2"
- Suction lance with empty switch
- Dosing valve 3/8" and 3 m dosing tube PE 4 x 1
- Adapter 1/2" - 3/8" for dosing valve
- Adapter 1/2" - PG 13,5 for electrode



TECHNICAL DATA

Electrical supply	230 V/AC 50 Hz
Power supply	6 W
Charging rate max.	100 mA
Measures (W/H/D)	160 x 150 x 120 mm
Weight	app. 1,5 kg
Dosing performance*	max. 1,2 l/h

* Lower dosing performance 0,1 or 0,5 l/h on demand

TO BE PROVIDED BY THE BUILDER

- Power supply
- Installation of the dosing valve and the electrode into the tubing of the swimming pool

ACCESSORIES / OPTIONS

On demand we can supply the system as a complete pre mounted unit with measuring water tubing, measuring cell and tapping point.



ACCESSORIES FOR AUTOCONTROL SYSTEMS

SERVICE BOXX

Service Boxx for all standard systems. It contains all necessary wear parts for one annual maintenance. The box offers additional storage space for further spare parts such as fine filter, pH electrode cable, level switch, dosing motor and ball valve. The parts are included in a practical SORTIMO plastic box.

The Service-Boxx is available for the following system series:

- POOLKLAR PR/Touch XL, Part No. 24055
- POOLKLAR Touch XL-V2 and V3, Part No. 25423
- POOLKLAR Basic, Part No. 30449
- CPR Touch XL-2S, Part No. 26290
- CPR Compact 3000, Part No. 24572



Notice: If you are not sure, which Service Boxx is the right one for your system, please let us know your serial number! Special system versions may require other wear parts!

TELE INDICATION 10" TOUCH

FUNCTION DESCRIPTION

Tele indication via 10" Touchscreen display for the indication of the water values in areas of swimming pools that are accessible by the public (in combination with auto-control system CPR Touch). Bathing guests can convince themselves of the perfect quality of the swimming pool water. Besides the indicated hygiene parameters free chlorine, pH and redox the water temperature is shown too. Furthermore the operator of the pool can use the display for the information of his guests (e.g. bathing rules, advertisement). The water values and the stored guest information are shown alternating in a slideshow.

SCOPE OF DELIVERY

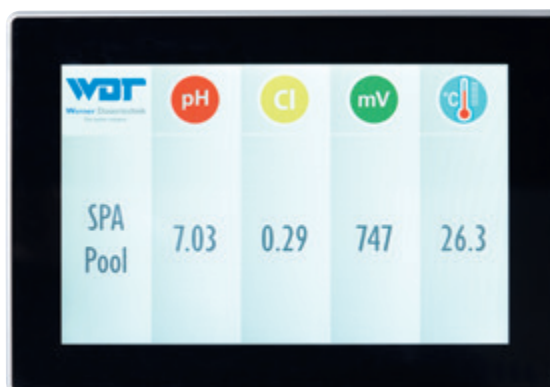
- Display: 10,1" IPS, 1280 x 800 Pixel
- Aluminium-front with 3 mm ESG glas, RAL9005
- Backwall made of stainless steel, 8 holding clamps
- Plug in transformer
- Network connection via RJ45 plug
- Programmed SD card
- Possible menu languages: German, English, French, Russian, Arabic

TECHNICAL DATA

Electrical supply	230 V/AC 50 Hz
Power supply	8 W
Measures (W/H/D)	273 x 190 x 40 mm
Protection class	IP66 from the front

TO BE PROVIDED BY THE BUILDER

- Power supply
- Network cable to autocontrol system CPR Touch
- Installation frame





MEASURING WATER PUMP V600

FUNCTION DESCRIPTION

Measuring water pump for a continuous flow of the measuring water in public und private swimming pools.

With an optimal performance range of app. 600 l/h, the non-self-priming metering pump V600 offers one great advantage: the very low flow rate ensures the best possible safety for swimmers close to metering water priming points. The corrosion-resistant pump has especially been developed for conveying the measuring water in public swimming pools where pool water quality is subject to strict conditions.

SCOPE OF DELIVERY

Performance:

- Centrifugal pump with peripheral impeller
- Bellows mechanical seal on plastic impeller hub mounted
- Motor or pump shaft does not come into contact with water in the circuit
- Electrical separation

Construction material:

- Pump housing PPS GF 40
- Pump housing cover PPS GF 40
- Pump shaft PPS GF 40
- Impeller PEEK
- Slide ring seal carbon/ceramic/NBR
- Stainless steel screws



TECHNICAL DATA

Delivery rate	max. 0,8 m ³ /h
Delivery height	max. 20 mWS
Power consumption P ₁ /-output P ₂ (kW)	1 - 230 V 0,28/0,14
Suction connection	G 3/4"
Pressure connection	G 3/4"

Notice: The pumps can be used in this version for swimming pool water up to a total salt concentration of 0,5 % corresponding to 5 g/l. For higher salt concentrations, please contact us.



THREE-CHAMBER-TESTER CHLORINE PH – BASIC

Cost-effective pool tester for measuring the chlorine and pH value as an absolute minimum equipment for every pool owner.

- Highest accuracy
- RAPID tablets fast dissolving
- Easy handling
- Intuitive operation



SCUBA II – MEDIUM

The Scuba II is a measuring device for ambitious private swimming pool and whirlpool owners and the minimum equipment for every service vehicle. The device provides the most accurate measurement results of the important pool parameters, such as free chlorine, total chlorine or pH value.

- Fast measurement results
- Integrated measuring chamber
- User-friendly handling
- Watertight housing
- Large display
- Modern design



MD 200 PHOTOMETER – PROFI

For real professionals and operators of public pools. The Photometer MD 200 can be used in almost all areas of water analysis. The low-maintenance device ensures precise measurement results in a high-quality design that offers high-quality interference filters in addition to LEDs with long-term stability as a light source.

- Automatic switch-off
- Real-time clock and date
- Adjustment function display
- User-friendly handling
- Waterproof housing
- Illuminated, large display



Tablets as refill kit
for pool testers and photometers
available on demand.



DOSING OF ACTIVATED CARBON POWDER PAKDOS

DIN 19643 guidelines were established to reduce chloramines and bounded chlorine in the swimming pool water and to ensure healthy conditions in swimming pools. Following this standard, WDT has developed a practical system for the dosing of activated carbon powder.

- Dosing of economically priced, dry carbon powder directly from the carbon drum
- Dosing of a suspension, made of dust-free, acidulated carbon powder
- Generally useful for all filter types and filter sizes
- Clean dosing of activated carbon powder
- Easy integration into the filter cycle
- Reliable in operation and easy to handle

- 65 Up to max. 100 m³/h circulation rate per cycle – PAKDOS MINI
- 66 From 100 m³/h circulation rate per cycle – PAKDOS 60-TOUCH

CLEAN & DUST-FREE



PAKDOS MINI-100-200-300-500

FUNCTION DESCRIPTION

Dosing system for the dosing of dust-free and acidulated powdered activated carbon with suspension preparing unit for one or several filter cycles. For the elimination of organic impurities from the water such as combined chlorine. Suspension preparing unit with 100 l, 200 l, 300 l or 500 l tank and agitator. Dosing performance max 100 respectively 255 g/h per dosing line at a suspension concentration of 3 %. Injection before the filter pump (pressureless).

SCOPE OF DELIVERY

Suspension preparing unit:

- PE-tank 100 l, 200 l, 300 l or 500 l (according to consumption)
- Agitator 60 W (slow running)
- Suction tube PE 4 x 1
- Filling manually by ball valve d25
- Overflow and emptying connection
- Empty detection by pressure switch / optional by capacitive sensor
- Fault remote signal with non-volt changeover contact

Dosing line for PAKDOS-Mini CB36:

- For dosing the powdered activated carbon suspension with a max concentration of 3 %, max particle size of 100 µ. The number of dosing lines complies with the number of filter cycles.
- Controller CB36 with LC display installed in housing
 - Impulse length control via integrated timer or external contact
 - Speed control via 4 - 20 mA or 0 - 10 Volt
 - Peristaltic dosing pump Sa-4,8x2,4 or 6,4x2,4
 - Dosing performance max: 4 l/h respectively 10 l/h
 - Back pressure max: 1,0 bar
 - Leakage detection signal
 - Flushing unit for the dosing tube app. 10 - 20 l/h with regulation valve and water flow indication
 - Completely tubed and pre-wired on PP board
 - 25 m dosing tube PE 6x1
 - Injection valve PM 6x1

TO BE PROVIDED BY THE BUILDER

- Power supply
- Supply tubing and tubing to the injection point
- Tubing of the overflow to the drain



Fig.: Dosing line 4 l/h



Fig.: Dosing line 10 l/h

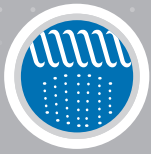


TECHNICAL DATA

Suspension preparing unit

Electrical supply	230 V/AC 50 Hz
Power supply	60 W
Water supply	DN20
Measures PM 100/200/300/500	d 450 mm x H 1120 mm
	d 560 mm x H 1230 mm
	d 650 mm x H 1320 mm
	d 790 mm x H 1460 mm
Weight PM 100/200/300/500	32 kg / 40 kg / 45 kg / 50 kg

Dosing line(s)	4 l/h	10 l/h
Electrical supply	230 V/AC 50 Hz	
Power supply	5 W	16 W
Measures	W 300 mm	W 360 mm
	H 410 mm	H 540 mm
	D 150 mm	D 150 mm
Weight	3 kg	5 kg



PAKDOS 60-TOUCH

FUNCTION DESCRIPTION

Dosing system for the dust-free dosing of powdered activated carbon (PAC) to eliminate organic impurities from the water such as combined chlorine. Dosing directly from 60 l drum by a dosing screw. Production of a weak suspension to be conveyed to the filters by a venturi nozzle. Suitable for multiple pool systems together with the suspension distribution system. Water supply from after the filter, injection point recommended before the filter pump (pressureless).

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 400 W/1250 l/h or 600 W/1500 l/h (alternatively fresh 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 TOUCH:

Operation and visualisation via coloured 7" Touch-Graphic display. This enables simple and clearly arranged user guidance of the screen. Faults and alarms are illustrated by self-explaining icons. Switch-off of the dosing at malfunction. With integrated meter for powdered activated carbon consumption and event storage (data logging).

Interface:

USB for data export.

Remote indication via browser driven devices:

(e.g. tablet or smartphone, not incl.): Indication of the current operational states, errors and alarms.



TECHNICAL DATA

Electrical supply	230 V/AC 50Hz (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 750 mm
Weight	app. 50 kg
Dosing performance	10 - 1200 g/h (optional up to 5000 g/h)
Pre-pressure min.	0,2 bar
Back-pressure max.	app. 2 bar (dependent on pre-pressure)

TO BE PROVIDED BY THE BUILDER

- Power supply
- Supply tubing and tubing to the injection point
- Tubing of the overflow to the drain
- As the case may be compressed air supply





DOSING PUMPS & ACCESSORIES UNODOS / FLOCDOS

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.

- Self-priming
- 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

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. We offer one-stop service and product selection.

69 Peristaltic pumps

71 Accessories

EFFICIENT

UNODOS+

FUNCTION DESCRIPTION

Speed controlled peristaltic pump for the continuous and reliable dosing of liquid chemicals. 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 1,6 x 1,6 or 3,2 x 1,6 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)

ACCESSORIES / OPTIONS

- Suction lance NF 500 with empty switch and non return foot valve for 30 kg canister
- Dosing tube PE 4 x 1
- 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

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 200 x 140 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

FLOCDOS+

FUNCTION DESCRIPTION

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

SCOPE OF DELIVERY

- Peristaltic pump SA
- Dosing hose 0,8 x 1,6 or 1,6 x 1,6 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
- Input (non-volt) for reduction of the dosing performance at night, reduction by app. 30 %

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 200 x 140 mm
Weight	app. 0,8 kg
Dosing performance with hose 0,8 x 1,6	app. 5 - 50 ml/h
Dosing performance with hose 1,6 x 1,6	app. 15 - 200 ml/h



ACCESSORIES / OPTIONS

- Suction lance NF 500 with empty switch and non return foot valve for 30 kg canister
- Dosing tube PE 4 x 1
- 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



INJECTION VALVES



FUNCTION DESCRIPTION

Injection valve for the injection of the chemical into the pipework. With removable injection tube and PVC ball valve for easy maintenance of the valve nozzle. According to your demands produced for all common hose measures. For peristaltic and diaphragm pumps.

SCOPE OF DELIVERY

Injection valve 1SK:

- PVC-ball valve 1/2"
- Removable dosing lance with dosing valve
- 1 spare valve rubber
- Hose connection (size depending on the used dosing tube – 4 x 1 / 6 x 1 / 6 x 3)

Injection valve 2SK:

For the injection of chlorine and acid at the same tapping point. Due to the resulting self-cleaning-effect maintenance efforts are reduced.

- PVC-ball valve 1/2"
- Removable dosing lance with dosing valve
- 1 spare valve rubber
- 2 x hose connection (size depending on the used dosing tube – 4 x 1 / 6 x 1 / 6 x 3)

SWITCH-OVER AUTOMATIC



FUNCTION DESCRIPTION

The Switch-Over Automatic has been designed to guarantee a continuous chemical supply of the pool water circulation. If a chemical is primed out of two canisters and one canister gets empty, the unit switches over automatically to the full one. The empty canister can be replaced at any time.

SCOPE OF DELIVERY

- Controller NT35 in housing. Function- and fault indication by 3 LED's. Fault remote indication by a non-volt contact
- Power supply cable with safety plug
- 2 suction lances with empty switch and canister lids
- Switch-over solenoid valve
- Completely pre-installed on PP board

TECHNICAL DATA

Electrical supply	230 V/AC 50 Hz
Power supply	4 W
Measures (W/H/D)	200 x 400 x 100 mm
Weight	app. 2 kg
Hose connection	4 x 1

ACCESSORIES / OPTIONS

- Suction lance with return hose
- Console
- Safety tubs



FLOW INDICATION



FUNCTION DESCRIPTION

Component for a simple visual function control (visual inspection) of the dosing at very low dosing performances. Easy to integrate into existing dosing pipes.

SCOPE OF DELIVERY

- Transparent drip tube as flow indicator
- Retaining plate for flow indicator with 2 screws
- 2 x hose connection 4 x 1

ACCESSORIES / OPTIONS

- Mounting plate (W/H/D) 240 x 195 x 10 mm with hose guide and strain relief for the installation of a / with mounted dosing pump

SUCTION LANCES



FUNCTION DESCRIPTION

Suction lance NF with empty switch and non-return foot valve. According to your demands produced for all common hose dimensions.

SCOPE OF DELIVERY

- Suction lance NF 500 mm – other lengths on demand (e. g. 300 mm, 500 mm, 1200 mm)
- Canister lid for 20 l or 30 l or 70 l canisters
- Empty switch NIG 1/4" and non return foot valve
- 2 m suction tube PVC 4 x 1 – other hose connections on demand

SAFETY TUBS



FUNCTION DESCRIPTION

Safety tubs for the placement of chemical canisters (max. 2 canisters à 30 l). On demand the tubs can be equipped with dosing pumps and as the case may be a switch-over automatic or further accessories. So you can configure your individual dosing station for increased safety and comfort.

SCOPE OF DELIVERY

- Safety tub for 2 canisters à 30 l
- Console for the placement of the components
- With or without separating strip

TECHNICAL DATA

Measures (W/H/D)	670 x 960 x 420 mm
Weight	app. 15 kg

DEAERATOR & PULSE DAMPER



FUNCTION DESCRIPTION

Deaeration of the suction tube at the dosing of outgassing liquids with diaphragm pumps.

Damping of pressure hits at the use of diaphragm pumps with a high dosing performance.



DOSING OF OXYGEN GRANULATE OXYDOS

The OXYDOS is the first system that we have developed for the automatic, time controlled dosing of oxygen granulate. The granulate (potassium monopersulfate) is a real alternative to liquid hydrogen peroxide.

- Chlorine free treatment of private swimming pools
- Tested and confirmed by an independent hygiene institute
- Easy storage and handling of granulate in comparison to liquid hydrogen peroxide
- No unpleasant chlorine smell

CHLORINE FREE

OXYDOS

FUNCTION DESCRIPTION

Dosing system for the dosing of oxygen granulate for a chlorine free disinfection of residential swimming pools. This product is a real alternative to the dosing of liquid hydrogen peroxide. The granulate is dosed directly from the integrated hopper into a dissolving tank from where the solution is conveyed into the swimming pool circulation via a booster pump. The water supply is controlled by a floating valve. The system can either be operated with fresh- or swimming pool water. The water level in the dissolving tank is regulated by two level switches. The power supply has to be interlocked with the filtration system. The dosing is controlled by an individually adjustable week timer. Operation and visualisation by a 3,2" Touch-Graphic display. Algicide can be dosed optionally by a peristaltic pump that will be integrated into the system (time controlled).

The system is useful for swimming pools from app. 30 - 200 m³ pool volume.

Producers of the chemical recommend to dose app. 15 - 30 g/m³ pool volume / week oxygen granulate. The oxygen content in the water shall be app. 10 - 30 mg/l.

SCOPE OF DELIVERY

Housing:

Solid one part rotational sintered PE shape green containing all functional parts.

Granulate dosing:

Dosing hopper for max. 15 kg oxygene granulate, dosing motor, dosing screw, bridge breaker for the support of the dosing.

Dissolving system:

Dissolving tank, booster pump (800 - 1000 l/h at 1,2 bar). Level monitoring in the flushing tank.

Micro processor controller NT35:

Controller with intuitive 3,2" Touch-Graphic display to set the dosing performance and to indicate possible faults in plain text.



TECHNICAL DATA

Electrical supply	230 V/AC 50 Hz
Power supply	400 W
Water supply	DN15
Water outlet to injection point	DN15
Measures (W/H/D)	650 x 950 x 550 mm
Weight	app. 30 kg
Dosing performance oxygene granulate	5 kg/h
Dosing performance algicide (optional)	3 l/h
Pre-pressure min.	0,4 bar
Back-pressure max.	0 - 1,5 bar, depending on pre-pressure

TO BE PROVIDED BY THE BUILDER

- Power supply
- Supply tubing and tubing to the injection point
- Tubing of the overflow to the drain

ACCESSORIES / OPTIONS

- Dosing pump for algicide



POOLCOMPLETE

Complete water treatment techniques
for private swimming pools from one source

From our point of view it has always been very important to understand the swimming pool and its technical context as a total. For this reason we have decided to integrate the necessary components for the water treatment of private swimming pools into our portfolio.

The used components are produced by our cooperation partners of our manufacturer network PoolPlenum.

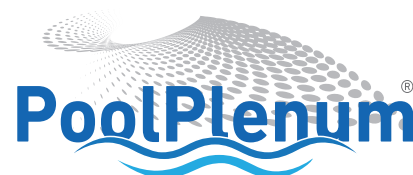
SUSTAIN ABLE



Our technical packages include the following components:

- Autocontrol systems POOLKLAR
- Filter Privat Pro series incl. AFM filter material
- Circulation pump BADU
- Control system (BADU OmniTronic or WDT control cabinet with touch screen)
- Backwash valve (BADU OmniTronic or Besgo)
- Automatic fresh water feeding
- Counter current system and VitaLight illumination
- Necessary accessories (flow indicator and -switch)

The components are pre-assembled as far as possible for an easy installation.



Das Herstellernetzwerk
für den professionellen Schwimmbadbau





WELLNESS BY WDT

The better solution.

Wellness by WDT

Relax, experience, regenerate. Due to the trend to improve the quality of life, the number of wellness & spa centers in the private and public sector has increased enormously over the last years. As a result, technical equipment for wellness facilities has become a main pillar of WDT's business activities.

Our product range for control and dosing systems is a compilation of own ideas and ideas from all over the world, which have inspired us: Experience Showers, techniques for steam rooms, techniques for saunas, nebulisation of brine solution, aromatisation systems and control system for complete Wellness facilities. Innovations of WDT increase the attractiveness and the comfort of SPA centres and therefore the feel-well factor of the guests.



Experience Showers



Technique for Steam Rooms



Technique for Saunas



Nebulisation of brine solution



Foam for Hammam Massages



Foot bath sputtering system



Room aromatisation



Control and regulation systems for Wellness areas



Fragrances, brine solution, Foam agent

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LA PERGOLA Panorama Suites

Schmider Schwimmbadtechnik

Slottsholmen, Warmbadhuset

Soltech GmbH

WeVaPo AB

Winkler GmbH

Woodtli Schwimmbadtechnik

WTA Vogtland GmbH



Werner Dosiertechnik

The better solution.

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